

Majestic Gateway Project

City of Bakersfield, California



DRAFT ENVIRONMENTAL IMPACT REPORT

SCH No. 2022030196

Lead Agency
City of Bakersfield
Development Services Department
Attn: Kassandra Gale, Principal Planner
1715 Chester Avenue, 2nd Floor
Bakersfield, CA 93301



BAKERSFIELD
THE SOUND OF *Something Better*

July 14, 2022

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GPA/ZC No. 21-0184

VTPM No. 12438

Site Plan Review No. 21-0185

Lead Agency

City of Bakersfield
Development Services Department
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Lead Agency Discretionary Permits

General Plan Amendment/Zone Change No. 21-0184
Vesting Tentative Parcel Map No. 12438
Site Plan Review No. 21-0185

July 14, 2022

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APPENDICES (BOUND SEPARATELY)

- A. Initial Study, Notice of Preparation (NOP) and Written Comments on the NOP
- B. Air Quality Impact Analysis
- C. Biological Resources Evaluation
- D1. Updated Cultural Resources Study
- D2. Supplemental Cultural Resource Study
- E. Energy Consumption & Efficiency Analysis
- F. Geotechnical Engineering Investigation
- G. Phase I Environmental Site Assessment
- H. Preliminary Hydrology Report
- I. Noise and Vibration Impact Analysis
- J. Traffic Study
- K. Urban Decay Analysis
- L. Sewer Capacity Study
- M. Water Supply Assessment
- N. Will Serve Letters

ACRONYMS AND ABBREVIATIONS

<u>Acronym</u>	<u>Definition</u>
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
AB 32	Global Warming Solutions Act of 2006
AB 52	Native Americans: California Environmental Quality Act
AB 341	Mandatory Commercial Recycling Program
AB 617	California Assembly Bill 617
AB 939	California Solid Waste Integrated Management Act
AB 1327	California Solid Waste Reuse and Recycling Act
AB 1493	Pavley Fuel Efficiency Standards
AB 1575	California Assembly Bill 1575, California Energy Commission
AB 1668	California Assembly Bill 1668
AB 1881	California Assembly Bill 1881, California Water Conservation Act of 2006
AB 2514	California Assembly Bill 2514, Energy Storage Systems
ACOE	Army Corps of Engineers
ACS	American Community Survey
ADT	Average Daily Traffic
ADMRT	Air Dispersion Modeling and Risking Assessment Tool
AERMOD	AMS/EPA Regulatory Model
AEWSD	Arvin-Edison Water Storage District
AFY	Acre Feet per Year
AIA	Air Impact Assessment
AIRFA	American Indian Religious Freedom Act
ALH Economics	ALH Urban & Regional Economics
ALUCP	Airport Land Use Compatibility Plan
AMSL	Above Mean Sea Level
ANSI	American National Standards Institute
A-P Act	Alquist-Priolo Earthquake Fault Zoning Act
APN	Assessor Parcel Number
AQAPs	Air Quality Attainment Plans
AQIA	Air Quality Impact Analysis
BACT	Best Available Control Technology
BAU	Business as Usual
BDPW	Bakersfield Department of Public Works
BFD	Bakersfield Fire Department
BMPs	Best Management Practices
B.P.	Before Present
BPD	Bakersfield Police Department
BPS	Best Performance Standards

BTUs	British Thermal Units
BUOW	Burrowing Owl
C-2	Regional Commercial
C-2/PCD	Regional Commercial-Planned Commercial Development Combining
C-NW	Commercial Non-Work
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CadnaA	Computer Aided Noise Abatement
CAFE	Corporate Average Fuel Economy
CalCot	California Cotton Cooperative Association
CalEEMod™	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
Cal-GEM	California Geologic Energy Management Division
CALGreen Code	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
CalSTA	California State Transportation Agency
CalTrans	California Department of Transportation
Calveno	California Vehicle Noise
CAP	Climate Action Plan
CAPP	Community Air Protection Program
CARB	California Air Resources Board
CASP	California Aviation System Plan
CAT	Climate Action Team
CBSC	California Building Standards Code
CBSC	California Building Standards Commission
CCA	Community Choice Aggregators
CCAA	California Clear Air Act
CCR	California Code of Regulation
CD	Consistency Determination
CDC	California Department of Conservation
CDC	Center for Disease Control and Prevention
CDFA	California Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEDS	Comprehensive Economic Development Strategy
CEPA	California Environmental Protection Agency
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CERP	Community Emissions Reduction Program
CFCs	Chlorofluorocarbons
CFGC	California Fish and Game Code

CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
CGC	California Geologic Code
CGC	California Government Code
CGS	California Geological Survey
CH ₄	Methane
Chloroethene	Vinyl Chloride
CIWMB	California Integrated Waste Management Board
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNRA	California Natural Resources Agency
CO	Carbon Monoxide
COG	Council of Governments
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
COP	Conference of the Parties
Cornerstone	Cornerstone Engineering, Inc.
CPUC	California Public Utilities Commission
CREC	Controlled Recognized Environmental Condition
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CSI	California Solar Initiative
CTC	California Transportation Commission
CTR	California Toxics Rule
CUPA	Certified Uniform Program Agency
CWA	Clean Water Act
CWC	California Water Code
CY	Cubic Yards
CZ	Change of Zone
dB	Decibel
dBA	A-weighted Decibels
dBA L _{eq}	equivalent level decibels
DEFRA	Department for Environment, Food and Rural Affairs
DFEH	Department of Fair Employment and Housing
DOF	California Department of Finance
DOSH	Division of Occupational Safety and Health
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EDR	Environmental Data Resources
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act of 2007

EO	Executive Order
EPA	Environmental Protection Agency
EPACT92	Energy Policy Acts of 1992
EPCA	Energy Policy and Conservation Act
EPS	Emission Performance Standard
ESA	Endangered Species Act
ESP	Electric Service Providers
°F	degrees Fahrenheit
FAA	Federal Aviation Administration
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FICON	Federal Interagency Committee on Noise
FIRM	Flood Insurance Rate Map
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Association
FUA	Fuel Use Act of 1978
FYI	For Your Information
g/sec	Grams per Second
GAMAQI	Guidance for Assessing and Mitigating Air Quality Impacts
GC	General Commercial (Metropolitan Bakersfield General Plan designation)
GCC	Global Climate Change
GCWD	Greenfield County Water District
GETD	Golden Empire Transit District
General Plan	Metropolitan Bakersfield General Plan
GHG	Greenhouse Gas
GOBiz	Governor's Office of Business and Economic Development
GPA	General Plan Amendment
gpd	Gallons per Day
GSA	Groundwater Sustainability Agencies
GSPs	Groundwater Sustainability Plans
GWh	gigawatt hours
GWP	Global Warming Potential
H ₂ S	Hydrogen Sulfide
HAP	Hazardous Air Pollutants
HARP2	Hotspots Analysis and Reporting Program
HCA	Housing Crisis Act of 2019
HCD	Housing and Community Development (State Department of)
HCP	Habitat Conservation Plan
HFCs	Hydrofluorocarbons

HHD	Heavy-Heavy Duty Trucks
HI	Hazard Indices
HMBEP	Hazardous Materials Business Emergency Plan
HMTA	Hazardous Materials Transportation Act
HMTUSA	Hazardous Materials Transportation Uniform Safety Act
HREC	Historical Recognized Environmental Condition
HSC	California Health and Safety Code
HSWA	Federal Hazardous and Solid Waste Amendments
HUD	U.S. Department of Housing and Urban Development
HWCL	Hazardous Waste Control Law
IBank	Infrastructure and Economic Development Bank
IEPR	Integrated Energy Policy Report
IOU	Investor-Owned Utilities
IPCC	Intergovernmental Panel on Climate Change
IRP	Integrated Resource Planning
ISO	Independent System Operator
ISR	Indirect Source Review
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITIP	Interregional Transportation Improvement Plan
ITP	Incidental Take Permit
IWMA	Integrated Waste Management Act
IWMP	Integrated Waste Management Plan
J&S	Jones and Stokes Associates
KCFD	Kern County Fire Department
KDWD	Kern Delta Water District
Kern COG	Kern Council of Governments
Krazan	Krazan & Associates, Inc.
KRGSA	Kern River Groundwater Sustainability Agency
KRWCA	Kern River Watershed Coalition Authority
kWh	kilowatt-hour
LCFS	Low Carbon Fuel Standards
LEA	Lead Enforcement Agency
LEED	Leadership in Energy and Environmental Design
L _{eq}	equivalent continuous sound level
LEV	Low-Emission Vehicle
LI	Light Industrial (Metropolitan Bakersfield General Plan)
LMR	Low Medium Density Residential
LOS	Level of Service
LR	Low Density Residential
LTF	Local Transportation Fund

M-1	Light Manufacturing
MBGP	Metropolitan Bakersfield General Plan
MBHCP	Metropolitan Bakersfield Habitat Conservation Plan
MBI	McCormick Biological, Inc.
MBTA	Migratory Bird Treaty Act
mgd	Million Gallons per Day
mg/yr	Million Gallons per Year
MM	Mitigation Measure
MMRP	Mitigation, Monitoring, and Reporting Program
MMT	million metric tons
MMT CO ₂ e	million metric tons of carbon dioxide equivalent
mph	Miles per hour
MPO	Metropolitan Planning Organization
MW	Megawatts
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NAIOP	Commercial Real Estate Development Association
NDA	No Development Alternative
NDC	nationally determined contributions
NECPA	National Energy Conservation Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NIOSH	National Institute for Occupational Safety and Health
NMFS	National Marine Fisheries Service
No.	Number
NOP	Notice of Preparation
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
N ₂ O	Nitrous Oxide
NPA	No Project Alternative
NPDES	National Pollutant Discharge Elimination System
NPS	Non-Point Source
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NTR	National Toxics Rule
NVIA	Noise and Vibration Impact Assessment
O ₃	Ozone

OAL	Office of Administrative Law
OEHHA	Office of Environmental Health Hazard Assessment
OHP	Office of Historic Preservation
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Act
OSHA	Occupational Safety and Health Administration
PAL	Project Area Limits
Pavley	Pavley Fuel Efficiency Standards Assembly Bill 1493)
Pb	Lead
PCBs	Polychlorinated biphenyls
PCD	Planned Commercial Development Exclusive
PFCs	Perfluorocarbons
PG&E	Pacific Gas and Electric Company
PLTRA	Panama Lane Truck Routing Alternative
PM _{2.5}	Fine Particulate Matter (2.5 microns or smaller)
PM ₁₀	Fine Particulate Matter (10 microns or smaller)
PMI	Point of Maximum Impact
POA	Property Owners' Association
POUs	Publicly Owned Utilities
PRC	Public Resources Code
PRPA	Paleontological Resources Preservation Act
PSD	Prevention of Significant Deterioration
Program EIR	Program Environmental Impact Report
PURPA	Public Utilities Regulatory Policies Act of 1978
PV	photovoltaic
QF	Qualifying Facility
R&S	Ruettgers & Shuler Civil Engineers
R-1	One-Family Dwelling
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Concerns
REMEL	Reference Energy Mean Emission Level
RHNA	Regional Housing Needs Assessment
ROGs	Reactive Organic Gases
RPA	Reduced Project Alternative
RPS	Renewable Portfolio Standards
RSCE	Ruettgers & Shuler Civil Engineers
RTIPs	Regional Transportation Improvement Plans
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy

RWQCB	Regional Water Quality Control Board
SF/s.f.	square foot or square feet
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SB 1	California Senate Bill 1, Road Repair and Accountability Act of 2017
SB 8	California Senate Bill 8 (Chapter 161, Statutes of 2021)
SB 18	California Senate Bill 18, Traditional Tribal Cultural Places Act
SB 32	California Senate Bill 32, California Global Warming Solutions Act of 2006
SB 50	California Senate Bill 50, Leroy F. Green School Facilities Act of 1998
SB 97	California Senate Bill 97
SB 325	California Senate Bill 325, Transportation Development Act
SB 330	California Senate Bill 330, Housing Crisis Act of 2019
SB 350	California Senate Bill 350, Clean Energy and Pollution Reduction Act of 2015
SB 375	California Senate Bill 375, Sustainable Communities and Climate Protection Act of 2008
SB 606	California Senate Bill 606
SB 610	California Senate Bill 610, California Water Code
SB 743	California Senate Bill 743
SB 901	California Senate Bill 901, CA. Water Code Section 10610 et seq.
SB 1000	California Senate Bill 1000, Environmental Justice in Local Land Use Planning
SB 1078	California Senate Bill 1078, Renewable Portfolio Standards
SB 1368	California Senate Bill 1368, Statewide Retail Provider Emissions Performance Standards
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SDG&E	San Diego Gas and Electric
SDWA	Safe Drinking Water Act
s.f.	square feet
SF ₆	Sulfur Hexafluoride
SGC	Strategic Growth Council
SGMA	Sustainable Groundwater Management Act
SHA	Safe Harbor Agreement
SHMA	Seismic Hazards Mapping Act
SHRC	State Historical Resources Commission
SIL	Significant Impact Levels
SIP	State Implementation Plan
SJKF	San Joaquin Kit Fox
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLCP	Short-Lived Climate Pollutants
SLF	Sacred Lands File
SNUR	Significant New Use Rule
SO ₂	Sulfur Dioxide

SoCalGas	Southern California Gas Company
SR	State Route
SRI	solar reflective index
SRRE	Source Reduction and Recycling Element
SSJVIC	Southern San Joaquin Archaeological Information Center
STA	State Transit Assistance
STIP	Statewide Transportation Improvement Program
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
TAZ	Traffic Analysis Zones
TCR	Tribal Cultural Resources
TDA	Transportation Development Act
TEOR	Thermally Enhanced Oil Recovery
TIA	Traffic Impact Analysis
TIF	Traffic Impact Fee
TNDG	The Natelson Dale Group
Trinity	Trinity Consultants
TSCA	Toxic Substance Control Act
TSP	Total Suspended Particulate
UNFCCC	United Nations Framework Convention on Climate Change
U.S. DOE	United States Department of Energy
U.S. DOT	United States Department of Transportation
U.S. EPA	United States Environmental Protection Agency
USCB	United States Census Bureau
USFWS	United States Fish and Wildlife Service
UWMP	Urban Water Management Plan
UWMP Act	Urban Water Management Planning Act
Valley	San Joaquin Valley
VdB	Vibration-velocity level
VERA	Voluntary Emission Reduction Agreement
VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
VTPM	Vesting Tentative Parcel Map
WDRs	Water Discharge Requirements
WMI	Watershed Management Initiative
WOA	Warehouse Only Alternative
WQCP	Water Quality Control Plan for the Tulare Lake Basin, Third Edition
WRRRA	Water Reuse and Recycling Act
WSA	Water Supply Assessment
WTP	Water Treatment Plant

ZC	Zone change
ZEV	Zero-Emission Vehicles
ZORI	Zones of Required Investigation

S.0 EXECUTIVE SUMMARY

S.1 INTRODUCTION

The California Environmental Quality Act (CEQA), Public Resources Code Section 21000, *et seq.* requires that before a public agency makes a decision to approve a project that could have one or more adverse effects on the physical environment, the agency must inform itself about the project's potential environmental impacts, give the public an opportunity to comment on the environmental issues, and take feasible measures to avoid or reduce potential harm to the physical environment. This Executive Summary complies with CEQA Guidelines Section 15123, "Summary." Included are a concise description of the proposed Majestic Gateway Project, a summary of the physical environmental effects that could result from its implementation, a list of the mitigation measures that will be imposed by the City of Bakersfield with resulting significance conclusions regarding environmental effects, and a summary of alternatives to the Project that would avoid or lessen the significant environmental effects.

This Environmental Impact Report (EIR), having California State Clearinghouse (SCH) No. 2022030196 was prepared in accordance with CEQA Guidelines Article 9, Sections 15120-15132 to evaluate the potential environmental impacts associated with planning, constructing, and operating the proposed Majestic Gateway Project. The Project entails the proposed development of ±90.59 gross acres (±84.67 net acres) located east of State Route 99 (SR-99), west of South H Street, north of Hosking Avenue and south of Berkshire Road with retail commercial uses (currently conceptually designed) and one warehouse distribution facility. The commercial buildings would all together provide up to 187,500 square feet (s.f.) of building space and the warehouse distribution building would provide up to 1,012,185 s.f. of building space. The commercial portion of the Project site is 29.25 gross acres (27.91 net acres), the warehouse distribution portion of the Project site is 56.86 gross acres (52.28 net acres), and a water retention basin is proposed on 4.48 net acres. Approximately 5.92 acres of right-of-way would be dedicated to the City of Bakersfield for the widening of South H Street and Berkshire Road. Off-site improvements would include but are not limited to the widening of Berkshire Road along the Project site frontage, the widening of South H Street and undergrounding of electric utility lines between Berkshire Road and Hosking Avenue, widening and lane striping at the Hosking Avenue/South H Street intersection, and making utility connections for water, sewer, and storm drain at site-adjacent utility infrastructure.

Entitlement applications filed by Majestic Realty Co. (the Project Applicant) with the City of Bakersfield pertaining to the proposed Project include General Plan Amendment/Zone Change (GPA/ZC) No. 21-0184, Vesting Tentative Parcel Map (VTPM) No. 12438, and Site Plan Review No. 21-0185. These actions and the physical and operational aspects of the Project's construction and operation are more fully described in Section 3.0, *Project Description*.

The City of Bakersfield determined that the scope of this EIR should cover 15 subject areas. The scope includes all of the subject areas listed in Appendix G to the CEQA Guidelines that the City determined could be significantly and adversely affected by the Project, taking into consideration public comment

received by the City in response to this EIR's Notice of Preparation (NOP) and comments made at the EIR's Scoping Meetings. The 15 environmental subject areas that could be reasonably and significantly affected by planning, constructing, and/or operating the proposed Project are analyzed herein, including:

- | | |
|------------------------------------|-----------------------------------|
| 1. Aesthetics | 9. Hydrology and Water Quality |
| 2. Air Quality | 10. Land Use and Planning |
| 3. Biological Resources | 11. Noise |
| 4. Cultural Resources | 12. Population and Housing |
| 5. Energy | 13. Transportation |
| 6. Geology and Soils | 14. Tribal Cultural Resources |
| 7. Greenhouse Gas Emissions | 15. Utilities and Service Systems |
| 8. Hazards and Hazardous Materials | |

Refer to EIR Section 4.0, *Environmental Analysis*, for a full account and analysis of the subject matters listed above. For each of the aforementioned subject areas, this EIR: 1) describes the physical conditions that existed at the approximate time this EIR's NOP was filed with the California State Clearinghouse (March 2022); 2) discloses the type and magnitude of potential environmental impacts resulting from Project planning, construction, and operation; and 3) if warranted, recommends feasible mitigation measures that would reduce or avoid significant adverse environmental impacts that the proposed Project may cause. A summary of the proposed Project's significant environmental impacts and the mitigation measures that the City of Bakersfield would impose on the Project to lessen or avoid those impacts is included in this Executive Summary as Table S-1. The City of Bakersfield applies mitigation measures that it determines: 1) are feasible and practical for project applicants to implement; 2) are feasible and practical for the City of Bakersfield to monitor and enforce; 3) are legal for the City of Bakersfield to impose; 4) have an essential nexus to the Project's impacts; and 5) would result in a benefit to the physical environment. CEQA does not require the Lead Agency to impose mitigation measures that are duplicative of project design features or mandatory regulatory requirements.

S.2 PROJECT SITE LOCATION AND REGIONAL SETTING

The ±90.59 gross-acre (±84.67 net-acre) Project site is located in the southern portion of the City of Bakersfield in Kern County, California. The on-ramp to State Route (SR) 99 from Hosking Avenue is located just beyond the southwest corner of the Project site. Specifically, the Project site is located east of State Route 99 (SR-99), north of Hosking Avenue, south of Berkshire Road, and west of South H Street. To the east of South H Street is the Kern Island Canal beyond which is a block wall and a residential community containing homes, schools, and parks. Under existing conditions, the Project site is vacant and undeveloped with remnants of past use scattered throughout the site. The topography of the Project site and immediately surrounding area is characterized by relatively flat land. The Sierra Nevada Mountains are located approximately 13.5 miles to the northeast, the Tehachapi Mountains are located approximately 16.9 miles to the south, and the Coast Range is located approximately 16.1 miles to the west. Despite air quality improving across California and Kern County due to increasingly stringent regulatory requirements, the census tract containing the Project site (Census Tract

6029003202) is ranked by the State as being in the 82nd percentile for pollution burden (OEHHA, 2022).

S.3 PROJECT OBJECTIVES

CEQA Guidelines Section 15124(b) requires a statement of project objectives. The fundamental purpose and goal of the Majestic Gateway Project is to develop an economically viable commercial area and warehouse distribution center in close proximity to an established population and the State highway system to expand employment and retail shopping opportunities in the City of Bakersfield. The Project would achieve its underlying purpose and goal through the following objectives.

- A. Expand economic development, facilitate job creation, and increase the tax base for the City of Bakersfield by establishing a new commercial development area and a warehouse distribution facility adjacent to or near the State highway system.
- B. Attract employment-generating businesses to the City of Bakersfield to reduce the need for members of the local workforce to commute outside the area for employment, thereby improving the jobs-housing balance in the City and nearby areas beyond the City boundary.
- C. Diversify the mix of land uses in the City of Bakersfield and greater Kern County to support the growing goods movement supply chain and to streamline package delivery services in and around the City of Bakersfield.
- D. Establish a supply chain use adjacent to or near designated truck routes and/or the State highway system to avoid or shorten vehicular trip lengths on other roadways.
- E. Provide retail shopping opportunities easily accessible to local residents and passers-by on the State highway system to assist in meeting the growing and evolving shopping demands of local residents and planned communities in the City of Bakersfield and greater Kern County.
- F. Develop an unused or underutilized property adjacent to SR-99.
- G. Provide a gathering place for City residents and visitors that includes shopping and other retail services in an aesthetically appealing environment.
- H. Facilitate the development of commercial and distribution warehouse uses that are architecturally and operationally designed to meet contemporary industry standards and be economically competitive with similar buildings in the region.

S.4 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

CEQA Guidelines Section 15123(b)(2) requires the Lead Agency (City of Bakersfield) to identify any known issues of controversy in the Executive Summary. The Lead Agency has not identified any issues of controversy. Notwithstanding, the Lead Agency has identified several issues of local concern including air quality and associated human health effects, traffic, and environmental justice among others listed in Table 1-1 in Section 1.0, *Introduction*.

S.5 PROJECT ALTERNATIVES

S.5.1 NO DEVELOPMENT ALTERNATIVE

The No Development Alternative (NDA) considers no development on the Project site beyond what occurs on the site under existing conditions. Under this Alternative, the approximately ±90.58 gross acre site would remain vacant and undeveloped for the foreseeable future. The Project site would be subject to routine maintenance (i.e., discing) for weed abatement. This alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would leave the Project site in its existing condition.

S.5.2 NO PROJECT ALTERNATIVE

The No Project Alternative (NPA) considers development of the Project site in accordance with the site's existing land use designation of "General Commercial (GC)" and the site's existing zoning classification of "General Commercial/Planned Commercial Development (C-2-PCD)." The "GC" land use designation is intended for retail and service facilities providing a broad range of goods and services which serve the day-to-day needs of nearby residents. The maximum allowable density is a 1.0 floor area ratio (FAR) and 4 stories tall (Bakersfield, 2007, p. II-7). The "C-2-PCD" combining zone is typically for larger commercial centers that contain a mix of larger scale stores and smaller retail outlets. Any uses permitted in the C-0 and C-1 zones are permitted. (Bakersfield, 2022, Title 17). For purposes of analysis herein, under this alternative it is assumed the Project site would be developed with up to 800,000 s.f. of leasable commercial space and a four-story hotel with 240 hotel rooms (Bakersfield, 2015, p. 3-1).

S.5.3 PANAMA LANE TRUCK ROUTING ALTERNATIVE

The Panama Lane Truck Routing Alternative (PLTRA) considers a scenario in which all Project-related truck traffic accessing the Project site via SR-99 would be restricted to only use Colony Street and Panama Lane, with no truck trips allowed along South H Street. All other components of the PLTRA would be similar to the proposed Project, as described in EIR Section 3.0, *Project Description*. Although the Project would not result in any localized impacts associated with truck traffic (i.e., significant health risks or traffic-related noise), this alternative was selected in order to consider an alternative that would avoid routing truck trips along roadways that directly parallel existing residential uses (i.e., existing residential uses located east of South H Street and east of the Kern Island Channel).

S.5.4 WAREHOUSE ONLY NET ZERO ALTERNATIVE

Under the Warehouse Only Net Zero Alternative (WOA), the Project site would be developed entirely with warehouse uses and no commercial retail uses. Under the WOA, warehouse uses would be constructed on approximately 86.11 acres, with approximately 4.48 acres of the Project site consisting of detention basin uses (similar to the proposed Project). For purposes of analysis, it is assumed that warehouse uses would be developed at an intensity up to 1,650,419 s.f. of warehouse building area. The WOA would result in an approximate 55% reduction in daily vehicle trips as compared to the proposed Project. This alternative assumes that the Project Applicant would be able to construct the WOA to prepare for a net zero greenhouse gas (GHG) emissions future and that the building user would be able to implement operational practices to achieve near-zero or net-zero GHG emissions by 2050. The feasibility of the WOA is questionable as it is not known with certainty whether a near-zero or net-zero WOA could actually be fully achieved by 2050 as it is yet unknown how quickly technological advancements will occur that would be feasible for a building operator to implement and for the City of Bakersfield to enforce.

S.5.5 REDUCED PROJECT ALTERNATIVE

Under the Reduced Project Alternative (RPA), the Project site would be developed with approximately 25% less commercial building space and 25% less warehouse building space than proposed under the Project. The RPA thus evaluates development of the Project site with 140,000 s.f. of commercial uses and a 760,000 s.f. warehouse distribution facility. The buildings would occur in the same general arrangement as proposed under the Project, but with smaller building footprints. The areas not covered by buildings would be used for surface parking for passenger vehicles, trucks, and trailers. The RPA would result in an approximate 25% reduction in daily vehicle trips as compared to the proposed Project and similarly an approximately 25% reduction in operational-related environmental effects.

S.6 EIR PROCESS

This EIR has been prepared as a Project EIR pursuant to CEQA Guidelines Section 15161. As described by CEQA Guidelines Section 15161, a Project EIR is the most common type of EIR that: 1) examines the environmental impacts of a specific development project; 2) focuses primarily on the changes in the environment that would result from the development of the project; and 3) examines all phases of the project, including planning, construction, and operation.

This Draft EIR will be available for public review and comment for a minimum of 45 days. Following public review, the City of Bakersfield will prepare responses to written comments concerning environmental topics and publish a Final EIR. Before taking action to approve the Project, the City of Bakersfield (serving as the CEQA Lead Agency) has the obligation to: 1) ensure this EIR has been completed in accordance with CEQA; 2) review and consider the information contained in this EIR as part of its decision-making processes; 3) make a statement that this EIR reflects the City of Bakersfield's independent judgment; 4) ensure that all significant effects on the environment are avoided or substantially lessened where feasible; and, if necessary 5) make written findings for each unavoidable significant environmental effect stating the reasons why mitigation measures or project

alternatives identified in this EIR are infeasible and citing the specific benefits of the proposed Project that outweigh its unavoidable adverse effects (CEQA Guidelines Sections 15090-15093).

S.7 SUMMARY OF IMPACTS, MITIGATION MEASURES AND CONCLUSIONS

S.7.1 EFFECTS FOUND NOT TO BE SIGNIFICANT

The scope of detailed analysis in this EIR includes 14 subject areas identified in an Initial Study prepared pursuant to CEQA Guidelines Section 15063 and CEQA Statute Section 21002(e), and one additional subject area (population and housing) that was added after consideration of public comments received by the City on this EIR's NOP and in response to the EIR scoping meetings. The Initial Study, NOP, and public comments received in response to the NOP and scoping meetings, are attached to this EIR as *Technical Appendix A*. Subject areas for which the City concluded that impacts clearly would be less than significant and that do not warrant detailed analysis in this EIR include: agriculture and forestry resources; mineral resources; public services; recreation; and wildfire. This EIR addresses these five topics in EIR Subsection 5.0, *Other CEQA Considerations*.

S.7.2 IMPACTS OF THE PROPOSED PROJECT

Table S-1, *Summary of Impacts, Mitigation Measures, and Conclusions*, provides a summary of the proposed Project's environmental impacts, as required by CEQA Guidelines Section 15123(a). Also presented are the mitigation measures recommended by the City of Bakersfield to further avoid adverse environmental impacts or to reduce their level of significance. After the application of all feasible mitigation measures within the City of Bakersfield's jurisdictional authority, the Project would result in significant and unavoidable environmental effects under two environmental subject areas, as summarized below.

- Greenhouse Gas Emissions (Threshold a): Significant and Unavoidable Cumulatively-Considerable Impact. Although the Project's GHG emissions would only be a very small fraction of the global GHG emissions that contribute to climate change, the City is using a net-zero threshold. Because the Project would result in a net increase in GHG emissions as compared to existing conditions even with implementation of mitigation measures, the Project's impacts due to GHG emissions would be significant and unavoidable on a cumulatively-considerable basis.
- Transportation (Threshold b): Significant and Unavoidable Direct and Cumulatively Considerable Impact. Although the Project's impacts to VMT from the proposed commercial retail uses and warehouse employees would not exceed the identified thresholds of significance, Project-related truck traffic would generate approximately 29,000 miles/day and 50 miles per truck, which exceeds the significance threshold established by this EIR of 16.29 miles per truck. Mitigation is not available to reduce this impact, as the destination of Project-related truck trips would consist of fixed locations (e.g., ports, last-mile delivery facilities, etc.), and it would not be feasible for the Project Applicant or the City of Bakersfield to mandate a

reduction in the distance the large trucks must travel to their destination. As such, the Project's truck-related VMT is a significant and unavoidable impact of the proposed Project on a direct and cumulatively-considerable basis.

Table S-1 Summary of Impacts, Mitigation Measures and Conclusions

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
4.1 Aesthetics					
Summary of Impacts					
Threshold a: The Project site does not comprise all or part of a scenic vista and does not contain any visually prominent scenic features. No unique views to scenic vistas are visible from the property. The Project would not substantially change a scenic view or substantially block or obscure a scenic vista; therefore, impacts to scenic vistas would be less than significant.	<p>No mitigation is required.</p> <p>The City of Bakersfield is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Aesthetics, which include the following:</p> <p>AES DF-1: Prior to the approval of building permits and other permits and approvals that authorize construction, the City of Bakersfield shall review the construction documents and plans to assure the following:</p> <ul style="list-style-type: none"> a) All building paint colors shall have a matte finish. b) All building glass shall be anti-glare or anti-reflective. c) Any photovoltaic panels installed on the property or on building roofs shall be anti-glare or anti-reflective. d) All lighting fixtures shall comply with applicable City of Bakersfield Municipal Code Requirements pertaining to lighting and illumination of buildings, parking areas, and signs. 	N/A	N/A	N/A	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	<p>e) The warehouse building truck courts shall be composed of concrete.</p> <p>f) All loading dock areas of the warehouse building shall be screened by a solid perimeter wall on all sides. Any gates visible from a public street shall be of an opaque design.</p> <p>g) All landscaping shall be installed to comply with all applicable City of Bakersfield Municipal Code standards pertaining to perimeter landscaping and minimum shade cover.</p>				
<u>Threshold b:</u> The Project site is not located within the viewshed of a scenic highway and, therefore, the Project site does not contain any scenic resources visible from a scenic highway.	No mitigation is required	N/A	N/A	N/A	No Impact
<u>Threshold c:</u> The Project site is located within an urbanized area and would not conflict with applicable zoning and other regulations governing scenic quality during construction or operation.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
<u>Threshold d:</u> Project-related development would not create substantial light or glare. Compliance with Bakersfield Municipal Code requirements for lighting would ensure less than significant impacts associated with light and glare affecting day or nighttime views in the area from on-site lighting elements.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
4.2 Air Quality					
Summary of Impacts					
<p><u>Threshold a:</u> Prior to mitigation the Project would generate operational emissions of ROG and NO_x that exceed the SJVAPCD's thresholds, and as such the proposed Project would be inconsistent with the AQAP prior to mitigation. With implementation of Mitigation Measure AIR MM-1, and with mandatory compliance with standard regulatory requirements, including SJVAPCD Rule 9510 (ISR), Project operational emissions of ROG and NO_x would be reduced to below the SJVAPCD's thresholds of significance. Accordingly, with mitigation, the Project would not conflict with the AQAP and impacts would be reduced to less-than-significant levels.</p>	<p>AIR MM-1: Prior to the issuance of occupancy permits, the Project Applicant shall enter into a Voluntary Emission Reduction Agreement (VERA) with the SJVAPCD. The VERA is an air quality mitigation measure by which a developer can voluntarily enter into a contractual agreement with the SJVAPCD to mitigate a development project's impact on air quality. Under the agreement, the developer provides funds to the SJVAPCD to administer the implementation of the VERA. The SJVAPCD then identifies emissions reductions projects, funds those projects, and verifies that the specified emission reductions have been successfully achieved. The SJVAPCD considers implementation of a VERA to be a feasible mitigation measure under CEQA, effectively achieving emission reductions necessary to reduce impacts to a less than significant level. The VERA requirements shall include specific terms to reduce the Project's emissions of operational ROG and NO_x to less-than-significant levels, consistent with the assumptions that were relied upon in the Project's Air Quality Impact Analysis to conclude that Project emissions of ROG and NO_x would be less than significant with mitigation.</p> <p>The City of Bakersfield is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Air Quality, which include the following:</p>	Project Applicant	SJVAPCD	Prior to the issuance of occupancy permits.	Less than Significant with Mitigation Incorporated
	<p>AIR RR-4: During construction, all construction contractors shall be subject to compliance with SJVAPCD Regulation VIII (Fugitive PM₁₀</p>	Project Construction Contractors	SJVAPCD	During Project Construction Activities	

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	<p>Prohibitions), including the following requirements. Project construction contractors shall be required by their contracts to comply with SJVAPCD Regulation VII, and permit periodic inspection of the construction site by City of Bakersfield staff or its designee to confirm compliance. A note that requires these items is required on all grading plans approved by the City of Bakersfield.</p> <ul style="list-style-type: none"> a) Water previously exposed surfaces (soil) whenever visible dust is capable of drifting from the site or approaches 20% opacity. b) Water all unpaved haul roads a minimum of three-times/day or whenever visible dust from such roads is capable of drifting from the site or approaches 20% opacity. c) Reduce speed on unpaved roads to less than 15 miles per hour. d) Install and maintain a track out control device that meets the specifications of SJVAPCD Rule 8041 if the site exceeds 150 vehicle trips per day or more than 20 vehicle trips per day by vehicles with three or more axles. e) Stabilize all disturbed areas, including storage piles, which are not being actively utilized for production purposes using water, chemical stabilizers or by covering with a tarp or other suitable cover. f) Control fugitive dust emissions during land clearing, grubbing, scraping, excavation, leveling, grading, or cut and fill operations with application of water or by presoaking. g) When transporting materials offsite, maintain a freeboard limit of at least 6 inches and cover or effectively wet to limit visible dust emissions. h) Limit and remove the accumulation of mud and/or dirt from adjacent public roadways at the 				

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	<p>end of each workday. (Use of dry rotary brushes is prohibited except when preceded or accompanied by sufficient wetting to limit visible dust emissions and use of blowers is expressly forbidden).</p> <ul style="list-style-type: none"> i) Stabilize the surface of storage piles following the addition or removal of materials using water or chemical stabilizer/suppressants. j) Remove visible track-out from the site at the end of each workday. k) Cease grading or other activities that cause excessive (greater than 20% opacity) dust formation during periods of high winds (greater than 20 mph over a one-hour period). <p>AIR RR-5: Construction contractors and painters shall comply with the provisions of SJVAPCD Rule 4601 (Architectural Coatings), during the construction of all buildings and facilities. Construction contractors shall be required by their contracts to comply with Rule 4601, and permit periodic inspection of the construction site by City of Bakersfield staff or its designee to confirm compliance. A note that requires compliance is required on all building plans approved by the City of Bakersfield.</p> <p>AIR RR-6: All buildings shall be constructed in compliance with Title 24 of the Uniform Building Code to minimize total consumption of energy. The City of Bakersfield shall confirm Title 24 compliance prior to the issuance of building permits.</p> <p>AIR RR-7: Construction contractors shall comply with the provisions of SJVAPCD Rule 4641 during the construction and pavement of all roads and parking areas. Construction contractors shall be</p>				

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	<p>required by their contracts to comply with Rule 4641, and the City of Bakersfield shall confirm Rule 4641 compliance prior to the issuance of permits and approval for paved surfaces. The following are prohibited:</p> <ul style="list-style-type: none"> a) Rapid cure cutback asphalt; b) Medium cure cutback asphalt; c) Slow cure cutback asphalt (as specified in SJVAPCD Rule 4641, Section 5.1.3); or Emulsified asphalt (as specified in SJVAPCD Rule 4641). <p>AIR RR-8: In compliance with SJVAPCD Rule 9510 (Indirect Source Review (ISR)), the Project Applicant or its successor in interest shall submit an Air Impact Assessment (AIA) application to the SJVAPCD, which will identify emission reduction measures for emissions of NO_x and PM₁₀. The performance measures listed below can be met through any combination of on-site emission reduction measures or off-site fees.</p> <ul style="list-style-type: none"> a) Related to construction-related emissions, the exhaust emissions for construction equipment greater than fifty (50) horsepower used or associated with the project shall be reduced by the following amounts from the statewide average as estimated by the ARB: 20% of the total NO_x emissions, and 45% of the total PM₁₀ exhausts emissions. Construction emissions can be reduced by using less polluting construction equipment, which can be achieved by utilizing add-on controls, cleaner fuels, or newer lower emitting equipment. 				

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	<p>b) Related to operational emissions, NOX Emissions shall be reduced by 33.3% of the project's operational baseline NOX emissions over a period of ten years as quantified in the approved AIA. PM10 emissions shall be reduced by 50% of the project's operational baseline PM10 emissions over a period of ten years as quantified in the approved AIA.</p> <p>AIR RR-9: If any building user occupying the Project site introduces equipment subject to regulation under SJVAPCD Rule 2010 (Permits Required), the owners of such equipment that emits, reduces, or controls air contaminants, except those specifically exempted by the SJVAPCD, are required to apply for an Authority to Construct and Permit to Operate from the SJVAPCD.</p> <p>AIR RR-10: If any building user occupying the Project site introduces equipment subject to JVAPCD Rule 2201 (New and Modified Stationary Source Review Rule), the owners of such equipment are required to requires the review of new and modified Stationary Sources of air pollution and the provision of mechanisms including emission trade-offs by which apply for an Authority to Construct, demonstrating that the stationary source of air pollutants would not interfere with the attainment or maintenance of Ambient Air Quality Standards. Rule 2201 also requires that there shall be no net increase in emissions above specified thresholds from new and modified Stationary Sources of all nonattainment pollutants and their precursors.</p>				
<u>Threshold b:</u> Project construction emissions would not exceed any of the SJVAPCD significance thresholds, however, prior to mitigation the Project's operational	AIR MM-1 and AIR RR-4 through AIR RR-10 shall apply.				Less than Significant with Mitigation Incorporated.

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
emissions of ROG and NO _x would exceed the SJVAPCD significance thresholds for these pollutants. Because the SJVAB is designated as “nonattainment” for ozone, and because both ROG and NO _x are precursors to ozone, Project-related operational emissions would result in a cumulatively-considerable net increase of criteria pollutants for which the Project region is non-attainment (i.e., ozone). Operational air quality impacts would be significant on both a direct and cumulatively-considerable basis prior to mitigation. With implementation of Mitigation Measure AIR MM-1, and with mandatory compliance with standard regulatory requirements, including SJVAPCD Rule 9510 (ISR), Project operational emissions of ROG and NO _x would be reduced to below the SJVAPCD’s thresholds of significance. Accordingly, with mitigation the Project would not result in a cumulatively considerable net increase of criteria pollutants (i.e., O ₃ , PM ₁₀ , and PM _{2.5}) for which the Project region is non-attainment under an applicable federal or State ambient air quality standard, and impacts would be reduced to less-than-significant levels.					
Threshold c: The Project would not result in air quality emissions that would result in carcinogenic risk or non-cancer risk exceeding the identified thresholds of significance of one in 20 million and 1.0, respectively, and Project cancer and non-cancer risks would therefore be less than significant. The Project also would result in	AIR MM-2: The Project’s construction contractors shall provide training and personal protective respiratory equipment to construction workers and provide information to all construction personnel and visitors to the construction site about Valley Fever. Project construction contractors shall be required by their contracts to provide the training and protective gear, and permit periodic inspection of the	Project Construction Contractors	City of Bakersfield or its designee	Prior to, and during construction activities	Less than Significant with Mitigation Incorporated

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
less-than-significant impacts due to visibility to nearby areas, CO “hot spots,” and naturally-occurring asbestos. However, prior to mitigation the Project has the potential to result in significant localized impacts due to suspended Valley Fever spores that may be generated during Project construction activities and that could result in adverse health effects to Project construction workers. This is a significant impact on a direct basis prior to mitigation. Implementation of Mitigation Measure AIR MM-2 would ensure that future construction workers and site visitors associated with the Project are provided training/education regarding Valley Fever, and would ensure that all construction workers are provided with protective respiratory equipment for use during ground-disturbing activities that could generate particulate matter. Implementation of the required mitigation would reduce Project localized impacts due to Valley Fever to less-than-significant levels.	<p>construction site by City of Bakersfield staff or its designee to confirm compliance. A note that requires these items is required on all grading plans approved by the City of Bakersfield.</p> <p>AIR MM-3: Construction equipment staging areas for equipment over 150 horsepower shall be not be located within 1,000 feet of South H Street. The construction equipment staging area location(s) shall be shown on all grading plans and building plans approved by the City of Bakersfield.</p>	Project Construction Contractors	City of Bakersfield or its designee	Prior to, and during construction activities	
<u>Threshold d:</u> Based on the provisions of the SJVAPCD’s Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI), the proposed Project would not exceed any screening trigger levels to be considered a source of objectionable odors or odorous compounds. Furthermore, there does not appear to be any significant source of objectionable odors in close proximity that may adversely impact the Project site when it is in operation. Additionally, the Project emissions estimates indicate that it	No Mitigation is required.	N/A	N/A	N/A	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
would not be expected to adversely impact surrounding receptors. As such, the proposed Project would not be a source of any odorous compounds nor would it likely be impacted by any odorous source. Impacts would be less than significant.					
4.3 Biological Resources					
Summary of Impacts					
Threshold a: The Project contains suitable habitat for burrowing owl. In the event that burrowing owl is present on the Project site at the time Project construction activities commence, implementation of the Project has the potential to take burrowing owl individuals not protected by the Metro Bakersfield Habitat Conservation Plan (MBHCP). The Project site provides suitable denning habitat for San Joaquin kit fox (SJKF). In the event that SJKF is present on the Project site at the time that Project construction activities commence, implementation of the Project has the potential to have an adverse effect on SJKF, which is protected by the MBHCP. The Project has the potential to impact nesting migratory birds protected by the Migratory Bird Treaty Act (MBTA) and the CDFW. With implementation of BIO MM-1, BIO MM-2, BIO MM-3, BIO MM-4, and BIO RR-5, the Project's potential to impact San Joaquin kit fox (SJKF) and burrowing owl would be reduced to less than significant.	<p>BIO MM-1: Prior to the issuance of a grading permit or any permit that authorizes ground disturbance, a biological clearance survey shall be conducted on all areas that would be physically disturbed by a CDFW-approved biologist for San Joaquin kit fox (SJKF) in accordance with the requirements of the MBHCP and CESA ITP. If known, active, or natal SJKF dens are identified during the survey, minimization measures identified in the CESA ITP for den avoidance must be demonstrated (MBHSCP CESA ITP Condition of Approval 7.5). If dens cannot be avoided, monitoring and den exaction as described in MBHCP CESA ITP Condition of Approval 7.6 shall be adhered to.</p> <p>BIO MM-2: Surveys to detect burrowing owls shall be conducted by a CDFW-approved biologist no more than 30 days prior to any ground disturbance activities on the Project site and can be conducted concurrently with the pre-activity survey required per the MBHCP. Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist verifies through non-invasive methods that either: (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival. If burrowing owls are observed using burrows during the surveys, owls shall be excluded</p>	Professional Biologist retained by Project Applicant	City of Bakersfield or its designee	Prior to the issuance of a grading permit or any permit that authorizes ground disturbance.	Less than Significant with Mitigation Incorporated
		Professional Biologist retained by Project Applicant	City of Bakersfield or its designee	30 days prior to ground disturbance	

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	<p>from all active burrows through the use of exclusion devices placed in occupied burrows in accordance with CDFG protocols, Staff Report on Burrowing Owl Mitigation, shall be implemented. In such case, exclusion devices shall not be placed until the young have fledged and are no longer dependent upon the burrow, as determined by a qualified biologist. Specifically, exclusion devices, utilizing one-way doors, shall be installed in the entrance of all active burrows. The devices shall be left in the burrows for at least 48 hours to ensure that all owls have been excluded from the burrows. Each of the burrows shall then be excavated by hand and refilled to prevent reoccupation. Exclusion shall continue until the owls have been successfully excluded from the site, as determined by a qualified biologist.</p> <p>BIO MM-3: If vegetation clearing or initial ground-disturbing construction activity occurs during the migratory bird nesting season (February 1 to August 31) a qualified avian biologist shall conduct a nesting bird survey to identify any active nests present within the proposed work area. If active nests are found, initial ground disturbance shall be postponed or halted within a buffer area, established by the qualified avian biologist, that is suitable to the particular bird species and location of the nest, until juveniles have fledged or the nest has been abandoned, as determined by the biologist. The construction avoidance area shall be clearly demarcated in the field with highly visible construction fencing or flagging, and construction personnel shall be instructed on the sensitivity of nest areas.</p> <p>BIO MM-4: The Project Applicant shall assure that the Project's construction contractors adhere to the</p>	<p>Professional Biologist retained by Project Applicant</p> <p>Project Applicant and Construction Contractors</p>	<p>City of Bakersfield or its designee</p> <p>City of Bakersfield or its designee</p>	<p>Prior to ground disturbance if such disturbance will occur between February 1 and August 31</p> <p>During construction activities</p>	

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	<p>following best management practices. Construction contractors shall be required by their contracts to comply with these best practices, and permit periodic inspection of the construction site by City of Bakersfield staff or its designee to confirm compliance. A note that requires compliance is required on all grading and building plans approved by the City of Bakersfield.</p> <p>a) All construction personnel involved in ground-disturbing construction activities should attend a worker orientation program. The worker orientation program should present measures required to avoid, minimize, and mitigate impacts to biological resources and should include, at a minimum, the following subjects: A summary of the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP), Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), and the Migratory Bird Treaty Act (MBTA); biological survey results for the current construction area; life history information for the species of concern; biological resource avoidance, minimization, and mitigation requirements; consequences for failure to successfully implement requirements; and procedures to be followed if dead or injured wildlife are located during Project activities. Upon completion of the orientation, employees should sign a form stating that they attended the program and understand all biological resource mitigation measures. Forms verifying worker attendance should be filed at the Project Applicant's office and be accessible to the City of Bakersfield, USFWS and CDFW staff. No untrained personnel should be allowed to work onsite with</p>				

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	<p>the exception of delivery trucks that are only onsite for 1 day or less and are under the supervision of a trained employee.</p> <p>b) All equipment storage and parking during construction activities should be confined to the designated construction area or to previously disturbed offsite areas that are not habitat for listed species.</p> <p>c) Project construction activities involving initial surface disturbance should occur during daylight hours.</p> <p>d) Trenches should be inspected for entrapped wildlife each morning prior to the onset of construction. Before such holes or trenches are filled, they should be thoroughly inspected for entrapped animals. Any wildlife so discovered should be allowed to escape voluntarily, without harassment, before construction activities resume. A qualified biologist may remove wildlife from a trench, hole or other entrapment out of harm's way if the immediate welfare of the individual is in jeopardy. State or federal listed species may not be handled. Should any State or federal listed species become entrapped, CDFW and USFWS should be contacted as appropriate.</p> <p>e) All food-related trash items such as wrappers, cans, bottles and food scraps generated by Project construction activities should be disposed of in closed containers and removed at least once each week from the site. Deliberate feeding of wildlife should be prohibited.</p>				

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	<p>f) To prevent harassment of special-status species, construction personnel should not be allowed to have firearms or pets on the Project site.</p> <p>g) All equipment and work-related materials should be contained in closed containers either in the work area or on vehicles. Loose items (e.g., rags, hose, etc.) should be stored within closed containers or enclosed in vehicles when on the work site.</p> <p>h) Use of rodenticides and herbicides on the Project site should be prohibited unless approved by the USFWS and the CDFW. This is necessary to prevent primary or secondary poisoning of special-status species using adjacent habitats, and to avoid the depletion of prey upon which they depend. If rodent control must be conducted, zinc phosphide should be used because of its proven lower risk to SJKE.</p> <p>i) Any employee who inadvertently kills or injures a listed species, or who finds any such wildlife dead, injured, or entrapped on the Project site, should be required to report the incident immediately to a designated site representative (e.g., foreman, project manager, environmental inspector, etc.).</p> <p>j) In the case of entrapped wildlife that are listed species, escape ramps or structures should be installed immediately, if possible, to allow the subject wildlife to escape unimpeded.</p> <p>k) In the case of injured special-status wildlife, the CDFW should be notified immediately. During</p>				

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	<p>business hours Monday through Friday, the phone number is (559) 243-4017. For non-business hours, report to (800) 952-5400. Notification should include the date, time, location, and circumstances of the incident. Instructions provided by the CDFW for the care of the injured animal should be followed by the contractor onsite.</p> <p>l) In the case of dead wildlife that are listed as threatened or endangered, the USFWS and the CDFW should be immediately (within 24 hours) notified by phone or in person, and should document the initial notification in writing within 2 working days of the findings of any such wildlife. Notification should include the date, time, location, and circumstances of the incident.</p> <p>m) Material and equipment inspections shall be conducted according to the MBHCP CESA ITP. All exposed pipes, culverts, and other similar structures with a diameter 3 inches or greater shall be properly capped in order to prevent entry by San Joaquin kit fox or other wildlife. Any of these materials or structures that are left overnight and are not capped shall be inspected prior to being moved, buried, or closed in order to ensure that San Joaquin kit fox or other wildlife are not present. If a listed species is found within pipe, culverts or similar structures, the animal will be allowed to escape that section of its own accord prior to moving or utilizing that segment.</p> <p>n) If any previously unidentified protected species or any previously unreported protected species</p>				

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	<p>is found to be present during Project-related construction activities, occupied areas shall be avoided and the construction contractor shall be required by its contract to call a CDFW-approved biologist to the site to identify the species. If the species is protected, the qualified biologist shall notify the USFWS and CDFW of any previously unreported protected species. Any take of protected wildlife shall be reported immediately to USFWS and CDFW.</p> <p>The City of Bakersfield is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Biological Resources, which include the following regulatory requirement for MBHCP fee payment and design features (best practices)</p> <p>BIO RR-5: Prior to the issuance of a grading permit or any permit that authorizes ground disturbance, the Project Applicant shall pay fees pursuant to the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) and Incidental Take Permit, which includes coverage for the San Joaquin kit fox (SJKF). The payment of development impact fees is considered adequate mitigation under the MBHCP and Incidental Take Permit to minimize impacts on special-status species. The fees are placed in an account for habitat acquisition and management to be used by the Metropolitan Bakersfield Habitat Conservation Plan Trust Group. Upon the payment of this fee as specified by the City of Bakersfield, the Project Applicant will become a sub-permittee and will be allowed the incidental take of the species in accordance with State and federal endangered species</p>				

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	laws and mitigation requirements of all parties, including State, federal, and local (City of Bakersfield and Kern County 1994, Incidental Take Permit No. 2081-2013-058-04).				
<u>Threshold b:</u> There is no potential for the Project to 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 CDFG or USFWS.	No mitigation is required.	N/A	N/A	N/A	No Impact
<u>Threshold c:</u> There is no potential for the Project to have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means	No mitigation is required.	N/A	N/A	N/A	No Impact
<u>Threshold d:</u> There is no potential for the Project to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	No mitigation is required.	N/A	N/A	N/A	No Impact
<u>Threshold e:</u> There is no potential for the Project to conflict with any local policies or ordinance protecting biological resources.	No mitigation is required.	N/A	N/A	N/A	No Impact
<u>Threshold f:</u> The Project is subject to the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) and its requirements for San Joaquin kit fox (SJKF). If SJKF is present on the Project site at the time that Project grading activities commence, significant impacts would occur. With implementation of BIO MM-1 and BIO RR-5 and the required compliance	BIO MM-1 and BIO RR-5 shall apply.				Less than Significant with Mitigation Incorporated

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
with the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP), the Project's potential to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, would be reduced to less than significant.					
4.4 Cultural Resources					
Summary of Impacts					
<u>Threshold a:</u> The Project would not impact significant historical resources.	No mitigation is required.	N/A	N/A	N/A	No Impact
<u>Threshold b:</u> The Project would not impact any known archaeological sites and would not cause a substantial adverse change in the significance of any known archaeological resources pursuant to California Code of Regulation, Section 15064.5. However, there is a possibility that previously-undiscovered subsurface archaeological resources may be impacted by development of the Project as proposed. Therefore, Project impacts to previously-undiscovered archaeological resources that may occur in the impact areas of the proposed Project would be significant prior to mitigation. Implementation of Mitigation Measures (MMs) CR MM-1 and CR-MM-2 would ensure the proper identification and subsequent treatment of any significant archaeological resources that may be encountered during ground-disturbing activities associated with Project construction. With implementation of the required mitigation, the Project's potential impacts to important archaeological	<p>CR MM-1: Prior to construction and as needed throughout the construction period involving ground-disturbing construction activities, a construction worker cultural awareness training program shall be provided to all new construction workers within one week of employment at the project site. The training shall be prepared and conducted by a qualified cultural resources specialist. Workers attending the training shall sign a form that shall be kept by the Project Applicant and made available to the City of Bakersfield upon request.</p> <p>CR MM-2: If suspected cultural resources are encountered during ground disturbance activities, all work within 100 feet of the find shall immediately cease and the area cordoned off until a qualified cultural resource specialist that meets the Secretary of the Interior's Professional Qualification Standards can evaluate the find and make recommendations. If the specialist determines that the discovery represents a potentially significant cultural resource, additional investigations may be required. If cultural resources are discovered that may have relevance to Native Americans, the specialist or Project Applicant must</p>	<p>Professional Archaeologist retained by Project Applicant</p> <p>Construction Contractors and Professional Archaeologist retained by Project Applicant</p>	<p>City of Bakersfield or its designee</p> <p>City of Bakersfield or its designee</p>	<p>Prior to the issuance of a grading permit or any permit that authorizes ground disturbance</p> <p>If suspected cultural resources are encountered</p>	<p>Less than Significant with Mitigation Incorporated</p>

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
resources would be reduced to less than significant. Cumulatively-considerable impacts would likewise be reduced to less than significant.	provide written notice to the City of Bakersfield, Tejon Indian Tribe, Native American Heritage Commission, and any other appropriate individuals, agencies, and/or groups as determined by the specialist in consultation with the City of Bakersfield to receive input regarding treatment and disposition of the resource, which may include avoidance, testing, and/or excavation to prevent destruction of the resource and/or to allow documentation of the resource for research potential. All reports, correspondence, and determinations regarding the discovery shall be submitted to the California Historical Resources Information System's Southern San Joaquin Valley Information Center at California State University Bakersfield.				
<u>Threshold c:</u> The Project site does not contain a cemetery and no known cemeteries are located within the immediate site vicinity. Although the Project Applicant would be required to comply with the applicable provisions of California Health and Safety Code § 7050.5 and California Public Resources Code § 5097 et. seq., the Project's potential impacts to buried human remains would be significant on a direct and cumulatively-considerable basis prior to mitigation. In the event that human remains are discovered during construction activities, Mitigation Measure CR MM-3 would require compliance with the applicable provisions of California Health and Safety Code § 7050.5 and California Public Resources Code § 5097 et. seq. Mandatory compliance with Mitigation Measure CR MM-3, State law, and applicable regulatory requirements would reduce the Project's potential impacts to	CR MM-3: During construction, if human remains are discovered, further ground disturbance shall be prohibited pursuant to California Health and Safety Code Section 7050.5. The specific protocol, guidelines, and channels of communication outlined by the Native American Heritage Commission, in accordance with Health and Safety Code Section 7050.5, Public Resources Code 5097.97, and Senate Bill 447 shall be followed. In the event of the discovery of human remains, at the direction of the county coroner, Health and Safety Code Section 7050.5(c) shall guide Native American consultation. Unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The coroner, pursuant to the specific exemption set forth in California Government Code Section 6254 (r), parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set	Construction contractors	County Coroner	If human remains are discovered	Less than Significant with Mitigation Incorporated

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
buried human remains to less-than-significant levels.	forth in California Government Code Section 6254 (r).				
4.5 Energy					
Summary of Impacts					
<u>Threshold a:</u> The amount of energy and fuel consumed by construction and operation of the Project would not be inefficient, wasteful, or unnecessary. Furthermore, the Project would not cause or result in the need for additional energy facilities or energy delivery systems.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
<u>Threshold b:</u> The Project would not cause or result in the need for additional energy production or transmission facilities. The Project would not conflict with or obstruct the achievement of energy conservation goals within the State of California identified in State and local plans for renewable energy and energy efficiency.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
4.6 Geology and Soils					
Summary of Impacts					
<u>Threshold a:</u> Implementation of the Project would not expose people or structures to substantial direct or indirect adverse effects related to liquefaction or fault rupture. The Project site is subject to seismic ground shaking associated with earthquakes; however, mandatory compliance with local and State regulatory requirements and building codes would ensure that the Project minimizes potential hazards related to seismic ground shaking to less than significant levels.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
<u>Threshold b:</u> Implementation of the Project would not result in substantial soil erosion	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
or loss of topsoil. The Project Applicant would be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activities minimizing impacts to less than significant.					
<u>Threshold c:</u> There is no potential for the Project's construction or operation to cause, or be impacted by, on- or off-site landslides or lateral spreading. Potential hazards associated with unstable soils would be precluded through mandatory adherence to the recommendations contained in the site-specific geotechnical report during Project construction.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
<u>Threshold d:</u> The Project site contains soils with low susceptibility to expansion; therefore, the Project would not create substantial direct or indirect risks to life or property associated with the presence of expansive soils. Impacts would be less than significant.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
<u>Threshold e:</u> No septic tanks or alternative wastewater disposal systems are proposed to be installed on the Project site. Accordingly, no impact would occur associated with soil compatibility for wastewater disposal systems.	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold f: The Project would not impact any known paleontological resource or unique geological feature. However, construction activities on the Project site have the potential to unearth and adversely impact an unknown unique paleontological resource or site or unique geologic feature that may be buried beneath the ground surface. Mitigation Measures (MMs) GEO MM-1, GEO MM-2, GEO MM-3, and GEO	GEO MM-1: Prior to construction and as needed throughout the construction period involving ground-disturbing construction activities, a construction worker paleontological resource awareness training program shall be provided to all new construction workers within one week of employment at the project site, if their work will involve ground-disturbing construction activities greater than six feet in depth in Pleistocene older alluvium soils. The training shall be prepared and conducted by a	Professional paleontologist retained by the Project Applicant	City of Bakersfield or its designee	Prior to the issuance of a grading permit	Less than Significant with Mitigation Incorporated

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
MM-4, would ensure the proper identification and subsequent treatment of any paleontological resources that may be encountered during ground-disturbing activities associated with implementation of the proposed Project. Therefore, with implementation of GEO MM-1, GEO MM-2, GEO MM-3, and GEO MM-4, the Project's potential direct and cumulatively considerable impacts to a unique paleontological resource or site or unique geologic feature would be reduced to less than significant.	qualified professional paleontologist. Workers attending the training shall sign a form that shall be kept by the Project Applicant and made available to the City of Bakersfield upon request.				
	GEO MM-2: If paleontological resources are encountered, all work within 100 feet of the find shall halt until a qualified paleontologist can be called to the site to evaluate the find and make recommendations. Paleontological resource materials may include fossils, plant impressions, or animal tracks that have been preserved in rock. If the qualified paleontologist determines that the discovery represents a potentially significant paleontological resource, additional investigations and fossil recovery may be required to mitigate adverse impacts to less than significant levels. Construction within 100 feet of the find shall not resume until the appropriate mitigation measures are implemented or the materials are determined to be to be less than significant by the paleontologist.	Construction contractors and professional paleontologist retained by the Project Applicant	City of Bakersfield or its designee	If paleontological resources are discovered	
	GEO MM-3: Recovered specimens, if any, shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storages shall be required for discoveries of significance as determined by the paleontologist.	Professional paleontologist retained by the Project Applicant	City of Bakersfield or its designee	If paleontological resources are discovered	
	GEO MM-4: A final monitoring and mitigation report of findings and significance shall be prepared, including lists of all fossils recovered, if any, and necessary maps and graphics to accurately record the	Professional paleontologist retained by the Project Applicant	City of Bakersfield or its designee	If paleontological resources are discovered and prior to final building inspection	

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	<p>original location of the specimens. The report shall be submitted to the City of Bakersfield prior to final building inspection.</p> <p>The City of Bakersfield is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Geology and Soils.</p> <p>GEO RR-5: In compliance with City of Bakersfield Municipal Code Chapter 15.05, California Building Code, construction of the Project is required to adhere to the California Building Standards Code and its requirement to prepare and adhere to site-specific recommendations contained in a geotechnical report prepared for the Project site. As such, compliance with the recommendations provided in the Project's geotechnical study prepared by Krazan & Associates, Inc. and dated September 9, 2021 (contained as <i>Technical Appendix F</i> to this EIR) is required.</p> <p>GEO RR-6: To address wind erosion, Project construction activities are required to comply with the provisions of Chapter 15 Section 104.12 of the Bakersfield Municipal Code to ensure that dust abatement measures comply with the current standards set for by the San Joaquin Valley Air Pollution Control District (SJAPCD).</p> <p>GEO RR-7: The Project Applicant is required, pursuant to the State Water Resources Control Board, to obtain coverage under the State's General Construction Storm Water Permit for construction activities (NPDES permit). Compliance with the NPDES permit involves the preparation and implementation of a SWPPP for construction-related</p>				

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	activities. The SWPPP will specify the Best Management Practices (BMPs) that construction contractors will be required to implement during construction activities to ensure that waterborne pollution – including erosion/sedimentation – is prevented, minimized, and/or otherwise appropriately treated prior to surface runoff being discharged from the subject property. Examples of BMPs that may be utilized during construction include, but are not limited to, sandbag barriers, geotextiles, storm drain inlet protection, sediment traps, rip rap soil stabilizers, and hydro-seeding.				

4.7 Greenhouse Gas Emissions

Summary of Impacts

Threshold a: The Project would generate approximately 20,504.28 MT CO ₂ e/yr of GHGs, which is significant on a cumulatively-considerable basis. Although the Project's GHG emissions would only be a very small fraction of the global GHG emissions that contribute to climate change, the City is using a net-zero threshold. Because the Project would result in a net increase in GHG emissions as compared to existing conditions even with implementation of mitigation measures, the Project's impacts due to GHG emissions would be significant and unavoidable on a cumulatively-considerable basis.	Please refer to AIR MM-1 , which requires that the Project Applicant enter into a Voluntary Emission Reduction Agreement (VERA) with the SJVAPCD. AIR MM-1 also serves to reduce GHG emissions. Additional mitigation measures are as follows.			Significant and Unavoidable Cumulatively-Considerable Impact	
	GHG MM-1: Construction contractors shall assure that construction equipment greater than 150 horsepower achieves or is equivalent to or better than Environmental Protection Agency (EPA)/California Air Resources Board (CARB) Tier 4 emissions standards, or Tier 3 standards if Tier 4 equipment is not available at the time of construction. Prior to grading and building permit issuance, the construction contractor(s) shall submit an equipment list to the City's Development Services Director confirming that the equipment used is compliant.	Construction contractors	City of Bakersfield or its designee		Prior to issuance of a grading permit and prior to issuance of a building permit, and during construction
	GHG MM-2: Construction contractors shall assure that hand tools, forklifts, and pressure washers used for construction are electric-powered and shall	Construction contractors	City of Bakersfield or its designee		Prior to issuance of a grading permit and prior to issuance of a building

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	<p>designate an area of the construction site where electric-powered construction vehicles and equipment can charge. The City of Bakersfield shall verify the location of the designated charging area in association with grading and building permit issuance.</p> <p>GHG MM-3: Project construction contractors shall tune and maintain all construction equipment in accordance with the equipment manufacturer's recommended maintenance schedule and specifications. Maintenance records for all pieces of equipment shall be kept on-site for the duration of construction activities and shall be made available for periodic inspection by City of Bakersfield or its designee.</p> <p>GHG MM-4: Provisions shall be made at the warehouse site for emerging electric truck technology. Prior to the issuance of a shell building permit for the warehouse building, the City of Bakersfield shall verify that the warehouse site plan identifies an on-site location for future electric truck (tractor) charging stations, with space available for a minimum of 9 trailers to simultaneously charge (5% of the number of warehouse building dock doors) when charging stations are installed in the future. The conduit trenching shall be installed to that location for future conduit pull as a requirement of the shell building permit.</p> <p>GHG MM-5: In conjunction with the approval of tenant improvement plans and prior to the issuance of an occupancy permit, a minimum of 9 truck (tractor) electric charging stations shall be installed on-site. If the warehouse building tenant is not served by electric trucks, this requirement can be deferred to a</p>	<p>Construction contractors</p> <p>Project Applicant</p> <p>Project Applicant</p>	<p>City of Bakersfield or its designee</p> <p>City of Bakersfield or its designee</p> <p>City of Bakersfield or its designee</p>	<p>permit, and during construction</p> <p>Prior to issuance of a grading permit and prior to issuance of a building permit, and during construction</p> <p>Prior to issuance of a shell building permit</p> <p>Prior to approval of tenant improvement plans and prior to the issuance of an occupancy permit</p>	

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	<p>future point in time when the building begins to be served by electric trucks, as a condition of the occupancy permit.</p> <p>GHG MM-6: Prior to issuance of a shell building permit for the warehouse building, the City of Bakersfield shall verify that electric charging stations are provided at the exterior for the purpose of charging electric yard equipment such as forklifts and yard hostlers.</p> <p>GHG MM-7: The roof of the warehouse building shall be solar-ready. Prior to issuance of a shell building permit for the warehouse building, the City of Bakersfield shall verify that the roof structure is designed to support the installation of solar panels.</p> <p>GHG MM-8: Any loading dock serving refrigerated warehouse space shall be equipped with an electric plug to power a transport refrigeration unit. Prior to issuance of a tenant improvement building permit that authorizes the installation of refrigerated warehouse space, the City of Bakersfield shall verify that the electric plug will be provided.</p> <p>GHG MM-9: The warehouse building's electrical room shall be sufficiently sized to accommodate the number and size of electrical panels reasonably anticipated to be needed to support technological advances in zero-emission technologies. Prior to issuance of a shell building permit for the warehouse building, the City of Bakersfield shall ensure that either a secondary electrical room will be provided in the building or that the primary electrical room of the building is sized 25% larger than is required to satisfy the service requirements of the building or the</p>	<p>Project Applicant</p> <p>Project Applicant</p> <p>Project Applicant</p> <p>Project Applicant</p>	<p>City of Bakersfield or its designee</p> <p>City of Bakersfield or its designee</p> <p>City of Bakersfield or its designee</p> <p>City of Bakersfield or its designee</p>	<p>Prior to issuance of a shell building permit</p> <p>Prior to issuance of a shell building permit</p> <p>Prior to issuance of a tenant improvement building permit that authorizes the installation of refrigerated warehouse space</p> <p>Prior to issuance of a building permit</p>	

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	<p>electrical gear installed with the initial construction has 25% excess demand capacity.</p> <p>GHG MM-10: At least 10% of all passenger vehicle parking spaces shall be electric vehicle (EV) ready, with all necessary conduit and related appurtenances installed. At least 5% of all passenger vehicle parking spaces shall be equipped with working Level 2 Quick charge EV charging stations installed and operational, prior to building occupancy. Signage shall be installed indicating EV charging stations and specifying that spaces are reserved for clean air/EV vehicles. Unless superior technology is developed that would replace the EV charging units, the building operators and any successors in interest shall be responsible for maintaining the EV charging stations in working order for the life of the buildings.</p> <p>GHG MM-11: The rooftops of commercial buildings and the office portions of the warehouse building shall be constructed with light colored roofing material with a solar reflective index ("SRI") of not less than 78. This material shall be the minimum solar reflective rating of the roof material for the life of the building. Prior to issuance of building permits, the City of Bakersfield shall verify that the roofing material complies.</p> <p>GHG MM-12: The Project Applicant or its successor in interest shall provide the warehouse building operator with an information packet regarding EPA Smartway features that are required to be incorporated into haul trucks, as required by CARB. Prior to the issuance of an occupancy permit, the Project Applicant or its successor in interest shall provide a copy of the packet to the City of Bakersfield as verification of the packet contents.</p>	<p>Project Applicant</p> <p>Project Applicant</p> <p>Project Applicant</p>	<p>City of Bakersfield or its designee</p> <p>City of Bakersfield or its designee</p> <p>City of Bakersfield or its designee</p>	<p>Prior to issuance of an occupancy permit</p> <p>Prior to issuance of a building permit</p> <p>Prior to issuance of an occupancy permit</p>	

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	<p>GHG MM-13: The Project's building users shall be encouraged to explore incentives available from the SJVAPCD under the "Heavy Duty Truck Replacement Program." This program provides incentives for the replacement of existing heavy-duty diesel trucks with new, zero or near-zero-emission technology. (At the time of this writing, information is available at https://ww2.valleyair.org/grants/truck-replacement-program/.) Provided that this program or a comparable program remains available, an information packet about the program shall be provided to every building user prior to occupancy. Prior to the issuance of occupancy permits, the Project Applicant, its successor in interest, or the Project's property owner's association shall provide a copy of the packet to the City of Bakersfield as verification of the packet contents.</p> <p>The City of Bakersfield is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Greenhouse Gas Emissions, which include the following:</p> <p>GHG RR-14: All buildings shall be constructed in compliance with Title 24 of the Uniform Building Code to minimize total consumption of energy. The City of Bakersfield shall confirm Title 24 compliance prior to the issuance of building permits.</p> <p>GHG RR-15: All vehicle operators are required to comply with CARB Rule 2485 and CARB Rule 2449, which limits nonessential idling of diesel-fueled commercial vehicle engines and diesel-powered off-road equipment to five minutes or less. Prior to</p>	Building Users	City of Bakersfield or its designee	Prior to issuance of an occupancy permit	

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	<p>issuance of occupancy permits for buildings with loading dock areas, the City of Bakersfield shall verify that signs are posted in these areas that inform vehicle and equipment operators about the requirements of these Rules.</p> <p>GHG RR-16: In compliance with SJVAPCD Rule 9510 (Indirect Source Review (ISR)), the Project Applicant or its successor in interest shall submit an Air Impact Assessment (AIA) application to the SJVAPCD, which will identify emission reduction measures for emissions of NO_x and PM₁₀. The performance measures listed below can be met through any combination of on-site emission reduction measures or off-site fees.</p> <p>a) Related to construction-related emissions, the exhaust emissions for construction equipment greater than fifty (50) horsepower used or associated with the project shall be reduced by the following amounts from the statewide average as estimated by the ARB: 20% of the total NO_x emissions, and 45% of the total PM₁₀ exhausts emissions. Construction emissions can be reduced by using less polluting construction equipment, which can be achieved by utilizing add-on controls, cleaner fuels, or newer lower emitting equipment.</p> <p>b) Related to operational emissions, NO_x emissions shall be reduced by 33.3% of the project's operational baseline NO_x emissions over a period of ten years as quantified in the approved AIA. PM₁₀ emissions shall be reduced by 50% of the project's operational baseline PM₁₀ emissions over a period of ten years as quantified in the approved AIA.</p>				

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
Threshold b: The Project would be consistent with the CARB 2017 Scoping Plan Update, which was prepared to address the GHG reduction requirements set forth by SB 32. Because the Project would be consistent with the Scoping Plan Update, the Project also would not interfere with the State's ability to achieve the GHG reduction requirements of SB 32. Thus, the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, and impacts would be less than significant.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact

4.8 Hazards and Hazardous Materials

Summary of Impacts

<p>Threshold a and b: The Project site contains no evidence of RECs, CRECs, HRECs or other environmental issues. However, the need to cap two existing water wells, the potential for existence of subsurface private septic system(s), and the potential to encounter agricultural-related chemicals, such as pesticides, herbicides, and fertilizers in soils during the construction process could result in a significant hazard to the public or the environment either through risk of upset, transport, use, or disposal of hazardous materials.</p>	<p>HAZ MM-1: The Project's construction contractors shall provide training and personal protective equipment to construction workers and provide information to all construction personnel involved in ground-disturbing construction activities about the potential for discovery of subsurface septic systems and soil contaminants. Project construction contractors shall be required by their contracts to provide the training and protective gear, and permit periodic inspection of the construction site by City of Bakersfield staff or its designee to confirm compliance. A note that requires these items is required on all grading plans approved by the City of Bakersfield.</p>	Construction contractors	City of Bakersfield or its designee	Prior to issuance of a grading permit	Less than Significant with Mitigation Incorporated
	<p>HAZ MM-2: Any stained or odorous soil that may be encountered during ground-disturbing activities shall be removed, stockpiled, and transported for disposal in accordance with local, State, and federal regulations. Soil samples shall be collected from the</p>	Construction contractors and an Environmental Professional retained by the Project Applicant	City of Bakersfield or its designee	If stained or odorous soil is encountered	

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	<p>resulting excavation(s) to verify complete removal of any impacted soil. During soils/debris removal operations, a Project Environmental Professional (Environmental Professional) shall be retained by the Project Applicant or construction contractor and shall be available to identify and address other issues that may arise in the course soil-disturbing construction activities. As determined necessary by the Environmental Professional, additional measures shall be employed to minimize effects of any encountered hazards. Documentation of the measures employed and resulting conditions after their application shall be documented and submitted to the City of Bakersfield.</p> <p>The City of Bakersfield is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Hazards and Hazardous Materials.</p> <p>HAZ RR-3: Existing water wells shall be abandoned and capped as part of the site preparation phase of the construction process, consistent with applicable regulations of the State of California Department of Water Resources (as reflected in Bulletins 74-81 and 74-90); and the Central Valley RWQCB.</p> <p>HAZ RR-4: Any septic systems encountered during construction activities shall be properly abandoned in compliance with the regulations of the Central Valley RWQCB; the California Uniform Plumbing Code; and Manual of Septic Tank Practice as published by the U.S. Department of Health, Education and Welfare; and the rules, standards and regulations of the City of Bakersfield.</p>				

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	<p>HAZ RR-5: Construction contractors shall be required to comply with all applicable federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited requirements imposed by the EPA, DTSC, and the Central Valley RWQCB.</p> <p>HAZ RR-6: Any business that occupies the Project site and that handles hazardous materials (as defined in Section 25500 of California Health and Safety Code, Division 20, Chapter 6.95) shall be required to comply with California's Hazardous Materials Release Response Plans and Inventory Law, which requires immediate reporting to the Kern County Fire Department and the State Office of Emergency Services regarding any release or threatened release of a hazardous material, regardless of the amount handled by the business, and to prepare a Hazardous Materials Business Emergency Plan (HMBEP).</p> <p>HAZ RR-7: If businesses that use or store hazardous materials occupy the future buildings on the Project site, the business owners and operators would be required to comply with all applicable federal, State, and local regulations to ensure proper use, storage, use, emission, and disposal of hazardous substances.</p> <p>HAZ RR-8: The proposed Project would be required to comply with the Kern County Operational Area Hazardous Materials Area Plan to ensure compliance with established procedures, rules, and regulations for emergency responses in the event of a hazardous materials incident.</p>				
<u>Threshold c:</u> The Project site is not located within one-quarter mile of any existing or	No mitigation is required.	N/A	N/A	N/A	No Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
proposed school. Accordingly, the Project has no potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.					
<u>Threshold d:</u> The Project site is not located on any list of hazardous materials sites complied pursuant to Government Code Section 65962.5.	No mitigation is required.	N/A	N/A	N/A	No Impact
<u>Threshold e:</u> The Project site is not located within an airport land use plan or, where such a plan has not been adopted, or within two miles of a public airport or public use airport.	No mitigation is required.	N/A	N/A	N/A	No Impact
<u>Threshold f:</u> The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. During construction and long-term operation, adequate emergency vehicle access is required to be provided. Accordingly, implementation of the Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan.	No mitigation is required.	N/A	N/A	N/A	No Impact
<u>Threshold g:</u> The Project site is not located in close proximity to wildlands or areas with high fire hazards. Thus, the Project would not expose people or structures to a significant wildfire risk.	No mitigation is required.	N/A	N/A	N/A	No Impact
4.9 Hydrology and Water Quality					
<u>Threshold a and e:</u> The Project would be required to comply with a Stormwater Pollution Prevention Plan (SWPPP) for construction-related activities, including	No mitigation is required. The City of Bakersfield is required to assure that implementing development complies with the	N/A	N/A	N/A	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
grading. Best management practices (BMPs) would be implemented as part of the SWPPP to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated. Under long-term conditions, the Project's proposed water quality/retention basin would capture all first-flush flows generated on the Project site and infiltrate the captured water into the groundwater basin. Furthermore, the Project site is not tributary to any impaired waterbodies listed on the CWA Section 303(d) list. As such, the Project has no potential to cause or contribute to surface water quality impacts downstream. Accordingly, the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality, and would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant.	<p>assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Hydrology and Water Quality, which include the following:</p> <p>HYD RR-1: The Project Applicant and construction contractor are required to comply with the requirements of a NPDES permit, and SWPPP. Compliance with the NPDES permit and the SWPPP require an effective combination of erosion control and sediment control measures (i.e., Best Management Practices) to reduce or eliminate discharges to surface water from storm water and non-stormwater discharges during construction activities.</p> <p>HYD RR-2: During construction, Project construction contractors are required to comply with the requirements of the 2019 California Green Building Standards Code (CalGreen, Part 11 of Title 24, California Code of Regulations) or any subsequent version of the Title 24 in effect at the time of building permit issuance, which requires among other items the installation of low water-use features.</p> <p>HYD DF-3: A water quality/retention basin that meets the sizing requirements for a 5-day/10yr storm event, for both the warehouse distribution and commercial components of the Project, shall be installed in the west-central portion of the Project site and shall be operational prior to issuance of the first occupancy permit for the Project. The sizing parameters are specified in a Preliminary Hydrology Report prepared for the Project by Cornerstone Engineering, dated March 24, 2022, and included as EIR Technical Appendix H.</p>				

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
<u>Threshold b:</u> The Project would be provided potable water by the GCWD. The GCWD UWMP forecasts 9,722 acre-feet of reliable supply for a normal year, single-year drought, and multi-year drought in 5-year increments over a 20-year planning period, which is nearly three times the forecasted water demand over the planning period, even accounting for the Project's increase in water demand. Similarly, the Kern River Groundwater Sustainability Plan estimates groundwater safe yield combined with other sources of supply and supplemental supply projects which combined fully mitigate potential future overdraft. With respect to groundwater recharge, runoff generated on site would be conveyed to the proposed on-site water quality/retention basin, where the runoff would infiltrate into the on-site soils. Accordingly, the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin, and impacts would be less than significant.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
<u>Threshold c:</u> For the reasons discussed under the analysis of Thresholds a. and e., Project impacts to surface and groundwater quality would be less than significant. The Project has no potential to increase the rate or amount of surface runoff in a manner	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
which would result in flooding on- or off-site, and the Project would not create runoff water which would exceed the capacity of existing or planned stormwater drainage systems. Additionally, the Project site and surrounding areas are not subject to flood hazards. Accordingly, the Project would not substantially alter the existing drainage pattern of the site or area in a manner which would result in flooding on or off site, exceed the capacity of existing or planned drainage systems, or impede or redirect flood flows. Impacts would be less than significant.					
<u>Threshold d:</u> The Project site is not located within or near any flood hazard areas, is not subject to tsunami hazards, and there are no enclosed or semi-enclosed bodies of water in proximity to the Project site capable of producing seiches that could affect the Project site. Accordingly, Project would not result in any impacts related to the risk of release of pollutants due to Project inundation from floods, tsunamis, or seiches.	No mitigation is required.	N/A	N/A	N/A	No Impact
4.10 Land Use and Planning					
<u>Threshold a:</u> The Project has no potential to physically divide an established community.	No mitigation is required.	N/A	N/A	N/A	No Impact
<u>Threshold b:</u> The Project's proposed General Plan Amendment would ensure consistency between the proposed Project's land uses and Metropolitan Bakersfield General Plan. The Project is consistent with General Plan goals and policies and the general intent of the General Plan and has	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
no potential to result in significant land use and planning conflicts in the context of compliance with applicable environmental plans, policies, and regulations beyond those identified in other Subsections of this EIR.					
4.11 Noise					
<u>Threshold a:</u> Noise levels generated by the Project's short-term construction would be less than significant at the nearest sensitive receptor. On-site operational noise levels would be less than significant at the nearest sensitive receptor. In addition, Project-related traffic noise increases would be below the identified thresholds of significance under Existing, 2024, 2029, and 2042 traffic conditions. Accordingly, the Project would not 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, and impacts would be less than significant.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
<u>Threshold b:</u> The Project's construction and operational activities would not result in a perceptible groundborne vibration or noise that exceed thresholds of significance.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
<u>Threshold c:</u> The Project site is not located within the vicinity of a private airstrip, is not located in an airport land use plan, and is not located within two miles of a public airport or public use airport. Therefore, the Project would not expose people residing or working in the Project area to excessive noise levels related to a private airstrip,	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
airport land use plan or public airport our public use airport.					
4.12 Population and Housing					
<u>Threshold a:</u> The estimated 1,500 jobs that could be generated by the Project are expected to be filled by a labor force that already resides in the region. Accordingly, the Project would not induce substantial unplanned population growth.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
<u>Threshold b:</u> No residences are located on the Project site and no direct displacements of housing or people would occur. Any indirect influences that the Project may have on existing households' decisions to move further from the Project site or closer to the Project site, if any, are speculative and nonetheless would not result in the need to construct new homes caused by Project-related displacement of people.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
4.13 Transportation					
<u>Threshold a:</u> The Project is consistent with the Metropolitan Bakersfield General Plan, including the goals and policies of the General Plan Circulation Element, and also would be required to comply with all applicable requirements of the City's Municipal Code. As there are no other applicable programs, plans, ordinances, or policies addressing the circulation system, Project impacts due to a conflict with a program, plan, ordinance or policy addressing the circulation system would be less than significant.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
<p><u>Threshold b:</u> For the commercial component of the Project, the overall VMT with the Project is less than the baseline. The Project VMT/employee for the proposed warehouse use would comply with the threshold of significance to reduce VMT by at least 15% below the baseline. However, the daily VMT associated with the Project's warehouse trucks would be 29,000 miles/day and 50 miles per truck, which exceeds the significance threshold established by this EIR of 16.29 miles per day. Thus, VMT impacts associated with Project-related long-haul truck trips are concluded to be a significant direct and cumulatively-considerable impact.</p>	<p>Mitigation is not available to reduce the Project's VMT associated with large truck trips.</p> <p>The City of Bakersfield is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Transportation, which include the following regulatory requirements.</p> <p>TRN RR-1: Prior to issuance of building permits, the Project Applicant shall pay appropriate Traffic Impact Fee (TIF) fees at the rates then in effect in accordance with Chapter 15.84 of the City's Municipal Code.</p> <p>TRN RR-2: All off-site roadway improvements shall comply with applicable provisions of City of Bakersfield Municipal Code Title 10 (Vehicles and Traffic) and Chapter 13.12 (Development Improvements Standards and Specifications).</p> <p>TRN DF-3: Prior to issuance of a certificate of occupancy for the warehouse building, the facility operator(s) shall establish and submit for approval to the Development Services Director a Truck Routing Plan to and from SR-99 using the Hosking Avenue ramps, which will apply to trucks owned and operated by the warehouse building user. The plan shall include measures, such as signage, pavement markings, and enforcement mechanisms for preventing truck queuing, circling, stopping, and parking on public streets. The facility operator shall be responsible for enforcement of the plan.</p>				Significant and Unavoidable Direct and Cumulatively-Considerable Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
<u>Threshold c:</u> With mandatory compliance with City design standards, including standards contained within the City's Municipal Code, the Project would not substantially increase hazards due to a geometric design feature. Additionally, due to the short distance between the Project site and the on- and off-ramps at SR 99, and because Project truck traffic would be directed directly to SR-99, the Project would not result in increased hazards to transportation as a result of incompatible uses, and impacts due to incompatible uses would be less than significant.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
<u>Threshold d:</u> The Project Applicant would be required to maintain adequate emergency access during both construction and long-term operation, in accordance with City of Bakersfield and BFD requirements. Accordingly, the Project would not result in inadequate emergency access, and impacts would be less than significant.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
4.14 Tribal Cultural Resources					
<u>Threshold a:</u> The Project site does not contain any known tribal cultural resources. Nonetheless, Project construction activities have the potential to unearth and adversely impact tribal cultural resources that may be buried or masked at the Project site. Implementation of CR MM-1 through CR-MM 3 would ensure the proper identification and subsequent treatment of any significant tribal cultural resources that may be encountered during ground-disturbing activities associated with Project development. With implementation of the	CR MM-1 through CR MM-3 shall apply.				Less than Significant with Mitigation Incorporated

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
required mitigation, the Project's potential impact to significant tribal cultural resources would be reduced to less-than-significant.					
4.15 Utilities and Service Systems					
<u>Threshold a:</u> The Project's wet and dry utility infrastructure facilities have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project's impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project's proposed water, sewer, drainage, and dry improvements that have not already been addressed.	<p>The City of Bakersfield is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Utilities and Service Systems, which include the following:</p> <p>UTL RR-1: During construction, Project construction contractors are required to comply with the requirements of the 2019 California Green Building Standards Code (CalGreen, Part 11 of Title 24, California Code of Regulations), which requires among other items the installation of low water-use appliances and requires that a minimum of 65 percent of the solid waste generated by the Project's construction phase be diverted from local landfills.</p> <p>UTL RR-2: The Project is required to comply with the provisions of the California Solid Waste Reuse and Recycling Act (AB 1327) which requires that an adequate area for collecting and loading recyclable materials over the lifetime of the project be provided. The City of Bakersfield shall ensure the provision of this area prior to the issuance of building permits.</p> <p>UTL RR-3: The Project Applicant, construction contractors, and operators, shall comply with all applicable provisions of Chapter 8.32, Solid Waste/Recyclable Materials/Organic Waste, of the City of Bakersfield Municipal Code.</p>	N/A	N/A	N/A	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	<p>UTL RR-4: The Project Applicant, construction contractors, and operators, shall comply with all applicable provisions of Chapter 14.02, Water and Sewers, of the City of Bakersfield Municipal Code.</p> <p>UTL RR-5: The Project Applicant, construction contractors, and operators, shall comply with all applicable provisions of Chapter 17.61, Landscape Standards, of the City of Bakersfield Municipal Code.</p>				
<u>Threshold b:</u> Estimated water demand associated with the Project represents an additional 129.4 AFY demand on the GCWD delivery system. The GCWD's 2020 UWMP forecasts more than adequate groundwater supplies to reliably meet customer demands, including demand associated with the proposed Project, under various drought scenarios, over a 20-year planning period. Accordingly, the GCWD would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years, and impacts would therefore be less than significant.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
<u>Threshold d:</u> There is adequate capacity available at the Bakersfield Metropolitan (Bena) Landfill to accept the Project's solid waste during both construction and long-term operation. The Project has no potential to generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure to handle the waste. Impacts would be less than significant.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
Thresholds e: There is no potential for the Project to conflict with applicable federal, State, and local statutes and regulations related to the management and reduction of solid waste and pertaining to waste disposal, reduction, and recycling. Impacts would be less than significant.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact

1.0 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that all public agencies within the State of California having land use approval over project activities that have the potential to adversely affect the quality of the environment, regulate such activities so that impacts to the environment can be prevented to the extent feasible. Such activities are reviewed and monitored through the CEQA compliance process, as provided in the CEQA Statute (Public Resources Code Sections 21000- 21177, as amended) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387, as amended).

Under CEQA, if there is substantial evidence that a project may have a significant effect on the physical environment, an Environmental Impact Report (EIR) must be prepared (CEQA Guidelines Section 15064(a)(1)). This document serves as an EIR for the proposed Majestic Gateway Project. For purposes of this EIR, the term “Project” refers to all actions associated with implementation of the Majestic Gateway Project including its planning, construction, and ongoing operations. The term “Project Applicant” used herein refers to Majestic Realty Co., which is the entity that submitted applications to the City of Bakersfield to entitle the Project. The term “Project site” refers to the property upon which the Project is proposed. The public agency with the principal responsibility for carrying out or approving a project or the first public agency to make a discretionary decision to proceed with a proposed project should ordinarily act as the Lead Agency pursuant to CEQA Guidelines Sections 15050-15051. The term “Lead Agency” used herein refers to the City of Bakersfield. Throughout this document, the terms “Draft EIR” and “Final EIR” may be used interchangeably since both are part of the ultimate EIR record; however, “Draft EIR” may be used specifically when referring to information provided in the volume made available for the CEQA-required 45-day public review period.

1.1 PURPOSES OF CEQA AND THIS EIR

As stated by CEQA Guidelines Section 15002(a), the basic purposes of CEQA are to:

- 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; and
- 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.

The purposes of this EIR are to inform public agency decision-makers and the general public about the potentially significant environmental effects of the Majestic Gateway Project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the Project that would feasibly attain most of the basic Project objectives but would avoid or substantially lessen its significant environmental effects (CEQA Guidelines Section 15121(a)). This EIR is an informational document that represents the independent judgment of the City of Bakersfield. Staff in the City's Development Services Department reviewed and, as necessary, directed revisions to all submitted drafts, technical studies, and reports supporting this EIR for consistency with City policies and requirements, to ensure that this EIR reflects the City of Bakersfield's independent judgment.

1.2 SUMMARY OF THE PROJECT EVALUATED BY THIS EIR

Refer to Section 3.0, *Project Description*, for a detailed description of these requested discretionary actions and the proposed physical and operational characteristics of the Project. Other related discretionary and administrative actions that are required to construct and operate the Project also are described in Section 3.0.

In summary, the Project Applicant proposes to develop ± 90.59 gross acres (± 84.67 net acres) located east of State Route 99 (SR-99), west of South H Street, north of Hosking Avenue and south of Berkshire Road with retail commercial uses (currently conceptually designed) and one warehouse distribution facility. The commercial buildings would all together provide up to 187,500 square feet (s.f.) of building space and the warehouse distribution building would provide up to 1,012,185 s.f. of building space. The commercial portion of the Project site is 29.25 gross acres (27.91 net acres), the warehouse distribution portion of the Project site is 56.86 gross acres (52.28 net acres), and a water retention basin is proposed on 4.48 net acres. Approximately 5.92 acres of right-of-way would be dedicated to the City of Bakersfield for the widening of South H Street and Berkshire Road.

Governmental approvals requested from the City of Bakersfield by the Project Applicant include the following:

- **General Plan Amendment/Zone Change No. 21-0184 (GPA/ZC No. 21-0184)** proposes the following modifications to the land use element of the Metropolitan Bakersfield General Plan (General Plan) and the City's official zoning map. Pertaining to the 52.28 net-acre warehouse distribution portion of the Project site, the General Plan land use designation would be modified from General Commercial (GC) to Light Industrial (LI), and the zoning classification would be modified from Regional Commercial-Planned Commercial Development Combining (C-2/PCD) to Light Manufacturing (M-1).

Pertaining to the 27.91 net-acre commercial portion of the Project site and the 4.48-acre retention basin portion of the Project site, the zoning classification would be changed from C-2/PCD to Exclusive PCD. Although the Applicant's preliminary development plan proposes 12 commercial buildings collectively having a maximum of 187,500 s.f. of building space, the

proposed Exclusive PCD zoning will require the Applicant to obtain approval of a final commercial development plan by the City Council at a future date.

- **Vesting Tentative Parcel Map No. 12438 (VTPM No. 12438)** is a proposed map to subdivide the Project site into 17 parcels and dedicate 5.92 acres of right-of-way to the City of Bakersfield for the widening of South H Street and Berkshire Road. The proposed VTPM also shows that the Project Applicant would construct off-site roadway improvements including but not limited to improvements to the Hosking Avenue/South H Street intersection.
- **Site Plan Review No. 21-0185** is a proposed site plan for the development of a 1,012,185 s.f. cross-dock speculative warehouse distribution building on 52.28 net acres of the Project site and a water retention basin on 4.48 acres. Other features include landscaping, parking areas, drive aisles, lighting, signage, and frontage improvements to Berkshire Road and South H Street.

1.3 CEQA COMPLIANCE PROCESS

As a first step in the CEQA compliance process, the City of Bakersfield prepared an Initial Study pursuant to CEQA Guidelines Section 15063. The Initial Study determined that implementation of the Project has the *potential* to cause or contribute to significant environmental effects, and a Project EIR, as defined by CEQA Guidelines Section 15161, is required.

Pursuant to the procedural requirements of CEQA, on March 8, 2022, the City of Bakersfield filed a Notice of Preparation (NOP) with the California Office of Planning and Research (State Clearinghouse) and the Kern County Clerk, to indicate that an EIR would be prepared to evaluate the Project's potential to impact the environment. The NOP also was distributed to potential responsible and trustee agencies and other interested parties for a 30-day public review period that commenced on March 8, 2022. The purpose of distributing the NOP was to solicit responses in order to assist the City in identifying the full scope and range of potential environmental concerns associated with the Project so that these issues could be fully examined in this EIR.

In addition, the City of Bakersfield held a publicly-noticed EIR Scoping Meeting on March 30, 2022 using an internet-based virtual platform (Zoom) due to coronavirus pandemic precautions. The City also held a second in-person EIR Scoping Meeting on April 11, 2022 at the City of Bakersfield City Hall, with interpretation services available in Spanish and Punjabi dialects. At the Scoping Meetings, the City provided information about the proposed Project, the intended scope of the EIR, and provided opportunity for public agencies and members of the general public to comment on the scope of environmental issues to be addressed in this EIR.

The NOP, public review distribution list, and written comments received by the City of Bakersfield during the NOP public review period are provided in *Technical Appendix A* to this EIR. Please refer to Table 1-1, *Summary of NOP Comments*, for summarized comments received during the NOP public

review period. The purpose of this table is to present a summary of the environmental topics that were expressed by public agencies, interested parties, and members of the general public to be of primary interest. Table 1-1 is not intended to list every comment received by the City during the NOP review period. Regardless of whether or not an environmental or CEQA-related comment is listed in the table, all relevant comments received in response to the NOP and during the EIR Scoping Meetings are addressed in this EIR.

Table 1-1 Summary of NOP Comments

Commenter	Comment	EIR Section Where Comment Is Addressed
State		
California Air Resources Board (CARB)	<ul style="list-style-type: none"> Recommends discussion of potential cumulative health impacts associated with construction and operation of the Project. 	<i>4.2, Air Quality</i>
	<ul style="list-style-type: none"> Recommends quantification and discussion of the potential cancer risks from construction and operation of the proposed Project. 	<i>4.2, Air Quality</i>
	<ul style="list-style-type: none"> To reduce exposure to diesel PM emissions in disadvantaged communities, recommends that the Project include zero-emission technologies to minimize diesel PM and NO_x emissions as well as greenhouse gas emissions that contribute to climate change. 	<i>4.2, Air Quality; 4.7, Greenhouse Gas Emissions</i>
California Department of Conservation Geologic Energy Management Division	<ul style="list-style-type: none"> Cites that no known oil or gas wells are located within the Project boundary and provides procedural information in the event that any wells are encountered. 	<i>4.8, Hazards and Hazardous Materials</i>
Native American Heritage Commission	<ul style="list-style-type: none"> Recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed Project. 	<i>4.14, Tribal Cultural Resources</i>
	<ul style="list-style-type: none"> Notes AB 52 requirements, SB 18 provisions, and recommendations for the preparation of cultural resources assessments. 	<i>4.4, Cultural Resources; 4.14, Tribal Cultural Resources</i>
Regional		
San Joaquin Valley Air Pollution Control District	<ul style="list-style-type: none"> Recommends mitigation measures to reduce impacts from construction emissions and operational emissions including from heavy-duty trucks. Recommends that operational (ongoing) air emissions from mobile sources and stationary sources be analyzed separately. Recommends that emissions analysis be performed using the California Emission Estimator Model (CalEEMod). 	<i>4.2, Air Quality; 4.7, Greenhouse Gas Emissions (all comments)</i>

Table 1-1 Summary of NOP Comments

Commenter	Comment	EIR Section Where Comment is Addressed
	<ul style="list-style-type: none"> • Recommends evaluation of the Project's heavy-duty truck routing patterns, with the aim of limiting exposure of residential communities and sensitive receptors to emissions. • Recommends evaluating alternative truck routes and possible impacts on vehicle miles traveled (VMT) and air quality. • Recommends that efforts occur to ensure compliance with anti-idling regulation, especially near sensitive receptors. • Requests discussion on the feasibility of implementing a Voluntary Emission Reduction Agreement (VERA). • Recommends assessment of health risk on surrounding receptors and coordination with the Air District regarding health risk modeling protocol. • Recommends limited idling times for trucks, use of vegetative barriers, and installation of EV charging equipment. • Requests discussion about the connection between potential adverse air quality impacts with the likely nature and magnitude of potential health effects. • If an ambient air quality analysis (AAQA) is performed, the analysis should include emissions from both Project specific and non-permitted equipment and activities. • Recommends review of Air District Rules and Regulations and compliance with regulatory requirements, in order to reduce impacts. 	
Local		
Kem County Superintendent of Schools	<ul style="list-style-type: none"> • Requests analysis of possible effects of the proposed Project on Greenfield Union Elementary and Kern High School facilities. 	5.4.4, Public Services
	<ul style="list-style-type: none"> • Notes that mitigation of the proposed Project's impacts would be limited to a collection of statutory fees authorized under Education Code Section 17620 and Government Code Sections 65995 et seq. at the time that building permits are issued. 	5.4.4, Public Services
Leadership Council for Justice and Accountability	<ul style="list-style-type: none"> • Requests that the Project comply with CEQA and civil rights laws. 	All EIR Sections
	<ul style="list-style-type: none"> • Expresses concern about increased air pollution in Greenfield. 	4.2, Air Quality
	<ul style="list-style-type: none"> • Requests that the EIR assess impacts to housing development and discuss the risk of disinvestment and 	4.12, Population and Housing

Table 1-1 Summary of NOP Comments

Commenter	Comment	EIR Section Where Comment is Addressed
	lowering property values.	
	<ul style="list-style-type: none"> Requests that the EIR analyze the Project's heat island effect. 	4.7, Greenhouse Gas Emissions
	<ul style="list-style-type: none"> Requests that the EIR analyze air quality impacts during all phases (construction and operation) of the Project. 	4.2, Air Quality
	<ul style="list-style-type: none"> Requests assessment of emissions from passenger vehicles driving to school drop offs in comparison to walking or other transportation options. 	4.2, Air Quality
	<ul style="list-style-type: none"> Requests mitigation measures or community benefit agreements to address health impacts on residents. 	4.2, Air Quality
	<ul style="list-style-type: none"> Requests incorporation of electric vehicles and trucks as well as truck routing to avoid sensitive land uses. 	4.2, Air Quality; 4.13, Transportation
	<ul style="list-style-type: none"> Requests that the proposed Project incorporate complete streets elements on Hosking Avenue for the prevention of traffic accidents and promotion of active transportation. 	3.0, Project Description; 4.13, Transportation
	<ul style="list-style-type: none"> Requests analysis of increased traffic impacts to public safety, pedestrian access to Hosking Avenue and Berkshire Road. 	4.13, Transportation
	<ul style="list-style-type: none"> Requests discussion and identification of effective mitigation measures. 	ES, Executive Summary
	<ul style="list-style-type: none"> Requests that the Project include a lighting plan. 	4.1, Aesthetics
	<ul style="list-style-type: none"> Requests discussion of potential water contamination from the Project. 	4.9, Hydrology and Water Quality
	<ul style="list-style-type: none"> Requests assessment of drainage capacity and potential impacts in surrounding residential communities, impacts associated with the retention basin, and stormwater drainage infrastructure. 	4.9, Hydrology and Water Quality
	<ul style="list-style-type: none"> Requests an analysis of impacts associated the retention basin and vector control. 	4.9, Hydrology and Water Quality
	<ul style="list-style-type: none"> Requests discussion of alternative locations for the proposed Project. 	6.0, Alternatives
	<ul style="list-style-type: none"> Requests that the City of Bakersfield ensure the proposed Project complies with the City's Municipal Code. 	4.10, Land Use and Planning
	<ul style="list-style-type: none"> Requests that the City further fair housing and comply with the Fair Employment and Housing Act (FEHA). 	4.12, Population and Housing
	<ul style="list-style-type: none"> Requests that the City include information in Spanish or Punjabi. 	1.0, Introduction
	<ul style="list-style-type: none"> Expresses concerns about detrimental and public health impacts, as well as discriminatory impacts. 	4.2, Air Quality

Table 1-1 Summary of NOP Comments

Commenter	Comment	EIR Section Where Comment is Addressed
Sierra Club, Kern Ka weah Chapter	<ul style="list-style-type: none"> Requests consideration of feasible mitigation measures to offset potential cumulative impacts on global climate change. Also recommends possible mitigation measures for evaluation in the EIR. 	4.7, Greenhouse Gas Emissions
	<ul style="list-style-type: none"> Requests that the EIR address the proposed Project's potential impacts on schools as sensitive receptors. 	4.2, Air Quality
	<ul style="list-style-type: none"> Requests that the EIR address the potential air quality impacts from an environmental justice perspective. 	4.2, Air Quality
	<ul style="list-style-type: none"> Requests that an air quality study be prepared that examines feasible methods to reduce impacts, and offers possible mitigation measures for evaluation in the EIR. 	4.2, Air Quality
	<ul style="list-style-type: none"> Requests that the EIR disclose whether trucks and trailers with transportation refrigeration units (TRUs) will be allowed on the site. If TRUs will be allowed on site, requests an HRA be performed. 	3.0, Project Description; 4.2, Air Quality
	<ul style="list-style-type: none"> Requests that the EIR address the proposed Project's air and climate impact to the AB 617-designated Arvin-Lamont region. 	4.2, Air Quality; 4.7, Greenhouse Gas Emissions
	<ul style="list-style-type: none"> Claims that dust mitigation is not efficient in reducing the threat of Valley fever and therefore requests soil testing for Valley fever. 	4.2, Air Quality; 4.6, Geology and Soils
	<ul style="list-style-type: none"> Requests examination of and mitigation for cumulative air pollution effects of the proposed Project on forest resources. 	4.7, Greenhouse Gas Emissions
	<ul style="list-style-type: none"> Requests that the EIR address the proposed Project's cumulative impact to air pollution. 	4.2, Air Quality
	<ul style="list-style-type: none"> Request that the EIR contain an alternative that could significantly reduce total vehicle miles traveled. 	6.0, Alternatives
	<ul style="list-style-type: none"> Requests that the EIR consider an infill alternative and a transit-oriented alternative 	6.0, Alternatives
	<ul style="list-style-type: none"> Notes a cumulative list of proposed new industrial park and/or proposed fueling station-convenience store projects within several miles of the proposed project 	4.0, Environmental Analysis
	<ul style="list-style-type: none"> Requests cumulative impacts be addressed. 	4.0, all Subsections
	<ul style="list-style-type: none"> Request that potential noise impacts, including truck traffic noise, to the adjacent residential neighborhood east of the Project site, be addressed. 	4.11, Noise
	<ul style="list-style-type: none"> Requests that the proposed Project's potential to result in growth inducement, be addressed. 	5.3, Growth-Inducing Impacts
	<ul style="list-style-type: none"> Requests that the EIR demonstrate a need for the proposed Project. 	3.0, Project Description

Table 1-1 Summary of NOP Comments

Commenter	Comment	EIR Section Where Comment is Addressed
	<ul style="list-style-type: none"> Request that the Project's water usage be quantified and that the EIR address water supply issues for the future. 	<i>4.15, Utilities and Service Systems</i>
	<ul style="list-style-type: none"> Requests evaluation of sensitive and special-status species and require pre-construction protocols to observe CDFG protocols to be extended to a buffer area surrounding the sites. 	<i>4.3, Biological Resources</i>
	<ul style="list-style-type: none"> Requests investigation of whether the Project site contains potential foraging and/or nesting habitat for Swainson's hawk. 	<i>4.3, Biological Resources</i>
	<ul style="list-style-type: none"> Requests that landscaping include drought-tolerant and/or native plants. 	<i>3.0, Project Description</i>
	<ul style="list-style-type: none"> Requests that the proposed Project be designed with kit fox dens and movement corridors. 	<i>4.3, Biological Resources</i>
	<ul style="list-style-type: none"> Request that the EIR analyze light pollution effects 	<i>4.1, Aesthetics</i>
Michell M. Tsai, Attorney at Law, on behalf of the Southwest Regional Council of Carpenters	<ul style="list-style-type: none"> Requests that the City provide notice for any and all notices referring or relating to the Project. 	<i>1.0, Introduction</i>
	<ul style="list-style-type: none"> Requests the City require use of local skilled and trained workforce, use of workers who are register or have graduated from a Joint Labor Management apprenticeship training program, or have or have equivalent on the job experience. Also requests local hire provisions. 	<i>3.0, Project Description</i>
Individuals		
Jeffrey Freeman	<ul style="list-style-type: none"> Concerns with traffic-related noise, emissions, and air quality. 	<i>4.2, Air Quality;</i> <i>4.11, Noise</i>
	<ul style="list-style-type: none"> Questions whether the trucks will be limited to where and what times they can access the site. 	<i>3.0, Project Description</i>
	<ul style="list-style-type: none"> Expresses concerns about aesthetics. 	<i>4.1, Aesthetics</i>
	<ul style="list-style-type: none"> Expresses concern about possible safety issues if hazardous materials would be hauled. 	<i>4.8, Hazards and Hazardous Materials</i>

Based on the analysis contained in the Initial Study (see *Technical Appendix A*) and in consideration of public comments made on the NOP and Initial Study in writing (see *Technical Appendix A*) and orally at the Scoping Meetings, the City of Bakersfield determined that the proposed Project would clearly result in no impacts or less-than-significant impacts to the following environmental topics: Agriculture and Forestry Resources, Mineral Resources, Public Services, Recreation, and Wildfire. Potential effects associated with these environmental topics and an analysis of the Project's potential to be growth-inducing are summarized in Section 5.0, *Other CEQA Considerations*.

Based on Appendix G to the CEQA Guidelines, and in consideration of all comments received by the City of Bakersfield on the NOP and during the EIR Scoping Meetings, Section 4.0, *Environmental Analysis*, of this EIR evaluates the Project's potential to cause adverse under the following environmental topics:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

As stated in CEQA Guidelines Section 15161, a Project EIR should "...focus primarily on the changes in the environment that would result from the development project" and "...examine all phases of the project including planning, construction, and operation." Acting as Lead Agency, the City of Bakersfield will consider the following items regarding the proposed Project and this EIR: a) evaluation of this EIR to determine if the physical environmental impacts of the Project are adequately disclosed; b) assessment of the adequacy and feasibility of identified mitigation measures; c) consideration of alternatives to the Project that could reduce or eliminate significant environmental effects of the Project; and, if necessary, d) consideration of Project benefits that override the Project's unavoidable and unmitigable significant effects on the environment.

The City of Bakersfield will release the Draft EIR for a minimum 45-day public review period and make the Draft EIR and its supporting technical appendices available for review in electronic form on the City's website and in paper copy at the City of Bakersfield Development Services Department, 1715 Chester Avenue, Bakersfield, CA 93301, during the City's regular business hours. The City also will provide interpretive services for any information requests in Spanish and Punjabi dialects.

During the 45-day review period, comments on the content of the Draft EIR can be submitted to:

City of Bakersfield – Development Services Department
Attn: Kassandra Gale, Principal Planner
1715 Chester Avenue, 2nd Floor
Bakersfield, CA 93301
Email: kgale@bakersfieldcity.us

Public comments should be focused "on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated" (CEQA Guidelines Section 152049(a)).

Following the Draft EIR's 45-day public review period, the City will then respond in writing to all submitted comments pertaining to an environmental effect and publish a Final EIR. Before taking action to approve the Project, the City of Bakersfield (serving as the Lead Agency) has the obligation to: (1) ensure this EIR has been completed in accordance with CEQA; (2) review and consider the information contained in this EIR as part of its decision making process; (3) make a statement that this EIR reflects the City of Bakersfield's independent judgment; (4) ensure that all significant effects on the environment are avoided or substantially lessened where feasible; and, if necessary (5) make written findings for each unavoidable significant environmental effect stating the reasons why mitigation measures or project alternatives identified in this EIR are infeasible and citing the specific benefits of the proposed Project that outweigh its unavoidable adverse effects (CEQA Guidelines Sections 15090-15093).

Project-related decision-making hearings will be subject to noticed public hearings held before the Planning Commission and City Council, which will include consideration of the information contained in the Final EIR and the associated administrative record. The roles and responsibilities of the City of Bakersfield Development Services Director, Planning Commission, and City Council for Project-related approvals are as follows.

- **The Planning Commission:** The Planning Commission will make advisory recommendations to the City Council whether proposed GPA/ZC No. 21-0184, VTPM No. 12438, and Site Plan Review No. 21-0185 should be approved, approved with changes, or not approved, and will recommend to the City Council whether to certify the Final EIR with or without modifications.
- **City Council:** The City Council will decide whether to certify the Final EIR and whether to approve, approve with changes, or not approve VTPM No. 12438 and GPA/ZC No. 21-0184. The City Council also will consider Site Plan Review No. 21-0185 and advise the Development Services Director whether the Site Plan Review should be approved, approved with changes, or not approved.
- **Development Services Director:** The Development Services Director will approve, approve with changes, or not approve Site Plan Review No. 21-0185 at the direction of the City Council.

During the decision-making processes, the Project and its design features, objectives, merits, environmental consequences, and socioeconomic factors, among other information contained in the Project's administrative record, will be considered by the City of Bakersfield. If the Final EIR is certified and GPA/ZC No. 21-0184, VTPM No. 12438, and Site Plan Review No. 21-0185 are approved, the City of Bakersfield and other public agencies with permitting authority over all, or portions of, the Project would be able to rely on the Final EIR as part of their permitting and approval processes to evaluate the environmental effects of the Project as they pertain to the approval or denial of applicable permits. City staff would also rely on the certified Final EIR to subsequently conduct administrative level reviews for implementing permits and approvals.

1.4 CONTENT AND ORGANIZATION OF THIS EIR

This EIR contains all of the information required to be included in an EIR as specified by the CEQA Statutes and Guidelines. This EIR is organized in the following manner:

- **Section S.0, Executive Summary**, provides an overview of the EIR document and CEQA compliance process. The Project and its objectives are described, and the location and regional setting of the Project site is documented. In addition, the Executive Summary discloses potential areas of controversy related to the Project, including those issues identified by other agencies and the public, and identifies potential alternatives to the proposed Project that would reduce or avoid significant impacts, as required by CEQA. Finally, the Executive Summary provides a summary of the Project's impacts, mitigation measures, and conclusions, in a table that forms the basis of the EIR's Mitigation, Monitoring, and Reporting Program (MMRP).
- **Section 1.0, Introduction**, provides introductory information about the CEQA process and the responsibilities of the City of Bakersfield, serving as the Lead Agency for this EIR; a brief description of the Project; the purpose of this EIR; applications submitted by the Project Applicant that would require discretionary City of Bakersfield approvals; and an overview of the EIR format.
- **Section 2.0, Environmental Setting**, describes the environmental setting, including an overview of the regional and local setting, as well as descriptions of the Project site's physical conditions and surrounding context. The existing setting is defined as the condition of the Project site and surrounding area at the approximate date this EIR's NOP was released for public review on March 8, 2022. The setting discussion also addresses the relevant regional planning documents that apply to the Project site and vicinity.
- **Section 3.0, Project Description**, serves as the EIR's Project Description for purposes of CEQA and contains a level of specificity commensurate with the level of detail proposed as part of the Project, including the summary requirements pursuant to CEQA Guidelines Section 15123. This section provides a detailed description of the Project, including its purpose and main objectives; design features; landscaping; site drainage; utilities; grading and construction characteristics; and operational characteristics expected over the Project's lifetime. In addition, the discretionary actions required of the City of Bakersfield and other government agencies to implement the Project are discussed.
- **Section 4.0, Environmental Analysis**, provides an analysis of the potential direct, indirect, and cumulatively considerable impacts that may occur from implementing the proposed Project. Topics that were found to have no potential of being significantly impacted are discussed in Section 5.0, *Other CEQA Considerations*. A conclusion concerning significance is reached for each discussion, and mitigation measures are presented as warranted. The environmental changes identified in Section 4.0 and throughout this EIR are referred to as

“effects” or “impacts” interchangeably. The CEQA Guidelines also describe the terms “effects” and “impacts” as being synonymous (CEQA Guidelines Section 15358).

In the environmental analysis subsections of Section 4.0, the existing conditions are disclosed that are pertinent to the subject area being analyzed, accompanied by a specific analysis of physical impacts that may be caused by implementing the proposed Project. Impacts are evaluated on a direct, indirect, and cumulative basis. Direct impacts are those that would occur directly as a result of the proposed Project. Indirect impacts represent secondary effects that would result from Project implementation. Cumulative effects are defined in CEQA Guidelines Section 15355 as “...two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.”

The analysis in Section 4.0 is based in part upon technical studies that are appended to this EIR. Information also is drawn from other sources of analytical materials that directly or indirectly relate to the proposed Project and are cited in Section 7.0, *References*. Where the analysis demonstrates that a physical adverse environmental effect may or would occur without undue speculation, feasible mitigation measures are recommended to reduce or avoid the significant effect. Mitigation measures must be fully enforceable, have an essential nexus to a legitimate governmental interest, and be “roughly proportional” to the impacts of the Project. The discussion then indicates whether the identified mitigation measures would reduce impacts to below a level of significance. In most cases, implementation of the mitigation measures would reduce the adverse environmental impacts to below a level of significance. If mitigation measures are not available or feasible to reduce an identified impact to below a level of significance, the environmental effect is identified as a significant and unavoidable adverse impact, for which a Statement of Overriding Considerations would need to be adopted by the City of Bakersfield pursuant to CEQA Guidelines Section 15093.

- **Section 5.0, Other CEQA Considerations**, includes specific topics that are required by CEQA. These include a summary of the Project’s significant and unavoidable environmental effects, a discussion of the significant and irreversible environmental changes that would occur should the Project be implemented, as well as potential growth-inducing impacts of the proposed Project. Section 5.0 also includes a discussion of the potential environmental effects that were found not to be significant during the preparation of this EIR.
- **Section 6.0, Project Alternatives**, describes and evaluates alternatives to the proposed Project that could reduce or avoid the Project’s adverse environmental effects. CEQA does not require an EIR to consider every conceivable alternative to the Project but rather to consider a reasonable range of alternatives that will foster informed decision making and public participation. A range of five (5) alternatives is presented in Section 6.0, including a No Development Alternative, No Project Alternative, Panama Lane Truck Routing Alternative, Warehouse Only Alternative, and Reduced Project Alternative.

- **Section 7.0, References**, cites all reference sources used in preparing this EIR and lists the agencies and persons that were consulted during preparation of this EIR. Section 7.0 also lists the persons who authored or participated in preparing this EIR.

CEQA requires that an EIR contain, at a minimum, certain specified content. Table 1-2, *Location of CEQA Required Topics*, provides a quick reference in locating the CEQA-required sections within this document.

Table 1-2 Location of CEQA Required Topics

CEQA Required Topic	CEQA Guidelines Reference	Location in this EIR
Table of Contents	§ 15122	Table of Contents
Summary	§ 15123	Section S.0
Project Description	§ 15124	Section 3.0
Environmental Setting	§ 15125	Section 2.0
Consideration and Discussion of Environmental Impacts	§ 15126 and § 15126.2(a)	Section 4.0
Energy Conservation	§ 15126.2(b) and Appendix F	Subsection 4.5
Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented	§ 15126.2(c)	Section 4.0 & Subsection 5.1
Significant Irreversible Environmental Changes Which Would be Involved in the Proposed Project Should it be Implemented	§ 15126.2(d)	Subsection 5.2
Growth-Inducing Impacts of the Proposed Project	§ 15126.2(e)	Subsection 5.3
Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects	§ 15126.4	Section 4.0 & Table S-1
Consideration and Discussion of Alternatives to the Proposed Project	§ 15126.6	Section 6.0
Effects Not Found to be Significant During the EIR Scoping Process	§ 15128	Subsection 5.4
Organizations and Persons Consulted	§ 15129	Section 7.0 & Technical Appendices
Discussion of Cumulative Impacts	§ 15130	Section 4.0

1.4.1 INCORPORATION BY REFERENCE

CEQA Guidelines Section 15147 states that the “information contained in an EIR shall include summarized... information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public,” and that the “placement of highly technical and specialized analysis and data in the body of an EIR shall be avoided.” CEQA Guidelines Section 15150 allows for the incorporation “by reference all or portions of another document... [and is] most appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of a problem at hand.” The purpose of incorporation by reference is to assist the Lead Agency in limiting the length of this EIR. Where this EIR incorporates a document by reference, the document is identified in the body of the EIR, citing the appropriate

section(s) of the incorporated document and describing the relationship between the incorporated part of the referenced document and this EIR.

The detailed technical studies, reports, and supporting documentation that were used in preparing this EIR are bound separately as Technical Appendices. The Technical Appendices are available for review at the City of Bakersfield Development Services Department, 1715 Chester Avenue, Bakersfield, CA 93301, during the City's regular business hours or can be requested in electronic form by contacting the Development Services Department. The individual technical studies, reports, and supporting documentation that comprise the Technical Appendices are as follows:

- A. Initial Study, Notice of Preparation (NOP) and Written Comments on the NOP
- B. Air Quality Impact Analysis
- C. Biological Resources Evaluation
- D1. Updated Cultural Resources Study
- D2. Supplemental Cultural Resource Study
- E. Energy Consumption & Efficiency Analysis
- F. Geotechnical Engineering Investigation
- G. Phase I Environmental Site Assessment
- H. Preliminary Hydrology Report
- I. Noise and Vibration Impact Analysis
- J. Traffic Study
- K. Urban Decay Analysis
- L. Sewer Capacity Study
- M. Water Supply Assessment
- N. Will Serve Letters

Other reference sources that are incorporated into this EIR by reference are listed in Section 7.0, *References*, of this EIR. In most cases, documents or websites not included in the EIR's Technical Appendices are cited by a link to the online location where the document/website can be viewed by the public. All references relied upon by this EIR are included as part of the City of Bakersfield's Administrative Record pertaining to the proposed Project.

1.5 RESPONSIBLE AND TRUSTEE AGENCIES

The California Public Resource Code Section 21104 requires that all EIRs be reviewed by Responsible and Trustee Agencies (see also CEQA Guidelines Section 15082 and Section 15086(a)). As defined by CEQA Guidelines Section 15381, "the term 'Responsible Agency' includes all public agencies other than the Lead Agency that have discretionary approval power over the project." A "Trustee Agency" is defined in CEQA Guidelines Section 15386 as "a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California." The known Responsible and Trustee Agencies for the Majestic Gateway Project are listed below. Regardless, this EIR can be used by any Trustee Agency or Responsible Agency, whether

identified in this EIR or not, as part of their decision-making processes in relation to the proposed Project.

- **Central Valley Regional Water Quality Control Board (RWQCB)** is identified as a Trustee Agency that is responsible for the protection of California's water resources and water quality. The Central Valley RWQCB is responsible for issuance of National Pollutant Discharge Elimination System (NPDES) Permits to ensure that during and after construction of the Project, on-site water flows do not result in siltation, other erosional actions, or degradation of surface or subsurface water quality.
- **San Joaquin Valley Air Pollution Control District (SJVAPCD)** is identified as a Responsible Agency, in the event that any future tenant/user of the Project site requires a permit to construct or permit to operate. These permits are required to install or operate equipment pursuant to SJVAPCD Rules related to specific types and quantities of air pollutant emissions. The SJVAPCD also would approve and/or implement any Voluntary Emissions Reduction Agreements (VERA) entered into by the Project Applicant.
- **Kern County Flood Control and Water Conservation District** is identified as a Responsible Agency pertaining to approvals associated with the Project's proposed drainage infrastructure and stormwater drainage system improvements.
- **Greenfield County Water District (GCWD)** is identified as a Responsible Agency pertaining to approvals required to connect the Project to the domestic water system.
- **Pacific Gas & Electric Company (PG&E)** is identified as a Responsible Agency pertaining to approvals required for the removal of above-ground power poles and undergrounding of overhead power lines along the Project site's frontage with South H Street and the installation of power connections for the Project.

1.6 AREAS OF CONTROVERSY

Substantive issues raised in response to this EIR's NOP were previously summarized in Table 1-1. Based on comments received in response to the NOP, concerns were raised regarding potential impacts to the environment pertaining to the topics of: Aesthetics, Air Quality, Biological Resources, Cultural Resources, Tribal Cultural Resources, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology & Water Quality, Noise, Population and Housing, Transportation, and Utilities. Comments also were made pertaining to Environmental Justice. No other areas of concern or controversy were identified pertaining to the proposed Project, beyond comments regarding the Project's potential environmental effects summarized in Table 1-1.

1.7 ISSUES TO BE RESOLVED BY THE DECISION-MAKING BODY

The primary issue to be resolved by the decision-making body for the proposed Project involves the Project's significant and unavoidable impacts in the environmental topic areas of greenhouse gas emissions and transportation (vehicle miles traveled for trucks). The City of Bakersfield City Council will evaluate whether the mitigation measures presented in this document to reduce the Project's unavoidable greenhouse gas emissions impact adequately reduces the Project's impacts to the maximum feasible extent. The City Council also will consider the conclusion made in this EIR that it is not feasible to mitigate the Project's truck trips vehicle miles traveled. The City Council also will make a determination as to whether the Project's benefits outweigh the adverse environmental effects in support of adopting a Statement of Overriding Considerations pursuant to CEQA Guidelines Section 15093. Finally, the City Council will decide whether to approve one of the Project alternatives in lieu of the proposed Project, if it is determined that one of the alternatives is feasible, meets the Project's objectives, and its approval would serve to substantially reduce or avoid the significant environmental effects.

2.0 ENVIRONMENTAL SETTING

This EIR Section 2.0 was prepared pursuant to CEQA Guidelines Section 15125(a), and includes a description of the proposed Project's environmental setting as it existed at the time the Notice of Preparation (NOP) was published for this EIR (March 2022).

2.1 REGIONAL SETTING AND LOCATION

The Project site is located within the southern portion of the City of Bakersfield in Kern County, California. Kern County is bound by Kings, Tulare, and Inyo counties to the north; San Bernardino County to the east; Los Angeles and Ventura counties to the south; and Santa Barbara and San Luis Obispo counties to the west. Located in the San Joaquin Valley, Kern County is the third largest county in California at 8,129.8 square miles. According to U.S. Census data, Kern County had a population of 909,235 as of April 1, 2020 (USCB, 2020a). The U.S. Census Bureau defines an "urbanized area" as a densely settled core of census tracts and/or census blocks that have 50,000 or more residents and meet minimum requirements while also being adjacent to areas containing non-residential urban land uses. The Project site is located within the boundaries of the Census-defined Bakersfield urbanized area (USCB, 2010).

The Project site is located approximately 2.5 miles southwest of the Bakersfield Municipal Airport. Four schools are located in the vicinity of the Project site: Granite Pointe Elementary School is located approximately 0.3-mile west of the Project site at the northeast corner of the intersection of Berkshire Road and Greenland Way; Horizon Elementary School is located approximately 0.4-mile east of the Project site at the northwest corner of the intersection of Hosking Avenue and Monitor Street; Ollivier Middle School is located approximately 0.5-mile east of the Project site at the southeast corner of the intersection of Berkshire Road and Monitor Street; and Golden Valley High School is located approximately 0.6-mile southeast of the Project site at the southeast corner of the intersection of Hosking Avenue and Shannon Drive. The site's location in a regional context is shown in Figure 2-1, *Regional Map*.

2.2 LOCAL SETTING AND LOCATION

The ±90.59 gross-acre (±84.67 net-acre) Project site is located in the southeastern quarter of Section 25, Township 30 South, Range 27 East, Mount Diablo Base and Meridian and includes Assessor's Parcel Numbers 515-020-05, 07, -08, -09, -30, -44, -45, and -47. As shown on Figure 2-2, *Vicinity Map*, the Project site is located east of State Route 99 (SR-99), north of Hosking Avenue, south of Berkshire Road, and west of South H Street. The on-ramp to SR-99 from Hosking Avenue is located just beyond the southwest corner of the Project site.

The area immediately surrounding the Project site contains a variety of uses, including vacant parcels and parcels developed with commercial, residential, school, public utility, and public facility uses. The census tract containing the Project site (Census Tract 6029003202) is ranked by the State as being in the 82nd percentile for pollution burden which, based on the Census Tract's demographic

characteristics, results in the Office of Environmental Health Hazard Assessment (OEHHA) ranking the area in the 89th percentile of communities that are disproportionately burdened by multiple sources of pollution (OEHHA, 2022).

OEHHA's California Communities Environmental Health Screening Tool: CalEnviroScreen 4.0, is a screening methodology that the State uses to identify California communities that are disproportionately burdened by multiple sources of pollution. The CalEnviroScreen 4.0 indicators for the Project site's Census Tract are shown below.

Table 2-1 CalEnviroScreen Indicators for Census Tract 6029003202

Indicator	% Burden	Indicator	% Burden
Exposures		Environmental Effects	
Ozone:	95	Cleanup Sites	2
PM 2.5:	99	Groundwater Threats	38
Diesel PM:	51	Hazardous Waste	60
Pesticides:	90	Impaired Waters	0
Toxic Releases:	18	Solid Waste	70
Traffic:	25	Sensitive Populations	
Drinking Water Contaminants:	99	Asthma	88
Lead in Housing:	46	Low Birth Weight	47
Cleanups:	2	Cardiovascular Disease	96
Groundwater Threats:	38	Socioeconomic Factors	
Hazardous Waste:	60	Education	84
Impaired Water:	0	Linguistic Isolation	40
Solid Waste:	70	Poverty	89
		Unemployment	88
		Housing Burden	49

Source: (OEHHA, 2022)

Exposure indicators are based on measurements of different types of pollution that people may come into contact with. Environmental effects indicators are based on the locations of toxic chemicals in or near communities. Sensitive population indicators measure the number of people in a community who may be more severely affected by pollution because of their age or health. Socioeconomic factor indicators are conditions that may increase people's stress or make healthy living difficult and cause them to be more sensitive to pollution's effects. As indicated in Table 2-1, for the Project site's Census Tract, the highest environmental exposures (over 80%) are from ozone (O₃), fine particulate matter (PM_{2.5}), pesticides, and drinking water contaminates. The highest population and socioeconomic factors (over 80%) are compromised health conditions related to asthma and cardiovascular disease and a population with high levels of poverty, unemployment, and low levels of educational attainment. In addition, the Project site is located in a SB 535 Disadvantaged Community identified by the California Environmental Protection Agency (CalEPA). The State provides California Climate Investment funding appropriated by the State Legislature from the proceeds of the State's Cap-and-

Trade Program for investment in disadvantaged communities. The funding is used for programs that reduce emissions of greenhouse gases with at least 25% of the funding going to projects that provide a benefit to disadvantaged communities and at least 10 percent of the funding going to projects located within those communities (CalEPA, 2022).

2.3 SURROUNDING LAND USES AND DEVELOPMENT

Land uses in the immediate vicinity of the Project site are depicted on Figure 2-3, *Surrounding Land Uses*, and are described below.

- **North:** To the north of the Project site is Berkshire Road, which extends from the northeast corner of the site for approximately 0.3-mile to the west, and ends where it meets Colony Street. The land immediately north of Berkshire Road is a planned retail center with one major tenant, Floor & Décor, already sited on the property, as well as land owned by Kaiser Permanente which it is holding as a real estate asset with no current plans for development. Further north is the Arvin-Edison Canal which is owned and operated by the Arvin-Edison Water Storage District (AEWSD) (AEWSD, n.d.).
- **East:** To the east of the Project site is South H Street. Immediately east of South H Street is the Kern Island Canal, which is fenced and managed by Kern Delta Water District (KDWD, 2019). East of the canal is a solid wall, behind which is a residential neighborhood of single-family residential homes. Horizon Elementary School and Golden Valley High School are both located in the easterly portion of the neighborhood at the intersection of Hosking Avenue and Monitor Street. Monitor Street is approximately 0.5-mile east of the Project site. Ollivier Middle School is located east of Monitor Street at the intersection of Berkshire Road and Monitor Street.
- **South:** To the south of the Project site at the northwest corner of Hosking Avenue and South H Street is vacant, undeveloped land. To the southwest of the Project site is the Hosking Avenue/SR-99 interchange, with the on-ramp from eastbound Hosking Avenue to northbound SR-99 being adjacent to the Project site. South of Hosking Avenue and west of South H Street is vacant, undeveloped land planned for commercial development.
- **West:** To the west of the Project site is SR-99 and to the southwest is the Hosking Avenue/SR-99 interchange and the on-ramp from eastbound Hosking Avenue to northbound SR-99.

2.4 PLANNING CONTEXT

2.4.1 METROPOLITAN BAKERSFIELD GENERAL PLAN

The City of Bakersfield's prevailing planning document is the Metropolitan Bakersfield General Plan (MBGP) (adopted in 2007 and most recently amended in 2016). The MBGP is a policy document with land use maps and related information. It is designed to give long-range guidance to City staff and

officials who make decisions that affect growth and resources in the Metropolitan Bakersfield planning area. The General Plan helps to ensure that day-to-day decisions conform to the long-range program, which was designed to protect and further the public interest as it relates to the City's growth and development, and mitigate environmental impacts. The General Plan also serves as a guide to the private sector regarding the economy so that development initiatives conform to the City's public plans, objectives, and policies (Bakersfield, 2007). At the time this EIR was prepared, the City of Bakersfield was preparing a General Plan Update; regardless, the adopted Metropolitan Bakersfield General Plan is the pertinent long-range planning document for purposes of evaluation in this EIR.

As depicted on Figure 2-4, *Existing General Plan Land Use Map*, the General Plan designates the land use of Project site as General Commercial (GC). The "GC" land use designation is intended for retail and service facilities providing a broad range of goods and services which serve the day-to-day needs of nearby residents. The maximum allowable density is a 1.0 floor area ratio (FAR) and 4 story building height (Bakersfield, 2007, p. II-7).

As shown on Figure 2-4, the Project site is shown as occurring north, east, and west of land designated as roadway. The land to the immediate north of the site is designated "GC" and the land immediately north of Berkshire Road is also designated "GC." Land to the south of the site and immediately south of Hosking Avenue also is designated "GC." Land to the east of the site and east of South H Street is designated Low Medium Density Residential/Low Density Residential "LMR/LR" and land west of the Project site and west of SR-99 is designated "GC" and "LMR."

Pursuant to CEQA Guidelines Section 15125(d), the environmental setting should identify any inconsistencies between a proposed project and applicable general, specific, or regional plans. The Project Applicant proposes the development of commercial and warehouse distribution land uses on the Project site. The Project Applicant's proposal for the warehouse distribution portion of the property (52.28 net acres) is not consistent with the Project site's existing General Plan land use designation of "GC," whereas the proposal for the commercial portion of the Project site (27.91 net acres) and retention basin portion of the Project Site (4.48 net acres) are consistent with the Project site's existing General Plan land use designation of "GC."

2.4.2 CITY OF BAKERSFIELD MUNICIPAL CODE – ZONING ORDINANCE

According to Chapter 17.02.030, Purpose, of the City of Bakersfield Zoning Ordinance, Title 17 was adopted to implement the goals and policies of the Metropolitan Bakersfield General Plan which serves to promote and protect the public health, safety, peace, morals, comfort, convenience and general welfare. The specific purposes of this title are listed below (Bakersfield, 2022).

- To assist in providing a definite plan of development for the city and to guide, control and regulate the future growth of the city in accordance with said plan (MBGP); and

- To protect the established character and the social and economic stability of agricultural, residential, commercial, industrial and other areas within the city, and to assure the orderly and beneficial development of such areas.

As shown on Figure 2-5, *Existing Zoning*, under existing conditions, the Project site is zoned Regional Commercial-Planned Commercial Development Combining (C-2/PCD). According to the City of Bakersfield Municipal Code, the “C-2-PCD” combining zone is typically for larger commercial centers that contain a mix of larger scale stores and smaller retail outlets. Any uses permitted in the C-O and C-1 zones also are permitted (Bakersfield, 2022, Title 17).

As shown on Figure 2-5, the Project site is shown as occurring north, east, and west of land designated as roadway. The land to the immediate north of the site is zoned “C-2/PCD” and the land immediately north of Berkshire Road is zoned “C-2.” Land to the south of the site and immediately south of Hosking Avenue is zoned “C-2/PCD.” Land to the east of the site and east of South H Street is zoned One-Family Dwelling “R-1” and land west of the Project site and immediately west of SR-99 is designated Regional Commercial “C-2” and “R-1.”

2.4.3 METROPOLITAN BAKERSFIELD HABITAT CONSERVATION PLAN (INCLUDING CESA ITP 2081-2013-025-04)

The Project site is located within the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) California Endangered Species Act (CESA) Incidental Take Permit (ITP) Number 2081-2013-058-04 boundaries. The MBHCP was developed to allow the issuance of permits for projects that meet both federal and state environmental regulations regarding incidental “take” of listed species set forth in the federal Endangered Species Act (ESA) and CESA. In turn, urban development outlined in the adopted Metropolitan Bakersfield General Plan can proceed while meeting the goal of the MBHCP to acquire, preserve, and enhance native habitats that support endangered and sensitive species.

Because development on open lands in Metropolitan Bakersfield could potentially result in the incidental “take” of habitat and/or sensitive species, permits required under the MBHCP include Section 10(a)(1)(B) of the ESA and Section 2081 of the CESA. The MBHCP is funded through the collection of mitigation fees by the County and cities associated with all urban development occurring within the HCP permit area. The fee is paid at the time of grading permit approval, grading plan approval, or issuance of building permit, whichever occurs first. Upon payment and provided that all applicable measures required in the HCP have been implemented, the project applicant becomes a sub-permittee and would be allowed the incidental take of species in accordance with federal and state endangered species laws (MBI, 2021, p. 12).

2.4.4 KERN COUNTY AIRPORT LAND USE COMPATIBILITY PLAN

According to Figure 4-1 of the *Kern County Airport Land Use Compatibility Plan (ALUCP)*, the Project site is located outside of the compatibility zones for the Bakersfield Municipal Airport (Kern County, 2012, Figure 4-1). Although not directly relevant to the Project site but informative for context,

the ALUCP was originally adopted in 1996 with the latest amendment being in 2012 for the addition of the Air Installation Compatible Zones Study (Kern County, 2012, n.p.). As required by that law, proposals for public or private land use developments that occur within defined airport influence areas are subject to compatibility review. The principal airport land use compatibility concerns addressed by the plan are (1) exposure to aircraft noise, (2) land use safety with respect to both people and property on the ground and occupants of aircraft, (3) protection of airport air space, and (4) general concerns related to aircraft overflights (Kern County, 2012, p. 1-3). The ALUCP identifies policies and compatibility criteria for influence zones or planning area boundaries. The ALUCP maps and labels these zones as A, B1, B2, C, and D, ranging from the most restrictive (A: airport property/runway protection zone) to the least restrictive (D: disclosure to property owners only) (Kern County, 2012). The City adopted the ALUCP for airports within its limits

2.4.5 KERN COUNCIL OF GOVERNMENTS REGIONAL TRANSPORTATION PLAN AND SUSTAINABLE COMMUNITIES STRATEGY

Kern Council of Governments (Kern COG) is a federally designated Metropolitan Planning Organization (MPO) and a state designated Regional Transportation Planning Agency (RTPA). These designations formally establish Kern COG's role in transportation planning. The preparation of a Regional Transportation Plan (RTP) is one of the primary statutory responsibilities of Kern COG under federal and state law (Kern COG, 2018, pp. ES-1).

To guide the development of the planned multimodal transportation systems in Kern County, the *2018 RTP* establishes a 24-year blueprint which provides a set of regional transportation goals, policies, and actions. As required by California's Sustainable Communities and Climate Protection Act, of Senate Bill 375, a Sustainable Communities Strategy (SCS) also is included in the *2018 RTP*. The RTP provides transportation and air quality goals, policies, and actions and includes programs and projects for congestion management, transit, airports, bicycles and pedestrians, roadways, and freight. In addition, it provides a discussion of all mechanisms used to finance transportation and air quality program implementation. A Program Environmental Impact Report (Program EIR), pursuant to CEQA for the *RTP* was prepared by Kern COG which analyzed potential environmental impacts of individual transportation projects preliminarily identified in the *2018 RTP* from a regional perspective, providing opportunities for streamlining the analysis required in project specific environmental documents. In addition, the companion *RTP* conformity document demonstrates that the Plan will not delay attainment of federal air quality standards in the State Implementation Plans for air quality (Kern COG, 2018, pp. ES-1).

2.4.6 SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT (SJVAPCD) AIR QUALITY ATTAINMENT PLANS

The San Joaquin Valley Air Pollution Control District (SJVAPCD) has adopted several Air Quality Attainment Plans (AQAPs) that identify measures needed for the San Joaquin Valley to attain the U.S. Environmental Protection Agency's (EPA's) National Ambient Air Quality Standards (NAAQS) in

order to protect the health, safety, and welfare of the public (Trinity, 2022, p. 3-2). These plans include particulate matter plans, ozone plans, and a carbon monoxide plan.

2.5 EXISTING PHYSICAL SITE CONDITIONS

Pursuant to CEQA Guidelines Section 15125, the physical environmental condition for purposes of establishing the setting of an EIR is the environment as it existed at the time the EIR's NOP was released for public review. The NOP for this EIR was released for public review on March 8, 2022. The following pages provide a description of the Project site's physical environmental condition ("existing conditions") as of that approximate date. More detailed information regarding the Project's site's environmental setting as it relates to a specific environmental issue area is provided in the specific subsections of EIR Section 4.0, *Environmental Analysis*. The site's current physical conditions and surrounding areas are shown on Figure 2-6, *Aerial Photograph*.

2.5.1 LAND USE

The Project site is located in the southern portion of the City of Bakersfield, which has transitioned to urban development over the last approximately 20 years. As shown in Figure 2-3, *Surrounding Land Uses*, under existing conditions, residential and commercial development exists around the site on all sides and a few vacant parcels to the north and south of the Project site are planned for commercial development. Commercial uses located north of the site and residential uses to the east, south, and west around the immediate vicinity of the Project site developed between the 1990s and early 2000s (Google Earth, 1993). The residential community to the east of South H Street inclusive of Horizon Elementary School, Ollivier Middle School, and Golden Valley High School were developed between approximately 1994-2006 and the residential community to the west of SR-99 was developed between approximately 2003-2008.

Much like the surrounding area, the Project site was formerly in agricultural use. From 1932 to 1954, the Project site was in use for agricultural purposes and had two residences or farm structures on the northeast corner of the property. By 1956, these structures had been demolished but the property continued to be used for agriculture. From 1968 to 2006, a residential/farm structure was located on the southern portion of the property and the property remained in active agricultural use. By 2009, the property was vacant with unpaved roads, no structures were present, and the property no longer was in agricultural use (Nova, 2021, p. 17).

Under existing conditions, the Project site is vacant and undeveloped with remnants of past use scattered throughout the site. The Project site has been subject to various disturbances including off-road vehicle trespass, illegal dumping, and grass fires (MBI, 2021, p. 6). Remnants of a former single-family residence are present in the southern portion of the site, along with an abandoned reservoir or drainage basin and well. The remains of the residence primarily consist of concrete building and wall foundations. A review of aerial images indicates that the property was demolished between 2005 and 2009 prior to the construction of the Hosking Avenue/SR-99 Interchange – New Connection Project. The abandoned reservoir or drainage basin is rectangular in size and lies in the central portion of the

Project site. The structure measures approximately 180 feet (west-east) by 110 feet (north-south) with depths ranging from 10 to 15 feet. A dirt road has been constructed at the southwestern corner of the water control structure. Aerial images indicate that the structure was constructed sometime after 1981 (PaleoWest, 2021). Presently, the site is vacant, unoccupied, and is not used for any purpose although some unauthorized trespass and dumping is known to occasionally occur.

2.5.2 AESTHETICS AND TOPOGRAPHIC FEATURES

As shown on Figure 2-7, *USGS Topographic Map*, the topography of the Project site is characterized by relatively flat land that gently slopes south-southwest. Immediately surrounding areas also are flat and gently sloping with no prominent slopes or hillsides. The elevation of the Project site is approximately 355 feet above mean sea level (amsl) (MBI, 2021, p. 6). It is evident that previous grading activities have occurred on the site (Krazan, 2021, p. 3). There are no rock outcroppings or other unique topographic or aesthetic features present on the property or in the immediate vicinity of the Project site (Google Earth, 2022). There is no lighting on the Project site; however, there is street pole lighting on SR-99, Hosking Avenue, and Berkshire Road (Google Earth, 2022).

Scenic resources within and surrounding the City of Bakersfield include the Sierra Nevada Mountains, located approximately 13.5 miles to the northeast, the Tehachapi Mountains, located approximately 16.9 miles to the south, and the Coast Range, located approximately 16.1 miles to the west. In the far distance on clear days, views are possible to the Tehachapi Mountains to the south, the Coast Range to the west, and the Sierra Nevada Mountains to the northeast.

2.5.3 AGRICULTURE AND FOREST RESOURCES

Prior to the late 1990s and early 2000s much of the southern portion of the City of Bakersfield was in agricultural production. Since that time, the area has transitioned to urban development containing residential communities, commercial developments, public facilities, and other uses. The Project site was in agricultural use from 1932 to 2009, after which the property has been vacant and no longer in agricultural use (Nova, 2021, p. 17). The Project site is in an urban area and no forest lands are located in the Project site's vicinity. The California Department of Conservation (CDC) Farmland Mapping and Monitoring Program (FMMP) identifies "Important Farmland" to include lands mapped as "Prime Farmland," "Farmland of Statewide Importance," "Unique Farmland," and "Farmland of Local Importance." As mapped pursuant to the FMMP, the Project site is designated as Grazing Land, which is not an "Important Farmland" type (CDC, 2016). The Project site is not zoned for agricultural use, is not currently used for agricultural production, and is not subject to any Williamson Act contracts or County Agricultural Preserves.

2.5.4 AIR QUALITY AND CLIMATE

The Project site is located in the San Joaquin Valley Air Basin (SJVAB) which includes eight counties in California's Central Valley: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and portions of Kern. The SJVAB is bound by the Sierra Nevada mountains to the north, the Coast Ranges to the west, and the Tehachapi mountains to the south. The SJVAB is under the jurisdiction of the San

Joaquin Valley Air Pollution Control District (SJVAPCD), which acts as the regulatory agency for air pollution control in the SJVAB and is the local agency responsible for regulating air pollutant emissions for the Project area. The SJVAB is a nonattainment area for the State and federal ozone and particulate matter 2.5 (PM_{2.5}) standards and the State particulate matter 10 (PM₁₀) standard. No areas of the SJVAB exceeded federal or State standards for nitrogen dioxide (NO₂), sulfur dioxide (SO₂), or carbon monoxide (CO) (Trinity, 2022, p. 3-3).

Air pollutants adversely affect human health. Although the Project site's census tract has high O₃ and PM_{2.5} exposures as indicated in Table 2-1, emissions of O₃, NO_x, PM₁₀, and PM_{2.5} have been decreasing in the San Joaquin Valley since 1980 and are projected to continue to decrease despite challenging geography and meteorology that exacerbate the formation and retention of high levels of air pollution. NO_x and Volatile Organic Compound (VOC) levels are decreasing because of the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. NO_x emissions from electric utilities have also decreased due to use of cleaner fuels and renewable energy (Trinity, 2022a, pp. 3-8 to 3-9). The overall trends of PM₁₀ and PM_{2.5} levels in the air (not emissions) also show an overall improvement since 1990. The San Joaquin Valley has not any reported 24-hour PM₁₀ violation since 2003. Average PM_{2.5} concentrations have also decreased since 2000, despite low precipitation totals and increase in atmospheric stability, which is evidence that regulatory efforts taken by the SJVAPCD and California Air Resources Board (CARB) have been achieving permanent emissions reductions (Trinity, 2022a, pp. 3-9 to 3-10).

The climate in the SJVAB consists of warm, dry summers and cooler winters with limited rainfall. Average temperatures in the summer range from a low of mid-60's to a high of nearly 100 degrees Fahrenheit (°F) with low humidity. During the winter, average temperatures range from a low in the mid-30's to a high in the mid-50's (Trinity, 2022, p. 3-12). Refer to EIR Subsections 4.2, *Air Quality*, and 4.7, *Greenhouse Gas Emissions*, for a more detailed discussion of the existing air quality and climate setting in the Project area.

2.5.5 CULTURAL RESOURCES & TRIBAL CULTURAL RESOURCES

The Project site is located in the traditional tribal use areas of six Native American groups, including Big Pine Paiute Tribe of the Owens Valley; Chumash Council of Bakersfield; Kern Valley Indian Community; Kitanemuk & Yowlumne Tejon Indians; Tejon Indian Tribe; and the Tule River Indian Tribe (PaleoWest, 2021, n.p.). Over a 25-year period from 1992 to 2019, there have been no fewer than 24 cultural resource studies conducted within a 0.5-mile radius of the Project area and no significant prehistoric or historic period cultural resources were identified (PaleoWest, 2021, n.p.). As such, the Project site and surrounding area have a low probability for the discovery of cultural and tribal cultural resources. Pertaining to historic resources that may meet the CEQA definition of a historic resource, there are no known historic resources located on or adjacent to the Project site.

2.5.6 GEOLOGY AND SOILS

Regionally, the Project site is located near the southeastern end of the Great Valley Geomorphic Province which extends between the Coast Range Mountains and the Sierra Nevada Mountains. Due to erosion of these mountain ranges, a thick deposit of sediments is located on the Valley floor. The Project site is composed of alluvial deposits which are primarily cohesionless sands and silts. The Project site is underlain by 6 to 12 inches of very loose silty sand or sandy silt soils, which are disturbed, have low strength characteristics, and are compressive when saturated. Below the loose surface soils and fill material is approximately 3 to 4.5 feet of loose to dense silty sand, sandy silt, and sand, which are moderately strong and slightly to moderately compressible (Krazan, 2021, pp. 4 - 5).

The Project site is located within a seismically active region and is subject to ground shaking during seismic events. The south end of the San Joaquin Valley is proximate to active fault systems (San Andreas, White Wolf-Breckenridge-Kem Canyon and Garlock Faults). Numerous smaller faults exist within the valley floor. There is seismic activity in the Kern County area, with the most noticeable earthquake being the July 21, 1952, Kern County Earthquake. The nearest active fault to the Project site is the Edison Fault, located approximately 11.5 miles northeast of the Project site (CGS, 2015).

2.5.7 HYDROLOGY AND WATER QUALITY

The Project site is located in the Kern River Watershed within the Tulare Lake Hydrologic Region, which covers approximately 16,800 square miles including all of Tulare County, Kings County, and most of Fresno and Kern counties. The Tulare Lake Hydrologic Region is bordered to east by the Sierra Nevada Mountains, to the west by the Coast Ranges, and to the south by the Tehachapi Mountains (DWR, 2015, p. 1).

Pertaining to surface waters and ground water quality, the Project site and surrounding area are located within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB). Water quality within the Central Valley region is regulated by the RWQCB's, *Water Quality Control Plan for the Tulare Lake Basin, Third Edition* (herein, "WQCP"), dated May 2018. According to the WQCP, the Tulare Lake Basin ("Basin") comprises the drainage area of the San Joaquin Valley south of the San Joaquin River. Surface water from the Tulare Lake Basin only drains north into the San Joaquin River in years of extreme rainfall. The Basin encompasses approximately 10.5 million acres, of which approximately 3.25 million acres are in federal ownership. Specifically, the Project site is located within the Kern River sub-basin. As discussed in the RWQCB's WQCP, surface water supplies tributary to or imported for use within the Basin are inadequate to support the present level of water need for agricultural and other development. Therefore, ground water resources within the valley are used to meet water demands. The greatest long-term problem facing the entire Tulare Lake Basin is the increase of salinity in ground water. Even though an increase in the salinity of ground water in a closed basin is a natural phenomenon, salinity increases in the Basin have been accelerated by man's activity, with the major impact coming from intensive use of soil and water resources by irrigated agriculture (RWQCB, 2018, pp. 1-2, 4-1, and 4-2).

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06029C2300E, the Project site is located within FEMA Flood Zone X. Flood Zone X is correlated with areas of minimal flood hazard, determined to be less than the 0.2 percent annual chance flood (Cornerstone Engineering, 2021a). Refer to EIR Subsection 4.9, *Hydrology and Water Quality*, for a more detailed discussion of the Project site's existing hydrology and water quality setting.

2.5.8 NOISE

Primary sources of noise in the Project site's vicinity include traffic noise from vehicles traveling along roadways that abut the site (i.e., SR-99, Hosking Avenue, South H Street, and Berkshire Road). Urban Crossroads, Inc. collected 24-hour noise measurements at nine locations in the Project vicinity on July 28, 2021 to determine the baseline for the existing noise environment. Measured daytime noise levels in the area ranged from 46.4 equivalent level decibels (dBA L_{eq}) to 65.8 dBA L_{eq} and nighttime noise levels from 48.3 dBA L_{eq} to 65.0 dBA L_{eq} (Urban Crossroads, 2021, p. 24). Refer to EIR Subsection 4.11, *Noise*, for a more detailed discussion of the Project's Site existing noise setting.

2.5.9 TRANSPORTATION

The Project site is located to the northeast of the SR-99 and Hosking Avenue on- and off-ramps, to the east of South H Street, and south of Berkshire Road. Existing traffic on nearby roadways consist of both passenger vehicles and trucks passing through the area and accessing nearby land uses. The primary regional vehicular travel route to the Project area is SR-99, which is located adjacent to the west side of the Project site. Refer to EIR Subsection 4.13, *Transportation*, for a more detailed discussion of the roadway system surrounding the Project site.

In 2013, the State of California approved legislation (SB 743) to change the primary basis of evaluation of traffic impacts in CEQA from Level of Service (LOS) to Vehicle Miles Traveled (VMT). VMT represents the average length in number of miles that a person travels in a vehicle from home to work. Based on the regional transportation model maintained by the Kern Council of Governments (Kem COG), the average daily VMT for employees in Kern County is 19.17 miles (R&S, 2022, p. 9).

Pertaining to non-vehicular modes of travel, sidewalks are currently located along the east side of South H Street and along both the north and south sides of Hosking Avenue from the intersection with SR-99 to approximately 190 feet prior to the intersection with South H Street (Google Earth, 2022). According to the City of Bakersfield Bicycle Transportation Plan, no existing bicycle facilities are located on the roads abutting the Project site; however, a Class 2 bike lane is planned along Hosking Avenue, a Class 1 Multi-Use Path is planned along the east side of South H Street paralleling the Kern Island Canal, a Class 3 bike route is planned along the west side of South H Street, and a Class 3 bike route is planned along Berkshire Road (Bakersfield, 2016).

Public transit service in the region is provided by Kern Transit. Route 130 Santa Clarita – Bakersfield route runs adjacent to the Project site along SR-99, Hosking Avenue, South H Street, and Berkshire Road (Kern Transit, 2022). The closest stop is located approximately 0.6-mile south of the Project site

at the McKee Road Park & Ride. Golden Empire Transit (GET) also has a bus route, Route 62, which runs along Hosking Avenue south of the Project site (GetBus, 2022). The nearest stop along bus Route 62 is located at the Walmart along Panama Lane approximately 0.7-mile north of the Project site (Google Earth, 2022).

2.5.10 PUBLIC FACILITIES

Fire protection services for the Project site are jointly provided by Kern County and the City of Bakersfield. Kern County Fire Department (KCFD) Fire Station No. 52 is located approximately 1.4 miles south of the Project site, at 312 Taft Highway. Fire Station No. 13 is located approximately 1.7 miles west of the Project site. Police protection service is provided by the Bakersfield Police Department (BPD) and the County Sheriff's Office. The BPD central headquarters is located at 1601 Truxtun Avenue in Bakersfield, approximately 5.8 miles north of the Project site. The Kern County Sheriff's Department supplements BPD's services.

2.5.11 UTILITIES AND SERVICE SYSTEMS

A. Water Service

Two unused water wells are located on the Project site, one in the northern portion of the site and one in the southeastern corner of the site. Based on the locations of previous residential/farm structures on the property, these wells appear to have been previously used for domestic water supply purposes, but are no longer in use (Nova Group, 2021, pp. 19 - 23). The Project site is located in the service area of Greenfield County Water District (Greenfield CWD). The Greenfield CWD service area is approximately 3.3 square miles and is bound by the Arvin-Edison Intake Canal to the north, Cottonwood Road to the east, Di Giorgio Road to the south and SR-99 to the west. The sole source of water supply to Greenfield CWD is groundwater; no raw or recycled water is supplied. No potable water is purchased from any other source; however, Greenfield CWD does purchase Kern Island Canal seepage water from the Kern Delta Water District. This water supply is characterized as seepage that has passed through Greenfield CWD service area and has become groundwater (Cornerstone, 2021c, pp. 3 - 4).

B. Sewer Service

The Project site is located in the wastewater service area of the Bakersfield Department of Public Works (BDPW), Wastewater Division. BDPW provides wastewater treatment service to the City of Bakersfield from two treatment plants, Plant No. 2 and Plant No. 3. The Project site is within the service boundary of Treatment Plant No. 3, located at 6901 McCutchen Road, approximately 2.8 miles west of the Project site (Google Earth, 2022). A 36-inch trunk line that transfers wastewater to Plant No. 3 is located in the Hosking Avenue right-of-way (Cornerstone, 2021b, p. 7).

C. Solid Waste Services

BDPW's Solid Waste Division provides solid waste collection services (residential and commercial) within the City of Bakersfield. Solid waste collected in the area is disposed of at the Bakersfield

Metropolitan (Bena) Sanitary Landfill, which is operated by the Kern County Waste Management Department. The facility is located approximately 14 miles east of the Project site at 2951 Neumarkel Road in Caliente, California (Google Earth, 2022).

D. Other Services

The Project site is located in the service area of Pacific Gas & Electric (PG&E) for both natural gas and electricity. The gas supply for the Project site would come from the Kern River Corridor, which receives gas from suppliers in the Rocky Mountains. A natural gas pipeline and regulator station is located near the corner of Ashe Road and Berkshire Road, 2.6 miles east of the Project site. The electrical power that PG&E distributes is primarily derived from the company's generating plants, which use hydropower, gas-fired steam, or nuclear energy. Power lines are already located in the vicinity of the Project site. Refer to EIR Subsection 4.15, *Utilities and Service Systems*, for a more detailed discussion of the Project site's existing public utility and service systems.

2.5.12 VEGETATION COMMUNITIES

The Project site is vacant and is located in an area that has transitioned to urban development over many decades, with development around the site still ongoing to the north and to the south. The Project site was farmed and graded in the past and where vegetation is present on the Project site today, it consists of disturbed annual grassland and ruderal vegetation. During a site visit conducted by McCormick Biological, Inc. (MBI) 14 plant species were observed; however, none of these were special-status species. No special-status plant species have been recorded as occurring within the Project site by any of the literature sources consulted (MBI, 2021, p. 26). Refer to EIR Subsection 4.4, *Biological Resources*, for a more detailed discussion of the Project's site existing biological setting.

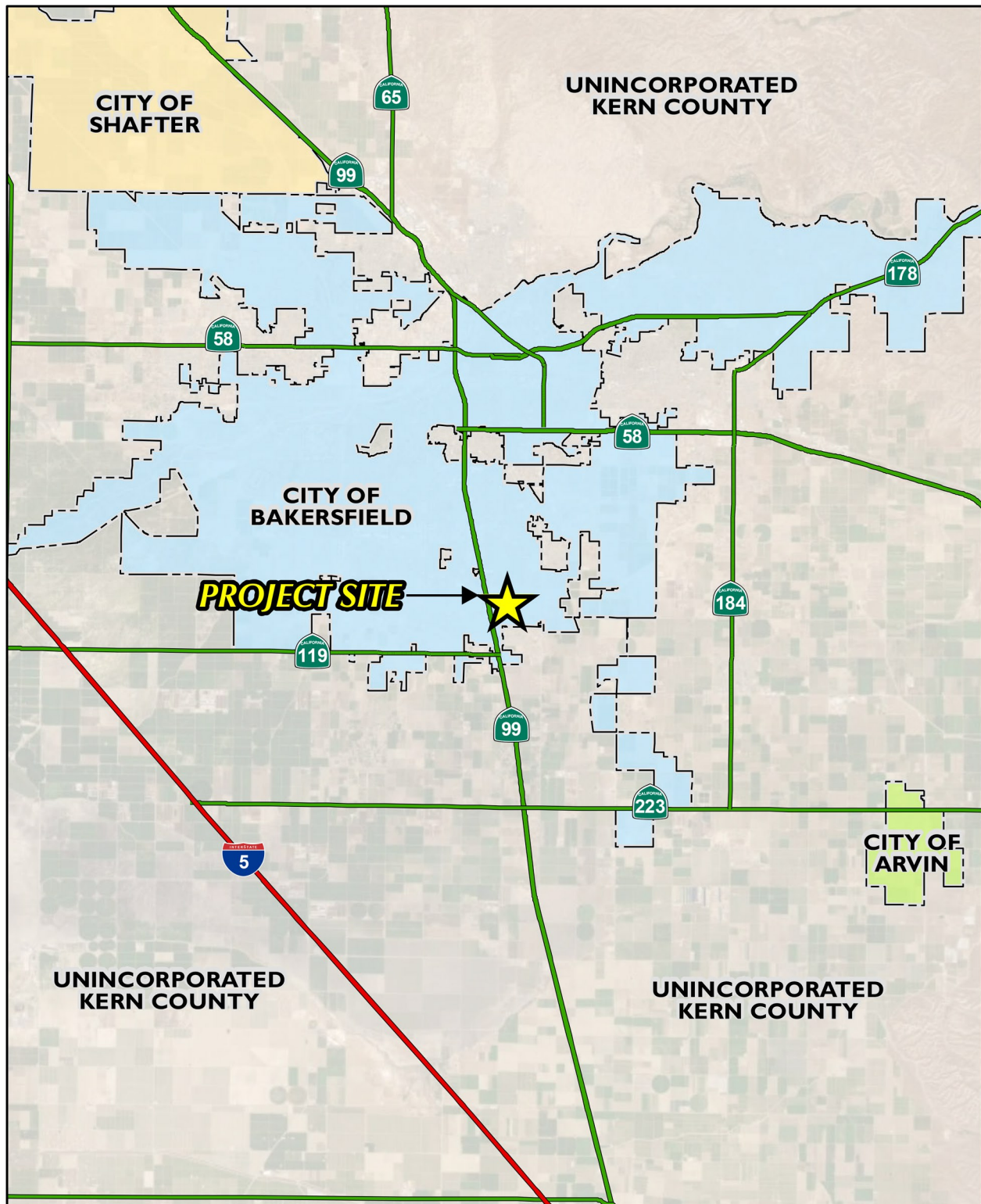
2.5.13 WILDLIFE

The Project site is not part of a wildlife corridor and has limited habitat potential for all but a few sensitive species. During a field survey conducted by MBI, indirect evidence of the San Joaquin kit fox was observed and it was determined that the Project site has a high potential for burrowing owl. MBI determined that there is a low potential for the Swainson's hawk, white-tailed kite, and American badger to occur on-site. Additionally, no nesting bird activity or nesting material was observed on or adjacent to the Project site. Other species identified during a literature review as having potential to occur on the site were determined by the field survey to have no potential to occur on the Project site (MBI, 2021, pp. 19 and 26). Refer to EIR Subsection 4.4, *Biological Resources*, for a more detailed discussion of the Project's site existing biological setting.

2.5.14 RARE AND UNIQUE RESOURCES

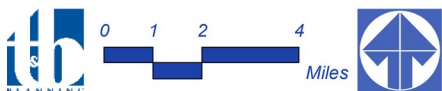
As required by CEQA Guidelines Section 15125(c), the environmental setting should place special emphasis on resources that are rare or unique to that region and would be affected by the Project. Based on the existing conditions of the Project site and surrounding area described above and discussed

in more detail in Section 4.0, *Environmental Analysis*, the Project Site does not contain any resources that are rare or unique to the region.

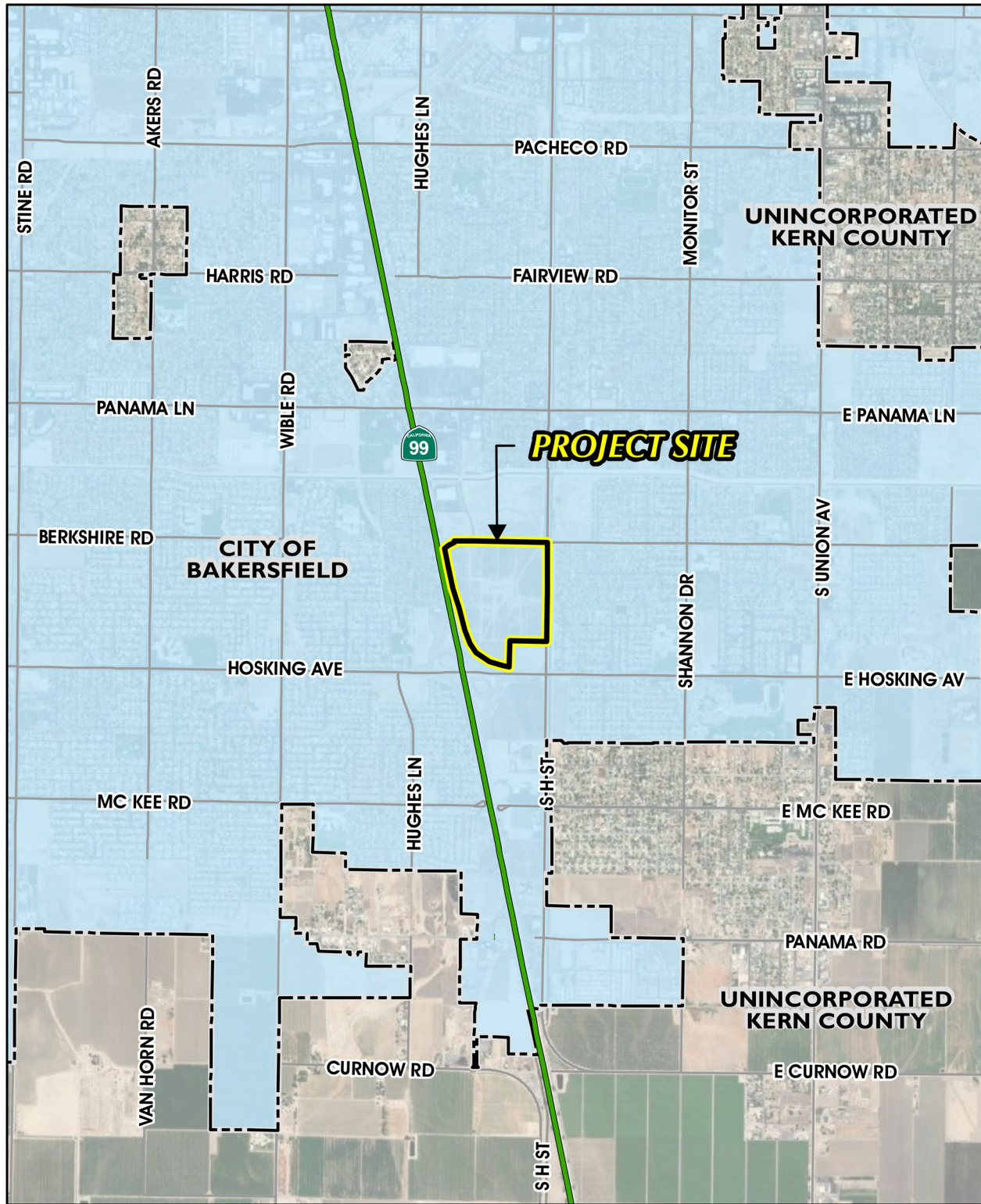


Source(s): Esri, Kern County (2022)

Figure 2-1

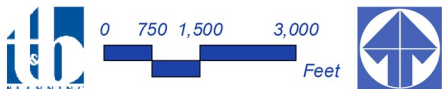


Regional Map

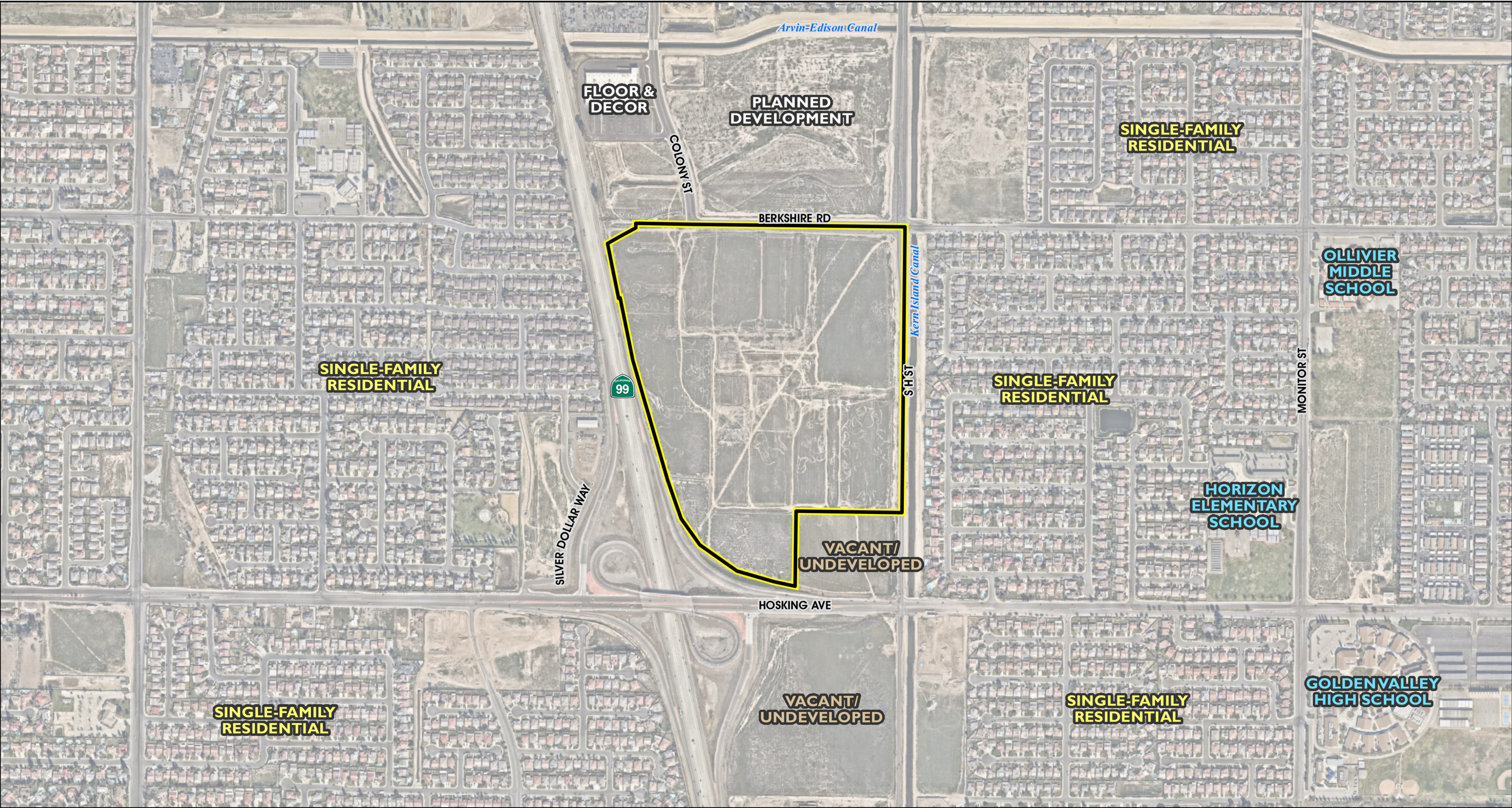


Source(s): Esri, Kern County (2022)

Figure 2-2

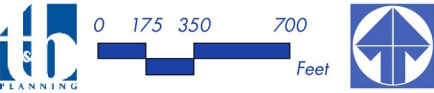


Vicinity Map

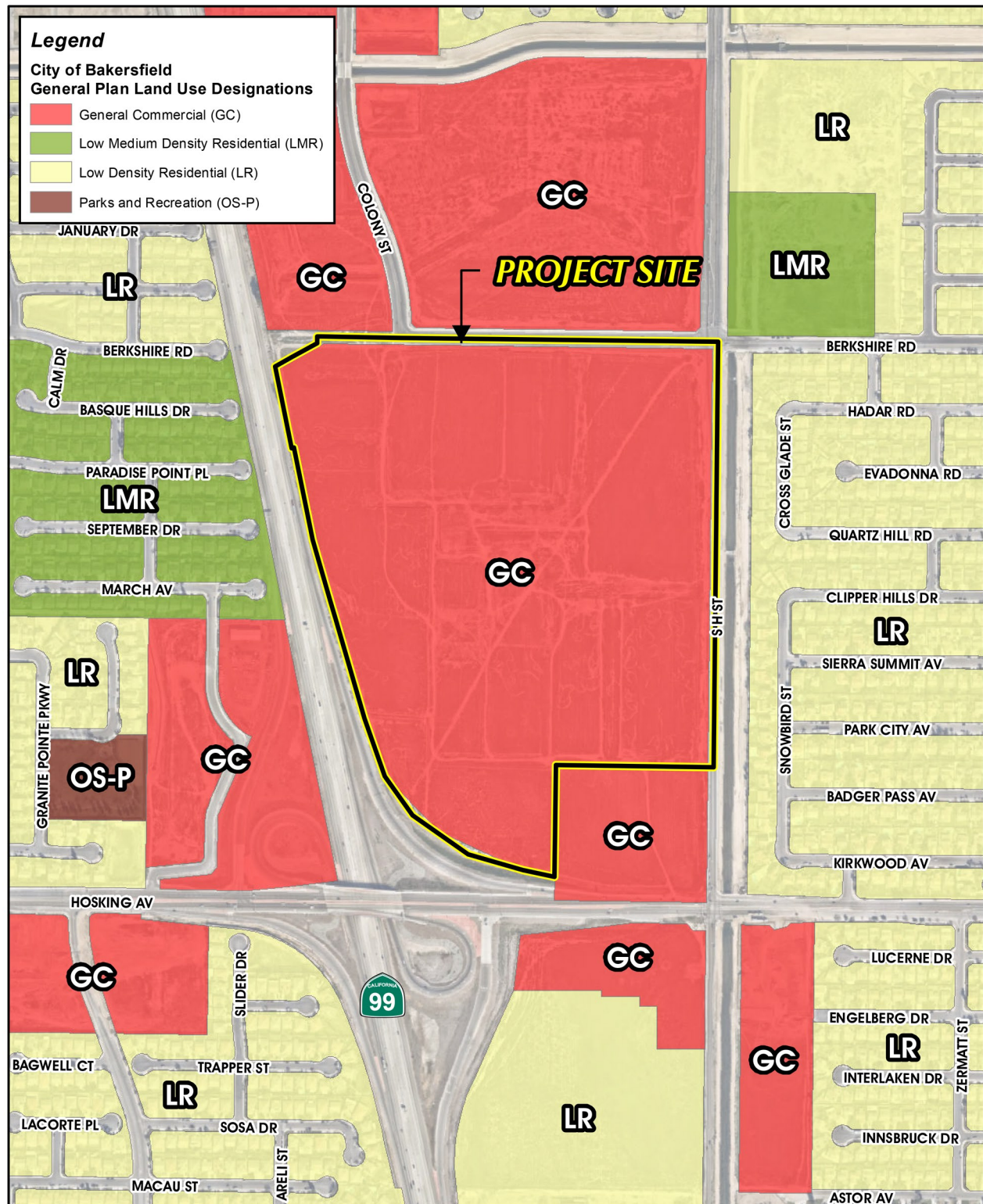


Source(s): ESRI, Nearmap Imagery (2022)

Figure 2-3

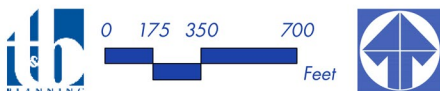


Surrounding Land Uses

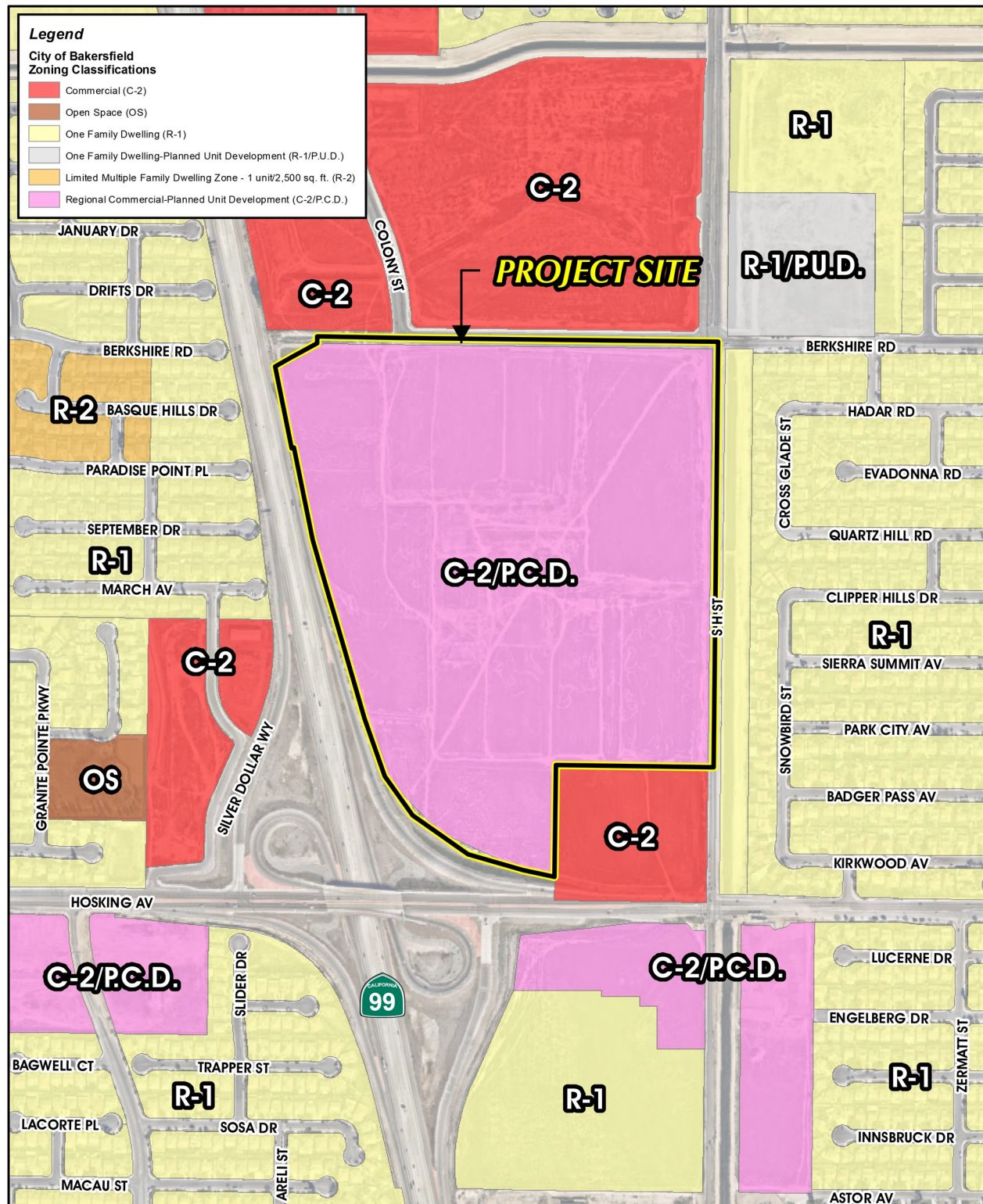


Source(s): ESRI, Nearmap Imagery (2022)

Figure 2-4

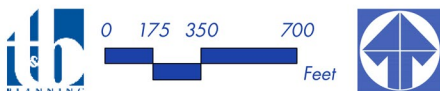


Existing General Plan Land Use Map



Source(s): ESRI, Nearmap Imagery (2022)

Figure 2-5

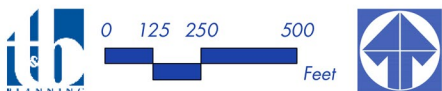


Existing Zoning

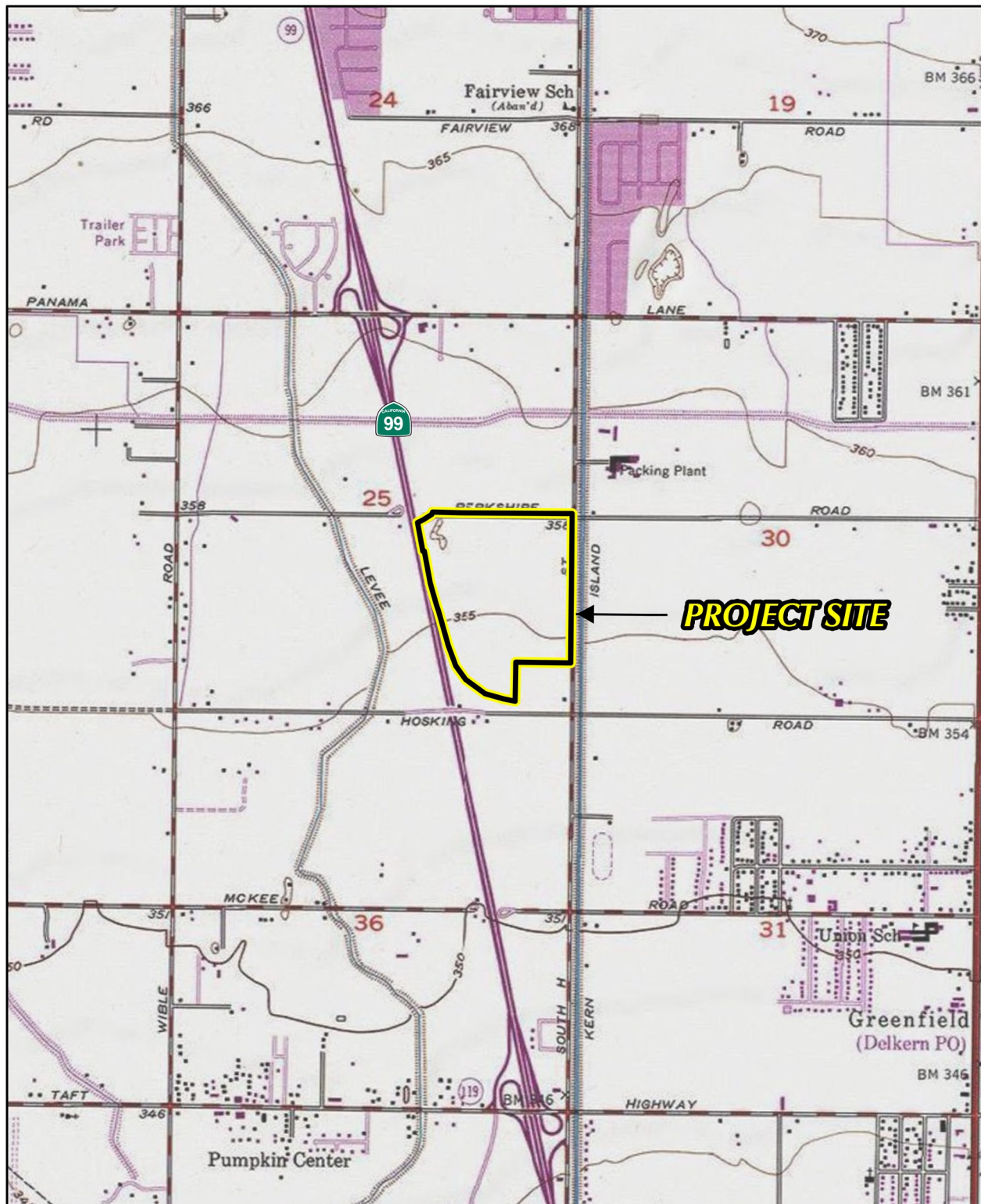


Source(s): ESRI, Nemap Imagery (2022)

Figure 2-6

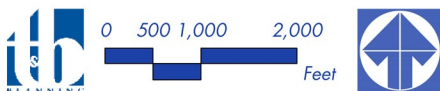


Aerial Photograph



Source(s): ESRI, USGS (2013)

Figure 2-7



USGS Topographic Map

3.0 PROJECT DESCRIPTION

This Section 3.0 provides all of the information required of an EIR Project Description by California Environmental Quality Act (CEQA) Guidelines Section 15124, including a description of the Project's precise location and boundaries; a statement of the Project's objectives; a description of the Project's technical, economic, and environmental characteristics; and a description of the intended uses of this EIR, including a list of the governmental agencies that are expected to use this EIR in their decision-making processes, a list of the permits and approvals that are required to implement the Project, and a list of related environmental review and consultation requirements.

3.1 SUMMARY OF THE PROPOSED PROJECT

The Project involves the proposed development of commercial uses and a warehouse distribution facility on ± 90.59 gross acres (± 84.67 net acres) located east of SR-99, west of South H Street, north of Hosking Avenue and south of Berkshire Road. Applications filed with the City of Bakersfield include the following:

- **General Plan Amendment/Zone Change No. 21-0184 (GPA/ZC No. 21-0184)** proposes the following modifications to the land use element of the Metropolitan Bakersfield General Plan (General Plan) and the City's official zoning map. Pertaining to the 52.28 net-acre warehouse distribution portion of the Project site, the General Plan land use designation would be modified from General Commercial (GC) to Light Industrial (LI), and the zoning classification would be modified from Regional Commercial-Planned Commercial Development Combining (C-2/PCD) to Light Manufacturing (M-1). Pertaining to the 27.91 net-acre commercial portion of the Project site and the 4.48-acre retention basin portion of the Project site, the zoning classification would be changed from C-2/PCD to Exclusive PCD. Although the Applicant's preliminary development plan proposes 12 commercial buildings collectively having a maximum of 187,500 s.f. of building space, the proposed Exclusive PCD zoning will require the Applicant to obtain approval of a final commercial development plan by the City Council at a future date.
- **Vesting Tentative Parcel Map No. 12438 (VTPM No. 12438)** is a proposed map to subdivide the Project site into 17 parcels and dedicate 5.92 acres of right-of-way to the City of Bakersfield for the widening of South H Street and Berkshire Road. The proposed VTPM also shows that the Project Applicant would construct off-site roadway and utility connection improvements. Off-site improvements include but are not limited to the widening of Berkshire Road along the Project site frontage, the widening of South H Street and undergrounding of electric utility lines between Berkshire Road and Hosking Avenue, widening and lane striping at the Hosking Avenue/South H Street intersection, and making utility connections for water, sewer, and storm drain at site-adjacent utility infrastructure.

- **Site Plan Review No. 21-0185** is a proposed site plan for the development of a 1,012,185 s.f. cross-dock speculative warehouse distribution building on 52.28 net acres of the Project site and a water retention basin on 4.48 acres. Other features include landscaping, parking areas, drive aisles, lighting, signage, and frontage improvements to Berkshire Road and South H Street.

3.2 SUMMARY OF REQUESTED APPROVAL ACTIONS

The City of Bakersfield has primary approval responsibility for the proposed Project. As such, the City of Bakersfield serves as the Lead Agency for this EIR pursuant to CEQA Guidelines Section 15050. The role of the Lead Agency was previously described in Section 1.0 of this EIR. As part of the approval process for the proposed Project, the City's Planning Commission will hold a public hearing to consider the Final EIR, GPA/ZC No. 21-0184, VTPM No. 12438 and Site Plan No. 21-0185. The Planning Commission will make advisory recommendations to the City Council. A public hearing will then be held before the City Council regarding certification of the Final EIR and approval of GPA/ZC No. 21-0184, VTPM No. 12438, and Site Plan No. 21-0185. The City Council is the approval authority for certification of the Final EIR and approval of GPA/ZC No. 21-0184 and VTPM No. 12438. The City Council will direct the Development Services Director whether to approve Site Plan No. 21-0185.

Should these actions be approved, additional discretionary and ministerial actions by the City and other agencies would be required to implement the Project. Table 3-1, *Matrix of Project Approvals/Permits*, lists the authorities and agencies that are expected to use this EIR and provides a summary of subsequent actions associated with the Project. This EIR covers all federal, State, and local government and quasi-governmental approvals which may be needed to construct and implement the Project, whether or not they are explicitly listed in Table 3-1 or elsewhere in this EIR (CEQA Guidelines § 15124(d)).

Table 3-1 Matrix of Project Approvals/Permits

Agency	Approvals and Decisions
City of Bakersfield Discretionary Approvals	
Planning Commission	<ul style="list-style-type: none"> • Provide recommendations to the City Council whether to approve, conditionally approve, or not approve GPA/ZC No. 21-0184 and VTPM No. 12438. • Provide recommendations to the City Council whether to direct the Development Services Director to approve, conditionally approve, or not approve Site Plan No. 21-0185.
City Council	<ul style="list-style-type: none"> • Approve, conditionally approve, or not approve GPA/ZC No. 21-0184 and VTPM No. 12438. • Provide direction to the Development Services Director whether to approve, conditionally approve, or not approve Site Plan No. 21-0185.
Development Services Director	<ul style="list-style-type: none"> • Approve, conditionally approve, or not approve Site Plan Review No. 21-0185.
Subsequent City of Bakersfield Approvals	

Table 3-1 Matrix of Project Approvals/Permits

Agency	Approvals and Decisions
City Council	<ul style="list-style-type: none"> Approve, conditionally approve, or not approve Commercial Development Plans in the portion of the Project site zoned PCD Exclusive.
Development Services Director	<ul style="list-style-type: none"> Approve, conditionally approve, or not approve any subsequent Site Plan Reviews or modifications thereto in the portion of the Project site zoned Light Manufacturing (M-1).
Development Services Department and Public Works Department	<ul style="list-style-type: none"> Issue grading permits. Issue building permits Accept public right-of-way dedications Approve road improvement plans. Issue encroachment permits Approve proposed sewer connections and improvements.
Other Agencies – Subsequent Approvals and Permits	
Central Valley Regional Water Quality Control Board	<ul style="list-style-type: none"> Issue a Construction Activity General Construction Permit. Confirm Compliance with National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements.
San Joaquin Valley Air Pollution Control District	<ul style="list-style-type: none"> Approve and/or implement any Voluntary Emissions Reduction Agreements (VERA) entered into by the Project Applicant. Approve permits to construct and permit to operate (if such permits are required by Project site occupants).
Kern County Flood Control and Water Conservation District	<ul style="list-style-type: none"> Approve proposed drainage infrastructure and improvements.
Pacific Gas & Electric	<ul style="list-style-type: none"> Approve undergrounding of electric lines and connections to the electric distribution and natural gas distribution systems.
Greenfield Water District	<ul style="list-style-type: none"> Approve proposed water system connections and improvements.

3.3 PROJECT LOCATION AND BOUNDARIES

A description of the Project site's regional location is included in EIR Section 2.0, *Environmental Setting*. The Project site is located in the southern portion of the City of Bakersfield in Kern County, California and positioned in the southeastern quarter of Section 25, Township 30 South, Range 27 East, Mount Diablo Base and Meridian and includes Assessor Parcel Numbers (APNs) 515-020-05, -07, -08, -09, -30, -44, -45, and -47. Refer to Figure 2-1, *Regional Map*, for the Project site's location within the regional vicinity. More specifically and as depicted on Figure 2-2, *Vicinity Map*, the Project site is located east of State Route 99 (SR-99), north of Hosking Avenue, south of Berkshire Road, and west of South H Street, encompassing 90.6 gross acres.

3.4 STATEMENT OF OBJECTIVES

The fundamental purpose and goal of the Majestic Gateway Project is to develop an economically viable commercial area and warehouse distribution center in close proximity to an established population and the State highway system to expand employment and retail shopping opportunities in

the City of Bakersfield. The Project would achieve its underlying purpose and goal through the following objectives.

- A. Expand economic development, facilitate job creation, and increase the tax base for the City of Bakersfield by establishing a new commercial development area and a warehouse distribution facility adjacent to or near the State highway system.
- B. Attract employment-generating businesses to the City of Bakersfield to reduce the need for members of the local workforce to commute outside the area for employment, thereby improving the jobs-housing balance in the City and nearby areas beyond the City boundary.
- C. Diversify the mix of land uses in the City of Bakersfield and greater Kern County to support the growing goods movement supply chain and to streamline package delivery services in and around the City of Bakersfield.
- D. Establish a supply chain use adjacent to or near designated truck routes and/or the State highway system to avoid or shorten vehicular trip lengths on other roadways.
- E. Provide retail shopping opportunities easily accessible to local residents and passers-by on the State highway system to assist in meeting the growing and evolving shopping demands of local residents and planned communities in the City of Bakersfield and greater Kern County.
- F. Develop an unused or underutilized property adjacent to SR-99.
- G. Provide a gathering place for City residents and visitors that includes shopping and other retail services in an aesthetically appealing environment.
- H. Facilitate the development of commercial and distribution warehouse uses that are architecturally and operationally designed to meet contemporary industry standards and be economically competitive with similar buildings in the region.

3.5 DESCRIPTION OF PROJECT CHARACTERISTICS

The Project Applicant proposes to develop 90.59 gross acres located east of SR-99, west of South H Street, north of Hosking Avenue and south of Berkshire Road with commercial uses and a warehouse distribution center. The 12 commercial buildings are conceptually designed to provide up to 187,500 s.f. of building space. The warehouse is designed to provide up to 1,012,185 s.f. of building space. The commercial portion of the Project site is 29.25 gross acres (27.91 net acres), the warehouse distribution portion of the Project site is 56.86 gross acres (52.28 net acres), and a water retention basin is proposed on 4.48 net acres. Approximately 5.92 acres of right-of-way would be dedicated to the City of Bakersfield for the widening of South H Street and Berkshire Road.

Each of the applications submitted to the City of Bakersfield to entitle the Project for development as proposed are described below, and an illustration of the proposed, resulting development concept is provided in Figure 3-1, *Proposed Development Concept*. The principal approval actions requested of the City of Bakersfield to implement the Project include a GPA/ZC and a VTPM for the entirety of the property and a Site Plan Review for the warehouse portion of the property, as described herein. Additional discretionary and administrative actions that would be necessary to implement the Project are listed in Table 3-1, *Matrix of Project Approvals/Permits*. A full set of Project application materials are on file with the City of Bakersfield, Development Services Department, 1715 Chester Avenue, 2nd Floor, Bakersfield, CA 93301.

3.5.1 GPA/ZC No. 21-0184

The Metropolitan Bakersfield General Plan (adopted 2007 and most recently amended in 2016) is a policy document that provides land use maps and related information intended as long-range guidance to City staff and officials who make decisions that affect growth and resources in the metropolitan Bakersfield planning area. The General Plan also serves as a guide to the private sector so that development initiatives conform to the City's long-range plans, objectives, and policies. The Project Applicant proposes to modify the land use element of the City's General Plan as it applies to the warehouse portion of the Project site. The proposal is to change the land use designation on ± 52.28 net acres from General Commercial (GC) to Light Industrial (LI) as shown on Figure 3-2, *Proposed General Plan Amendment*. The General Plan describes the Light Industrial (LI) land use designation as "unobtrusive industrial activities that can locate in close proximity to residential and commercial uses with a minimum of environmental conflicts" (Bakersfield, 2007).

The City of Bakersfield Municipal Code Title 17 (Zoning Ordinance) implements the goals and policies of the General Plan by providing standards by which development can occur. Under existing conditions, the entire Project site is zoned Regional Commercial-Planned Commercial Development Combining (C-2/PCD). This zoning classification allows commercial development without City Council approval of a specific development plan. Refer to Figure 3-3, *Proposed Change of Zone*. The Project Applicant proposes to modify the zoning classification on the warehouse portion of the Project site to Light Manufacturing (M-1). The proposed M-1 zoning designation permits warehouses, wholesale businesses, storage buildings, and freight and package delivery services, which are the types of uses intended to occupy the proposed warehouse. The M-1 zoning designation allows a floor area ratio (FAR) up to 1.0 and a building height up to 75 feet.

The Project Applicant also proposes to modify the zoning classification of the commercial portion and retention basin portion of the Project site to Exclusive PCD, which permits commercial development but only upon City Council approval of a commercial development plan. Although the Project Applicant is not proposing a commercial development plan for approval at this time, the Applicant provided a preliminary development plan that depicts a reasonably foreseeable design for the area that would be zoned PCD. The preliminary development plan shows 12 commercial buildings collectively having a maximum of 187,500 s.f. of buildingspace. The proposed Exclusive PCD zoning will require approval of a final commercial development plan by the City Council at a future date. The conceptual

design details for the commercial portion of the Project site through the Exclusive PCD zoning classification are described below.

A. Conceptual Exclusive PCD Development Plan

The intent of the Exclusive PCD zoning classification is to provide flexibility for commercial developments so that a more cohesive design can be achieved, allowing for innovative design and diversification in the relationship of various uses, buildings, structures, lot sizes, and open spaces while ensuring compliance with the General Plan and the intent of the City's Municipal Code (City of Bakersfield Municipal Code 17.54.010, 2001). The Project Applicant's conceptual design for the Exclusive PCD zoned area is described herein.

The conceptual design includes 12 commercial buildings, with three buildings located in the northwestern portion of the Project site and nine buildings located in the southern portion of the Project site. In total, a maximum of 187,500 s.f. of building space is planned among the 12 commercial structures. The commercial structures are conceptually designed to range in height from ± 29 ft to ± 43 feet, have contemporary style architecture, and be painted shades of white, gray, and tan, with a mixture of color accent materials including but not limited to brick and siding. Sample architecture is provided in Figure 3-4, *Conceptual Exclusive PCD Anchor Building Architecture* and Figure 3-5, *Conceptual Exclusive PCD Multi-Tenant Commercial Building Architecture*. At this time, the exact number and sizes of buildings and the tenants of the commercial spaces are not known. As is customary in commercial space leasing, building tenants often do not express interest in leasing a building until the entitlements are in place and a construction schedule is assured to know when the space would be available for occupancy.

Commercial development is proposed in the southern portion of the Project site and in the northwestern portion of the Project site. In the northwest portion, a 57,200 s.f. building is conceptually planned to house a major commercial tenant expected to be a general retail tenant. In addition, two buildings having 7,200 s.f. and 3,600 s.f. of building space are conceptually planned, which are expected to accommodate uses such as food and beverage tenants. Vehicular access to this area would be provided from Berkshire Road.

In the southern portion of the Project site, nine buildings are conceptually planned ranging in size from 6,000 s.f. to 42,000 s.f. Based on the expected building layout and design, tenants are expected to include food and beverage and general retail. Six of the buildings are conceptually laid out in a "main street" concept, in anticipation of future development of the vacant property to the south at the northwest corner of Hosking Avenue and South H Street, forming the south side of the "main street." Specific development plans for the off-site property, which is not in the control of the Project Applicant, are speculative, not part of the proposed Project, and not currently entitled or proposed. To connect the two areas of commercial development in the northwestern and southern portions of the Project site and to avoid the need to travel on public roads between onsite buildings, an internal private frontage driveway is planned paralleling SR-99 internal to the site. Vehicular access from Berkshire Road is anticipated to be provided by a signalized intersection at Colony Street and vehicular access

from South H Street is anticipated to be provided by a signalized intersection at a private driveway connecting to South H Street.

3.5.2 VESTING TENTATIVE PARCEL MAP NO. 12438

California Government Code Sections 66410-66499, cited as the Subdivision Map Act, allows local agencies to regulate and control the division of land through tentative and final tract maps and parcel maps. When a map is “vesting,” it confers a vested right to proceed with development for a specified period of time after the map is recorded. Pertaining to the Project site, VTPM No. 12438 is a proposed map to subdivide the Project site into 17 parcels and dedicate right-of-way to the City of Bakersfield for improvements to South H Street and Berkshire Road. Refer to Figure 3-6, *Vesting Tentative Parcel Map No. 12438*, which shows the location and sizes of the proposed parcels, which range in size from approximately 52.28 net acres for the warehouse parcel to 0.77 net acre for the smallest commercial parcel. VTPM No. 12438 also shows off-site utility connections and off-site roadway improvements at the intersection of Hosking Avenue and South H Street. Off-site improvements include but are not limited to the widening of Berkshire Road along the Project site frontage, the widening of South H Street and undergrounding of electric utility lines between Berkshire Road and Hosking Avenue, widening and lane striping at the improvements to the Hosking Avenue/South H Street intersection, and making utility connections for water, sewer, and storm drain at site-adjacent utility infrastructure.

3.5.3 SITE PLAN REVIEW NO. 21-0185

Pursuant to Bakersfield Municipal Code §17.08.060, the approval of a Site Plan is required for uses in the M-1 zone. Site Plan Review No. 21-0185 is a proposed site plan for the development of a warehouse building on ±52.28 acres of the Project site proposed with a M-1 zoning classification, as well as implementation of an adjacent water retention basin on 4.48 acres zoned Exclusive PCD. Refer to Figure 3-7, *Proposed Warehouse Site Plan*.

The proposed warehouse building is designed to have up to 1,012,185 s.f. of interior floor space. Office areas consisting of up to 50,000 s.f. of office space to support the warehouse functions would occur at the northwest, northeast, and southeast corners of the building, with the remainder of the building used as warehouse. The building’s user is not known at this time. Based on the building design, the structure is anticipated to be occupied by a single user but there is potential for the structure to be demised (divided with an interior wall) for occupancy by two users. The proposed building is rectangular in shape and would be positioned with the long sides of the building facing east and west and the shorter sides of the building facing north and south. The structure would have a maximum height of ±50 feet to the top of the office area parapets. The building is designed in a contemporary style and would be painted shades of white, gray, dark gray, with blue accents. The east-facing building elevation is designed to include 90 dock doors and two grade-level ramps with roll-up doors; the west-facing building elevation is designed to include 83 dock doors and two grade-level ramps with roll-up doors. Because dock doors are proposed on two opposite sides of the building, the building is called a “cross dock warehouse” which is typical in warehouse design. The east-, west-, north- and south-facing building elevations are shown on Figure 3-8, Figure 3-9, Figure 3-10, and Figure 3-11, respectively.

The roof would be constructed to support the future installation of solar panels, but because the location and size of such panels would be determined in conjunction with the future building user, which is not known at this time, the Project Applicant is not proposing the installation of rooftop solar panels as part of the initial Site Plan approval.

The Project Applicant is proposing the structure on a speculative basis, meaning that the future building occupant is not known at this time. As is customary in warehouse leasing, building users often do not express interest in leasing a building until the entitlements are in place and a construction schedule is assured to know when the building would be available for occupancy.

Vehicular access to the warehouse building would be provided by two driveways connecting with Berkshire Road, with the westernmost driveway at Colony Street signalized. Three driveways would connect with South H Street, with the center driveway signalized. Truck access would use the Berkshire driveways, with trucks primarily circulating counter-clockwise within the site around the warehouse building and traveling to and from SR-99 by using the Hosking Avenue/SR-99 on- and off-ramps. Signage would direct trucks to exit the site on Berkshire Road, turn southbound on South H Street, and westbound on Hosking Avenue to use the SR-99 ramps. Passenger vehicles would primarily use the South H Street private driveways, where the employee and visitor parking lot is planned. No trucks servicing the warehouse building would use the driveways that connect with South H Street. The employee and visitor parking lot is planned on the east side of the building. In total, parking on the site is designed with striping for 236 trailer spaces and 740 passenger vehicle parking spaces including 88 spaces designated for clean air vehicles (12% of the spaces) and 74 of the spaces having charging stations for electric vehicles (10% of the spaces). Parking space striping could be subject to change based on building user requirements so long as the minimum number of spaces required by the City of Bakersfield M-1 zoning classification are provided.

3.5.4 PROJECT'S TECHNICAL CHARACTERISTICS

A. Landscaping

Upon development of the proposed Project, the site would be landscaped as shown in Figure 3-12 *Conceptual Landscape Plan*. Proposed landscaping would be ornamental in nature and would feature trees, hedges, shrubs, groundcovers, and accent plants. Note that the landscaping plan for the warehouse component of the Project would be approved as part of proposed Site Plan Review No. 21-0185, while the landscaping shown for the commercial component of the Project site is only conceptual and would be subject to future review and approval by the City Council when a final commercial site plan is brought forward for consideration.

The notes on Figure 3-12, covering both the proposed warehouse facility development and the conceptual commercial development, indicate that 786 trees would be planted on the property, including approximately 181 perimeter trees and 605 parking lot trees at minimum 24-inch box size at the time of planting. A row of Canary Island Pine trees is proposed along the perimeter of the site and adjacent to the existing chain link fence paralleling SR-99 and the SR-99/Hosking on-ramp. California

Pepper trees are proposed in the streetscape along Berkshire Road and a mixture of Oak tree varieties are proposed along South H Street and in the passenger vehicle parking lots for the warehouse building and the commercial buildings. Landscaping also would occur at building entries and around building perimeters. Two fountains and/or sculptures are conceptually proposed as landscape design features in the commercial area in the southern portion of the Project site; two outdoor employee amenity patio areas are proposed as design features near the southeastern and northeastern portions of the warehouse facility.

The passenger vehicle parking lots would have a shade cover of 54.7%, whereas a minimum of 40% is required by Chapter 17.61 of the Bakersfield Municipal Code. Trees and other plant material are not proposed inside the gated and screened truck courts of the warehouse building where loading docks are located because, as typical in warehouse design, landscaping interferes with truck movements and driver visibility and can be subject to damage from tractor trailer operations in truck courts. The water retention basin that is proposed in the western portion of the Project site would be planted with plant species selected for their ability to remove waterborne pollutants from stormwater runoff; trees would be planted along the perimeter of the basin to screen public views of the basin and, also, screen the west-facing side of the warehouse building.

Prior to the issuance of building permits to construct the proposed warehouse building and commercial buildings, the Project Applicant would be required to submit final planting and irrigation plans to the City for review and approval. The plans are required to comply with Chapter 17.61 of the Bakersfield Municipal Code, which establishes requirements for landscape design, automatic irrigation system design, and water-use efficiency (Bakersfield, 2022, Chapter 17.61).

B. Lighting

The uses on the Project site would be illuminated at night for safety and security. Exterior lighting is required to comply with the City of Bakersfield Municipal Code Section 17.71, Outdoor Lighting, which among other things requires that all outdoor lighting be fully shielded and aimed downward, onto the ground surface with no escaping light permitted to contribute to sky glow by shining upward into the sky. Any outdoor lighting that shines onto adjacent property or streets that produce a nuisance or disabling glare, or that is above the horizontal plane, will not be permitted. Also, light trespass that extends beyond the property or project boundaries within or adjacent to residentially zoned and/or designated properties is not allowed to exceed an intensity level of 0.5 foot-candles at the property line as measured three feet above the ground or finished grade.

C. Walls and Fencing

The warehouse building's truck courts would be screened and secured by a combination of solid walls, fences, and the landscaping described above in Subsection A. An existing chain link fence is present along the Project site's boundary with the SR-99 northbound lanes and the Hosking Avenue northbound on-ramp to SR-99, and this fencing would remain. Chain link fencing also would occur around the perimeter of the proposed water retention basin for safety and security of the basin. On the

western and eastern perimeters of the warehouse facility, 8-foot-high solid screen walls are proposed to completely screen and enclose the truck courts. Trucks would pass through manual security gates positioned on interior driveways to enter and exit the facility.

D. Public Road Improvements and Signalization

The Project site is bound by, and adjacent to, SR-99 to the west, Berkshire Road to the north, South H Street to the east, and Hosking Avenue to the south. Of these roads, SR-99 and the SR-99/Hosking interchange are fully improved and would not require right-of-way dedication or improvements by the Project Applicant. As part of the Project's proposed VTPM No. 12438, the Project Applicant would dedicate 5.92 acres of right-of-way to the City of Bakersfield for the widening of South H Street and Berkshire Road. Proposed public roadway improvements are shown on Figure 3-13, *Public Roadway Improvements*, and described below.

Along the Project site's frontage with Berkshire Road, the Project Applicant would be responsible for dedicating right-of-way and improving the road to include 45 feet of total right-of-way on the south side of the centerline, including 34 feet of pavement and an 11-foot parkway inclusive of a new 7-foot-wide sidewalk. The Project Applicant also would be required to assure the installation of a traffic signal at the intersection of Berkshire Road and Colony Street.

Along the Project site's frontage with South H Street and extending beyond the frontage continuing between the southeast corner of the Project site to the intersection of South H Street and Hosking Avenue, the Project Applicant would be responsible for dedicating right-of-way and ensuring dedication of right-of-way by the off-site property owner to the south of the Project site to widen and improve South H Street to provide a minimum of 55 feet of right-of-way on the west side of the centerline, with additional widening as South H Street approaches and meets the Hosking Avenue intersection. When complete, South H Street would be improved to full arterial roadway width from Berkshire Road to Hosking Avenue, providing 6-lane roadway capacity. South H Street would be improved to include a new raised center median and the western side of the road would be improved to include new pavement and a curb-adjacent sidewalk, with 7 feet of the sidewalk in the public right-of-way and 1 foot of the sidewalk in a pedestrian easement. Two new traffic signals would be installed at the Project's proposed access driveways, where median breaks would occur to allow for full turning movements. The Project Applicant also would be required to assure the installation of improvements to the northwest corner of the South H Street/Hosking Avenue intersection, to include dual southbound left turn lanes, three through lanes in each direction and dual southbound right turn lanes, along with associated traffic signal, per the recommendations of the Project's Traffic Study attached to this EIR as *Technical Appendix J*.

E. Water Infrastructure

Water service and supply to the Project site is provided by Greenfield County Water District (Greenfield CWD). A domestic water distribution system would be installed on the Project site as part of the proposed development. As part of this system, a 56-foot diameter by 37½-foot high water tank

with pump house is proposed near the southwestern portion of the warehouse facility to service the warehouse and provide adequate fire flow. The on-site water lines would connect to existing site-adjacent Greenfield CWD lines installed in Berkshire Road and South H Street. Because improvements to these roads would occur as part of the Project's construction, connection to the existing water lines is considered an inherent part of the Project's construction.

F. Wastewater Infrastructure

Wastewater service for the Project site is provided by the Bakersfield Department of Public Works (BDPW), Wastewater Division. A wastewater conveyance system would be installed on the Project site as part of the proposed development, with a connection point to a 12-inch BDPW line in Berkshire Road and a 36-inch BDPW trunk line located in Hosking Avenue that transfers wastewater to Wastewater Treatment Plant No. 3 (Cornerstone Engineering, 2021b, p. 7).

G. Drainage Infrastructure

As part of the Project's construction, the existing drainage pattern on the site would be altered and managed by an on-site stormwater drainage system. Storm drain facilities would include curbs, gutters, inlets, underground pipes, and a surface retention basin. The proposed retention basin that also would serve water quality functions is proposed on a ±4.48-acre parcel in the west-central portion of the Project site between SR-99 and the proposed warehouse building. The basin would jointly serve the commercial development and the warehouse development for storm water and water quality purposes. The retention basin is designed to Kern County standards (which are more conservative (strict) than City standards) which require the basin to have capacity for a 5-day/10-year storm event. The capacity of the retention basin at a water depth of 8 feet is 17.6 acre-feet (Cornerstone Engineering, 2021a).

H. Dry Utilities

The Project site is located in the service area of Pacific Gas & Electric (PG&E) for both natural gas and electricity. Land line phone serve is provided by AT&T and cable and fiber service is provided by Brighthouse Network. Dry utility lines to service the site would be provided in a joint trench located on the south side of Berkshire Road and the west side of Hosking Avenue paralleling the Project site.

I. Construction Characteristics

The Project Applicant anticipates that the Project's construction will occur in two phases, with the warehouse facility and associated infrastructure including public road improvements to Berkshire Road and South H Street constructed first followed by development of the commercial uses in a second phase. A reasonable expectation of construction for purposes of analysis in this EIR is construction of the warehouse facility, retention basin, and associated site improvements and on- and off-site infrastructure between approximately March 2023 and December 2024. Next, the commercial uses would be constructed occur over a period of years depending on market demand and studied in this EIR as occurring between January 2025 and December 2029.

The typical construction sequence entails site preparation followed by grading, followed by construction of the building shells, installation of infrastructure and utilities, paving, landscaping, and then painting and other architectural coatings. Tenant improvements inside the buildings and the installation of exterior signage would typically occur after users/tenants are identified and enter into lease agreements.

Construction is assumed to occur Monday through Friday with occasional work on Saturdays with the exception of federal holidays. To control noise associated with construction activities, Section 9.22.050 of the City's Municipal Code establishes limits to the hours that construction activities can occur within 1,000 feet of residential homes. Sections 9.22.050[A] and [C] state that it is unlawful for any person, firm or corporation to erect, demolish, alter or repair any building, or to grade or excavate land, streets or highways, other than between the hours of six a.m. and nine p.m. on weekdays, and between eight a.m. and nine p.m. on weekends within 1,000 feet of the nearest residential dwelling. Although construction could occur during any time periods allowed by the Municipal Code, most construction crews typically work eight hours per day from approximately 6:30 am to 3:30 pm with a lunch break. During limited periods when concrete is poured, this activity may occur at night when cooler air temperatures are most conducive to curing (hardening) concrete.

The types of construction equipment expected on the site include diesel trucks, dump trucks, concrete trucks, material hauling equipment, graders, water towers, water pulls and water trucks, grading scrapers/blades, crawler loaders, bulldozers, cranes, backhoes, excavators, scissor lifts, forklifts, hand tools and other miscellaneous equipment. Construction equipment is not usually in continuous use and some pieces of equipment are utilized only periodically throughout a typical day of construction. Thus, eight hours of daily use per piece of equipment is an overly conservative and reasonable assumption for purposes of analysis in this EIR.

As shown on Figure 3-14, *Extent of Physical Improvements*, the entire Project site would be disturbed for construction of the Project, in addition to off-site areas along Berkshire Road, South H Street, and at the intersection of South H Street and Hosking Avenue. Under existing conditions, the Project site is relatively flat and earthwork is expected to balance with no import or export of materials required. Considering the need to over-excavate and recompact soils to support the proposed improvements, earthwork excavated from the proposed retention basin would be used across the site as during the recompacting process. No manufactured slopes are proposed other than the interior side slopes of the retention basin.

J. Operational Characteristics

At the time this EIR was prepared, the future building users/tenants were unknown. For the purposes of analysis in this EIR, the warehouse facility is assumed be operational 24 hours per day, seven days per week. The commercial buildings are also assumed to be operational 24 hours per day, seven days per week although this is an overly conservative assumption because a large majority of commercial users do not operate during night time hours. The Project is anticipated to employ approximately 1,500 persons.

The proposed warehouse building is designed such that business operations would be conducted within the enclosed building, with the exception of traffic movement, parking, and the loading and unloading of tractor trailers at designated loading bays. As a practical matter, dock doors on warehouse buildings are not occupied by a truck or trailer at all times of the day. There are typically many more dock door positions on warehouse buildings than are needed for receiving and shipping volumes. The dock doors that are in use at any given time are usually selected based on interior building operation efficiencies. In other words, trucks ideally dock in the position closest to where the goods carried by its trailer are stored inside the building. As a result, a number of dock door positions are frequently inactive throughout the day. Because the warehouse user is not known and some users require chilled, cooled, or freezer space to accommodate the storage of items requiring temperature control (examples include food products, medicines and other pharmaceuticals, wax products, beauty supplies etc.), 10% of the warehouse space is studied in this EIR as temperature-controlled space (commonly called “cold storage”).

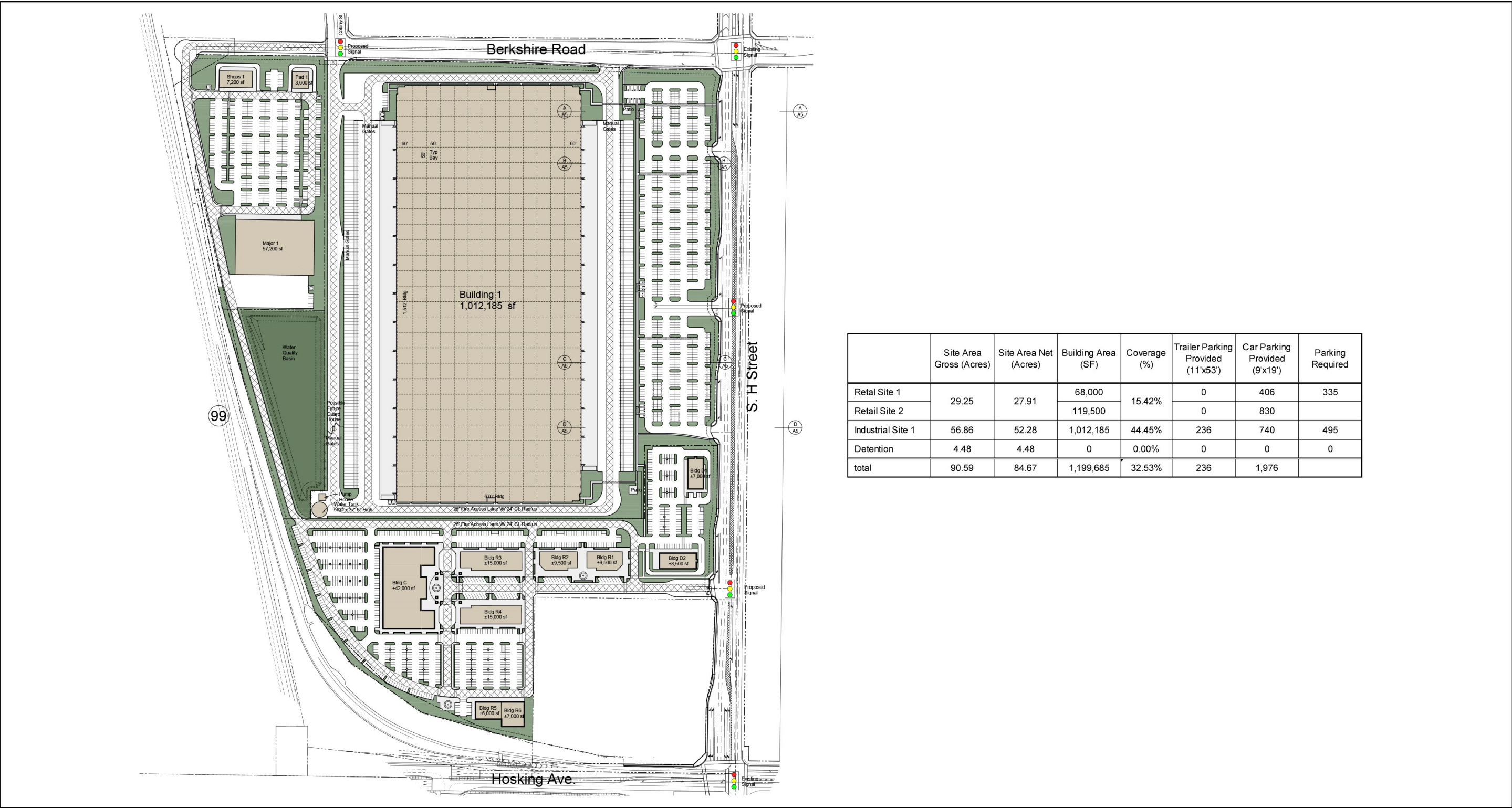
The commercial buildings are conceptually designed as a contemporary shopping center, with anchor buildings and multi-tenant buildings designed to attract retail patrons. Outdoor activities would include parking, walking, gathering, and potentially outdoor dining.

During operation, employees, visitors, and vehicles hauling goods would travel to and from the Project site on a daily basis. As calculated in a traffic study prepared for the Project (see *Technical Appendix J*), the commercial development is estimated to attract 10,759 trips per day including 1,614 pass-by trips (trips that are already on the road passing the site). The calculation of commercial development traffic was based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, using ITE Land Use Code 820 (Shopping Center).

The warehouse is estimated to attract 2,975 passenger vehicles and 580 truck trips per day. Because trip rates for warehouses available in the ITE Trip Generation Manual are either based on a low number of surveyed sites or at sites in areas outside of the central and southern California area collected from the 1980’s through 2010’s, the warehouse trip generation rates for AM, PM and daily traffic were based on a Technical Memorandum providing a trip generation rate recommendation specific for the Project site, prepared by Urban Crossroads using published ITE methodologies (see Appendix to *Technical Appendix J*). The trip rate was developed by Urban Crossroads from trip counts collected at five operating warehouses in Southern California that are expected to have operating characteristics similar to those expected at the Project site.

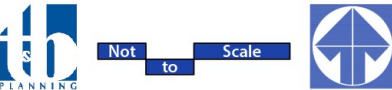
Thus, in total, the Project is estimated to generate 12,700 vehicle trips per day ($2,975 + 580 + 10,759 - 1,614 = 12,700$ using the numbers cited in the preceding paragraphs). Pursuant to State law, on-road diesel-fueled trucks are required to comply with various air quality and greenhouse gas emission standards, including but not limited to the type of fuel used, engine model year stipulations, aerodynamic features, and idling time restrictions. Compliance with State law is mandatory and inspections of on-road diesel trucks subject to applicable State laws are conducted by the California Air Resources Board (CARB).

A Water Supply Assessment was prepared and is provided as *Technical Appendix M*, which indicates that the Project is estimated to generate a water demand of approximately 42.2 million gallons per year (MG/yr), or approximately 129.4 acre-feet per year (AFY) (Cornerstone, 2021c, p. 1). Based on the Project's Sewer Capacity Study (*Technical Appendix L*), the Project is expected to generate an average of 132,000 gallons per day (gpd) of wastewater with peak daily flows estimated at 243,000 gpd (Cornerstone, 2021b, p. 3). According to the Project's Energy Consumption and Efficiency Analysis (*Technical Appendix E*), Project operations are expected to demand approximately 18,320 British thermal units (BTU) of natural gas per year; and up to 7.0 gigawatt hours (GWh) of electricity per year (Trinity, 2022b, p. 3-5).

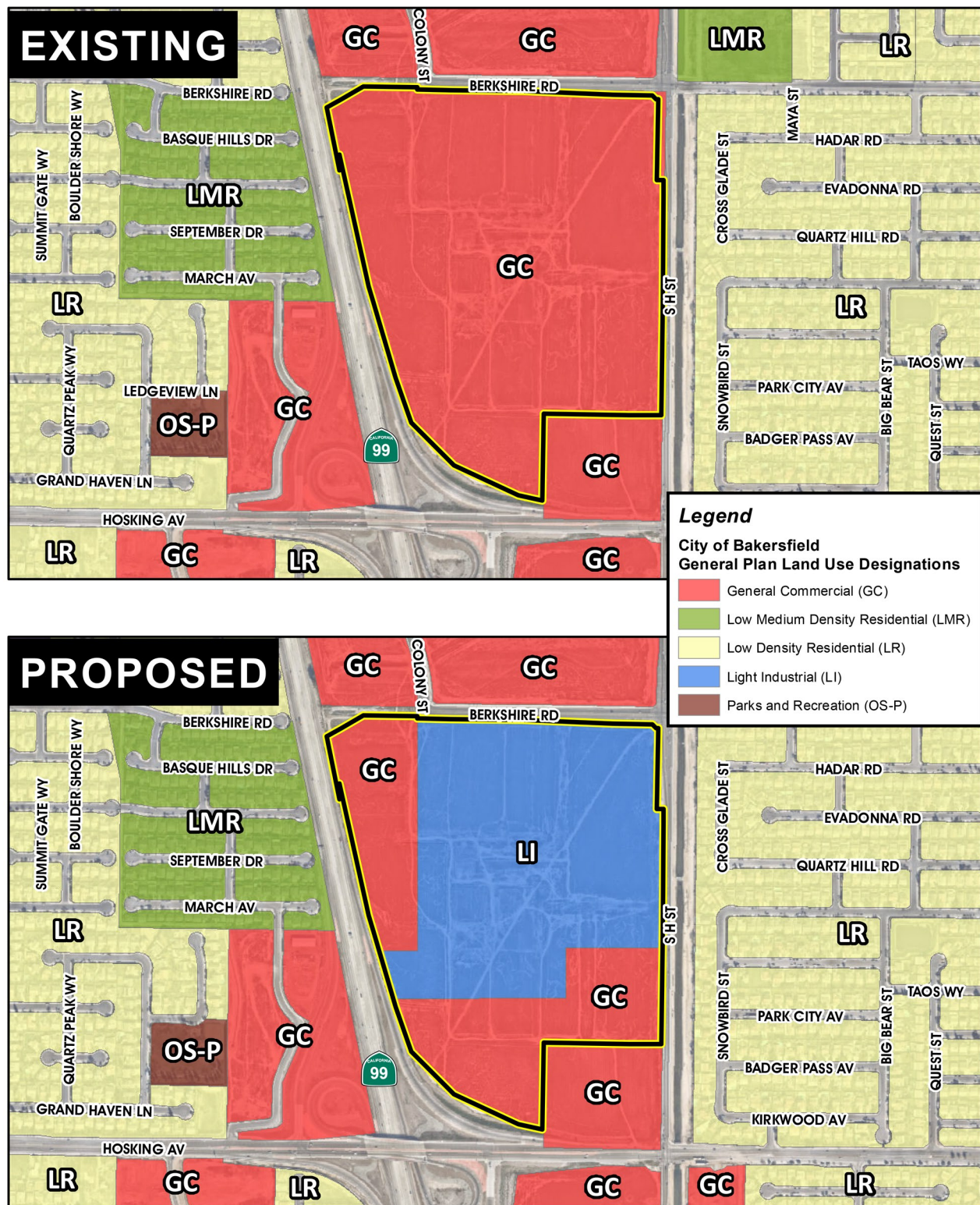


Source(s): Commerce Construction Co. (05-25-2022)

Figure 3-1

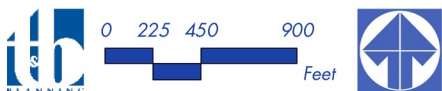


Proposed Development Concept



Source(s): ESRI, Nearmap Imagery (2021), RCTLMA (2019)

Figure 3-2



Proposed General Plan Amendment

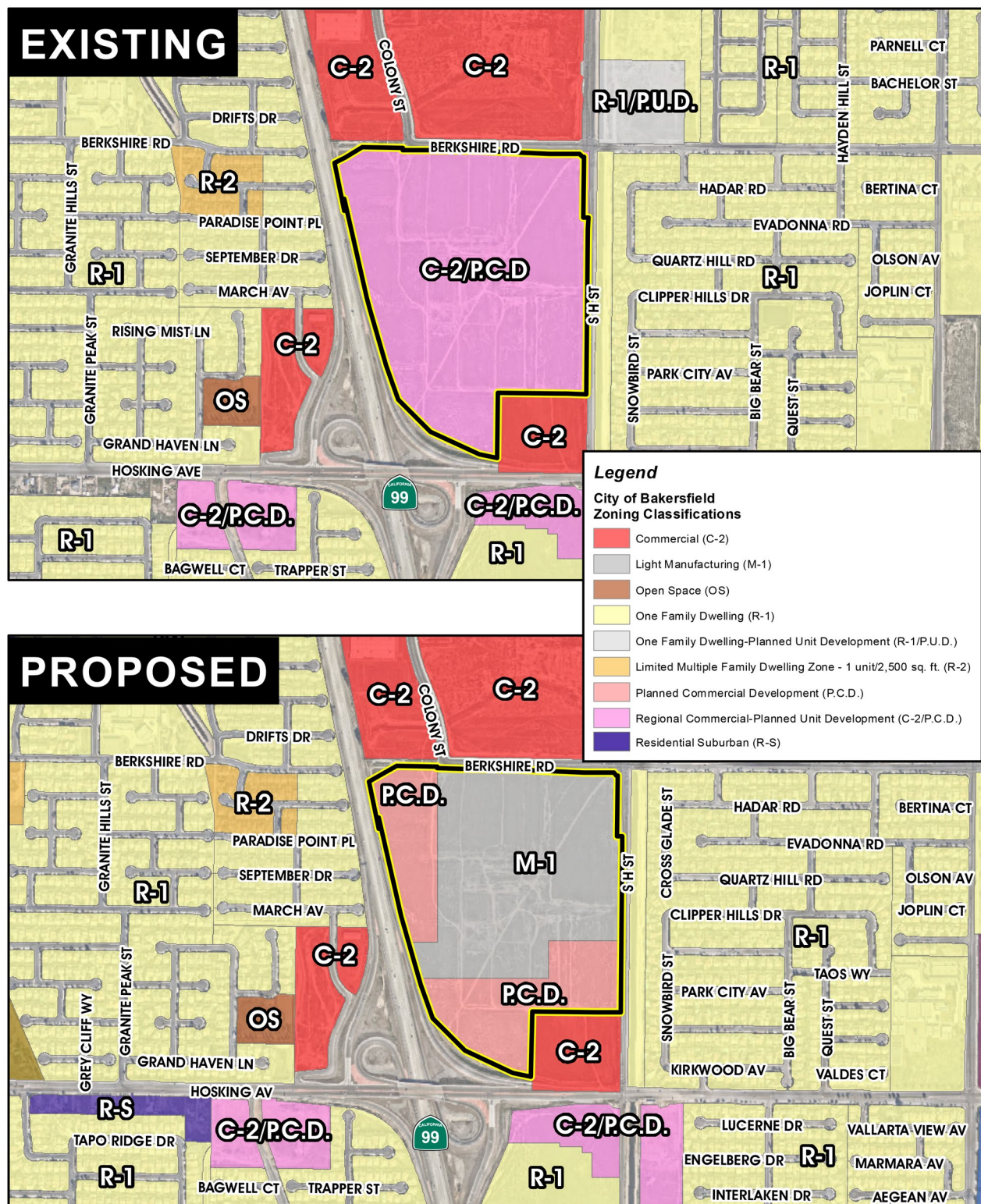
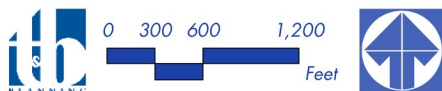


Figure 3-3

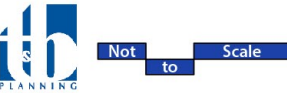


Proposed Change of Zone



Source(s): McKently Malak Architects (04-13-2021)

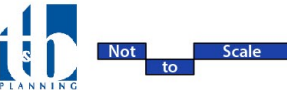
Figure 3-4



Conceptual Exclusive PCD Anchor Building Architecture



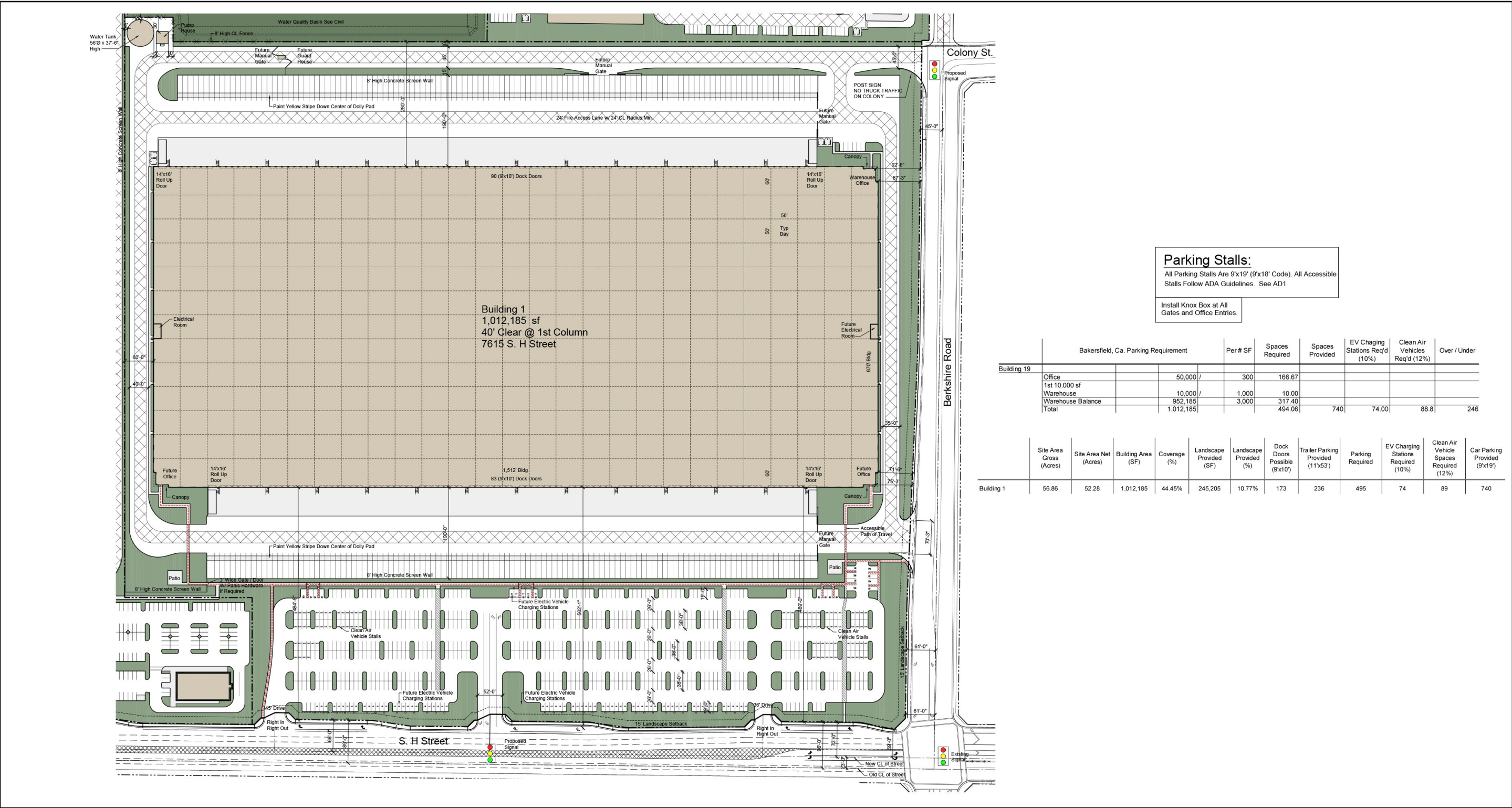
Figure 3-5



Conceptual Exclusive PCD Multi-Tenant Commercial Building Architecture

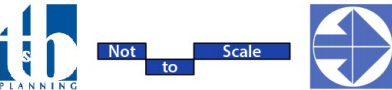


Figure 3-6

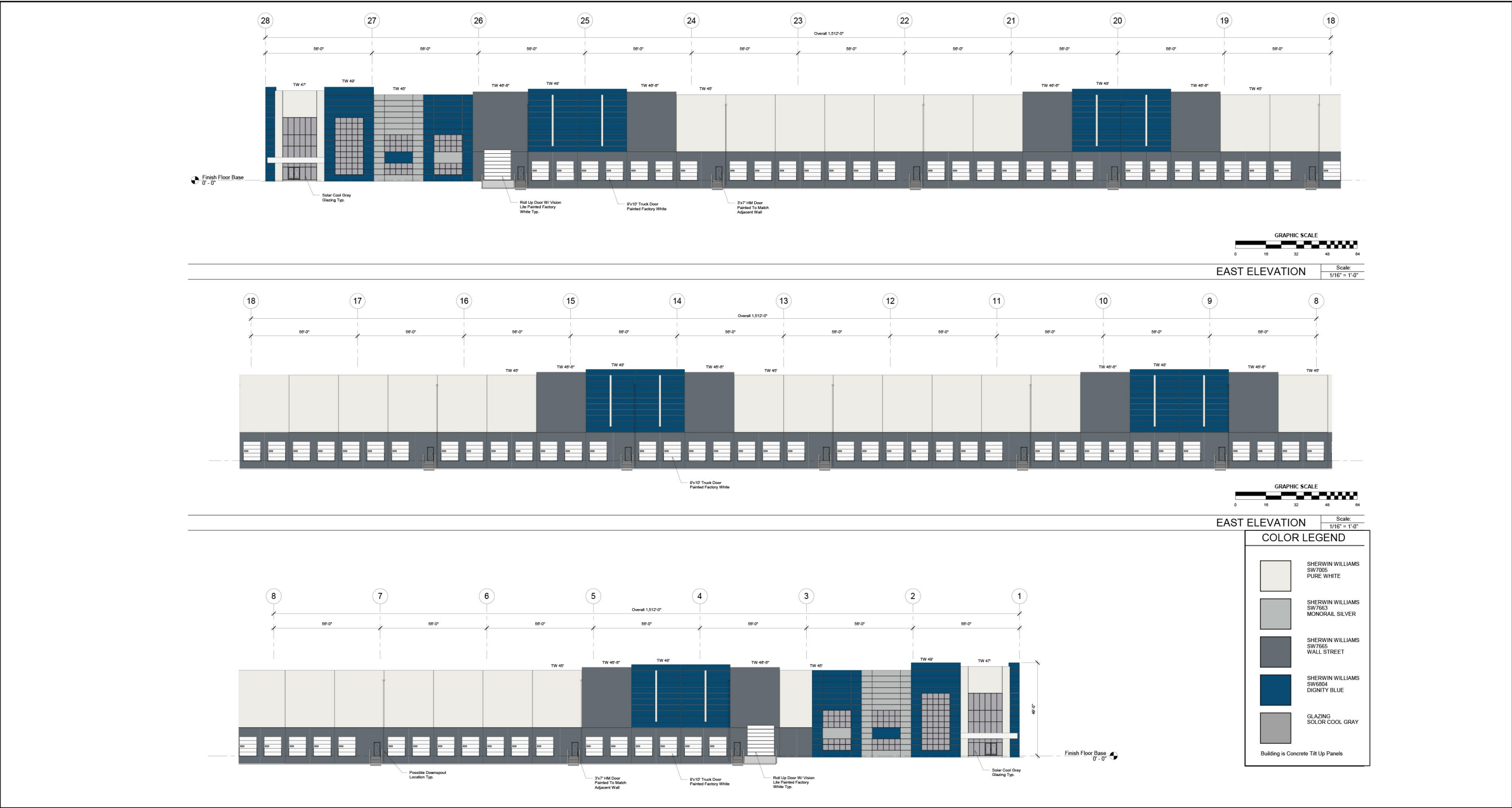


Source(s): Commerce Construction Co. (05-25-2022)

Figure 3-7

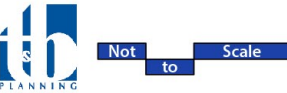


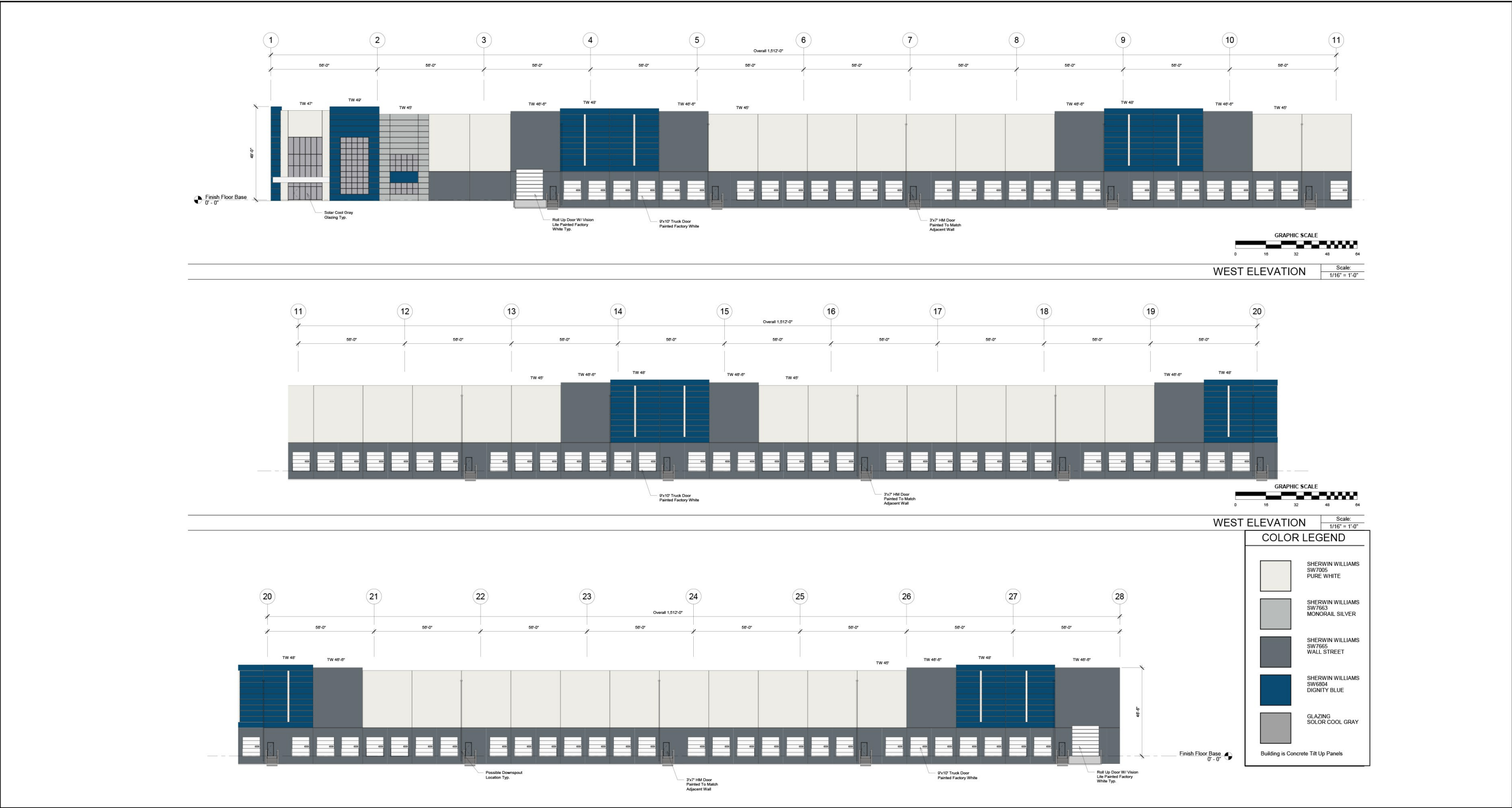
Proposed Warehouse Site Plan



Source(s): Commerce Construction Co. (05-25-2022))

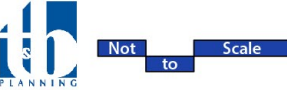
Figure 3-8



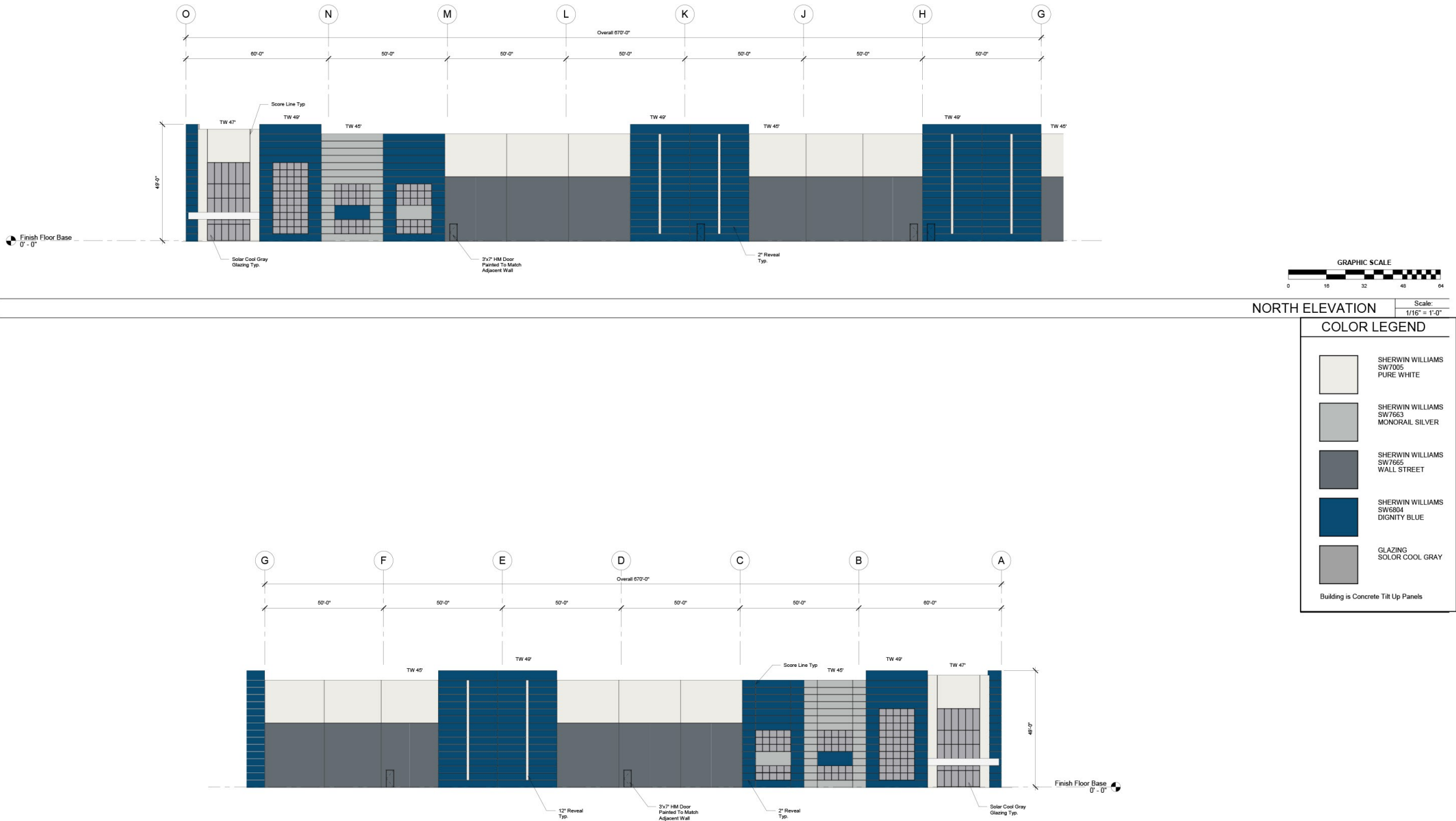


Source(s): Commerce Construction Co. (05-25-2022)

Figure 3-9

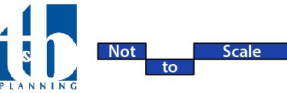


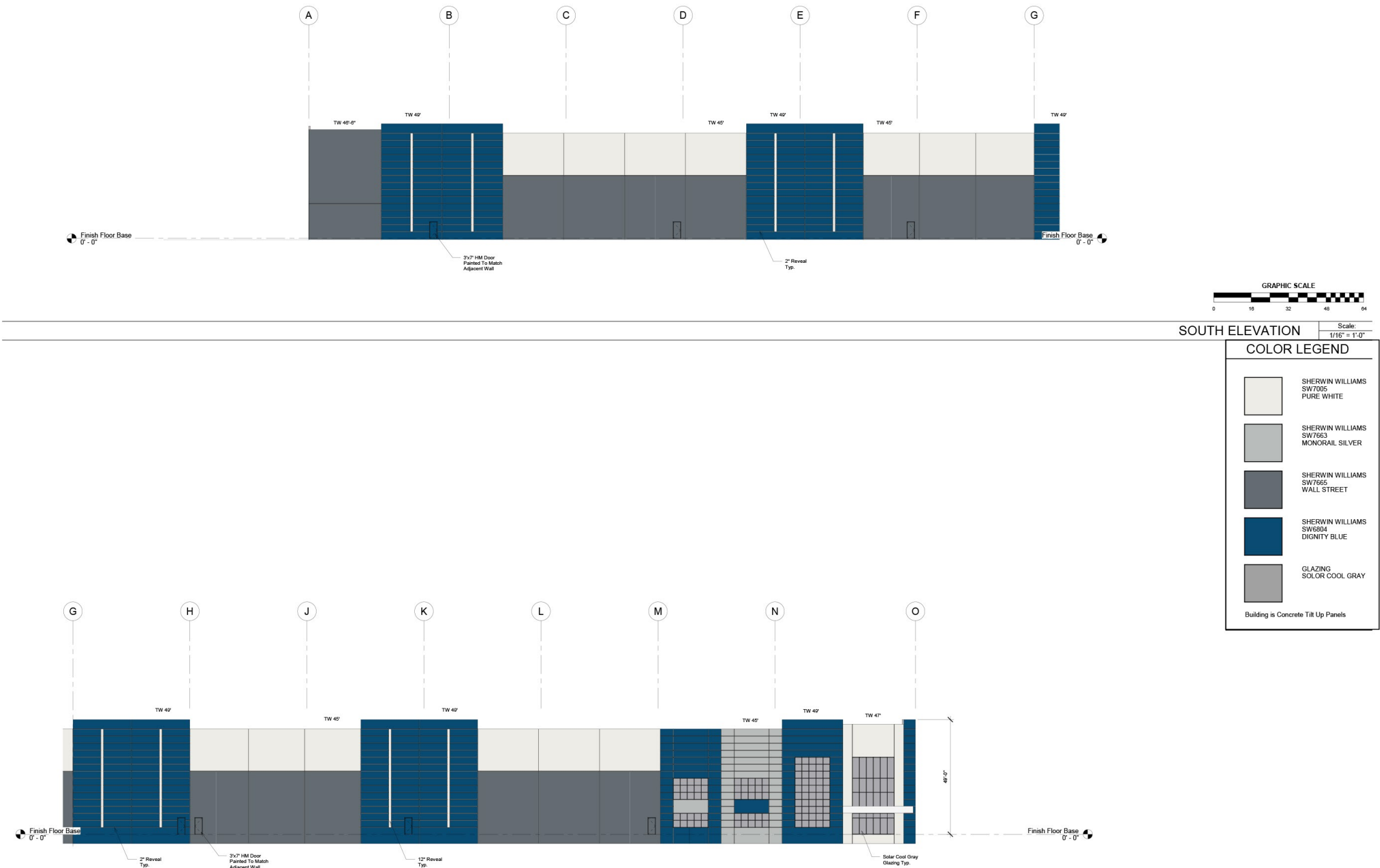
Warehouse Architecture West-Facing Elevation



Source(s): Commerce Construction Co. (05-25-2022)

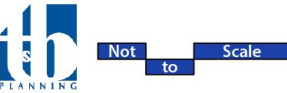
Figure 3-10



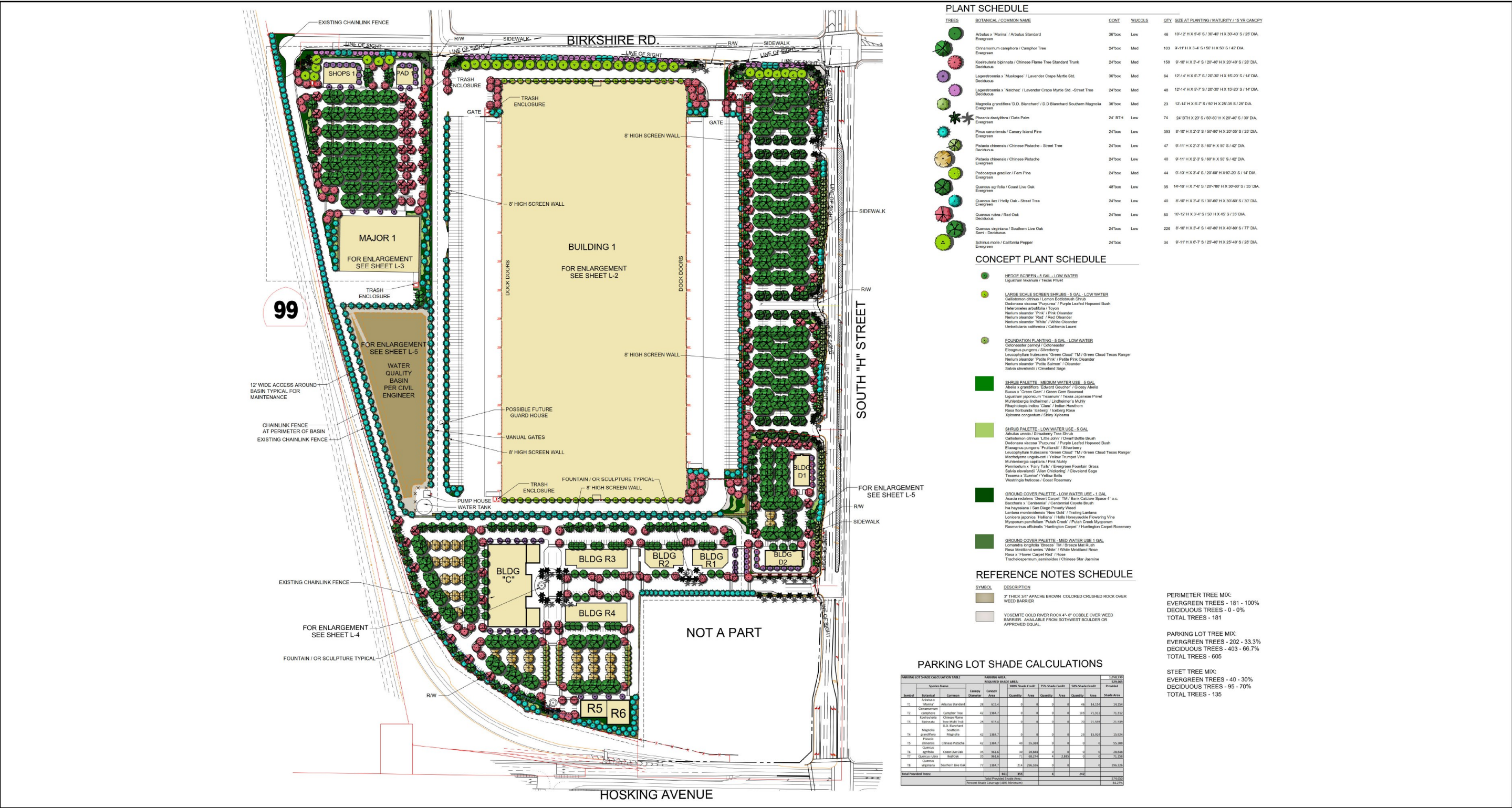


Source(s): Commerce Construction Co. (05-25-2022)

Figure 3-11

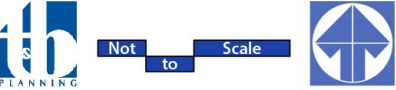


Warehouse Architecture South-Facing Elevation



Source(s): Environs Inc. (05-25-2022)

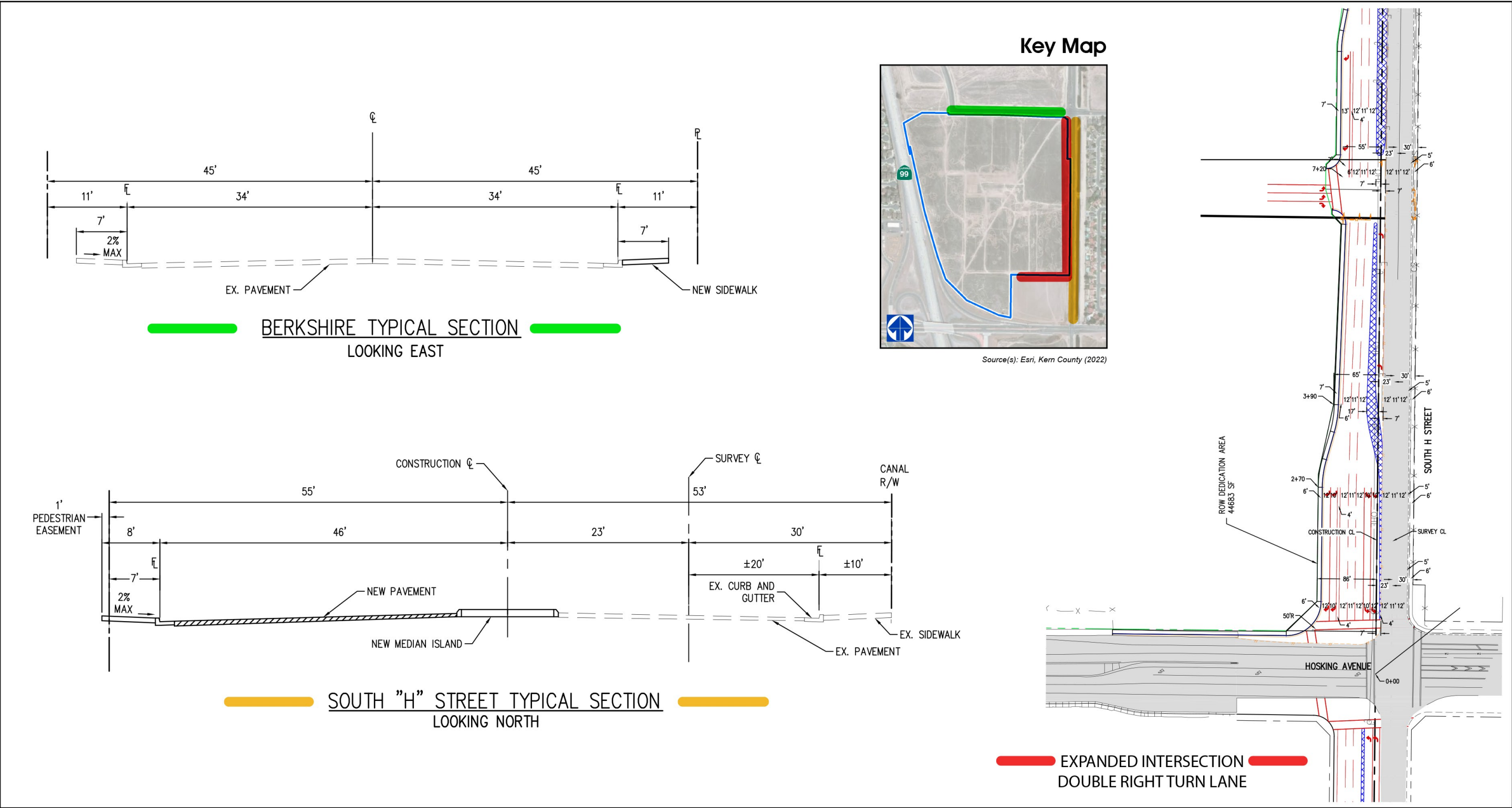
Figure 3-12



Lead Agency: City of Bakersfield

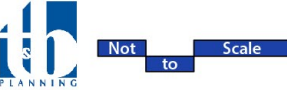
Conceptual Landscape Plan

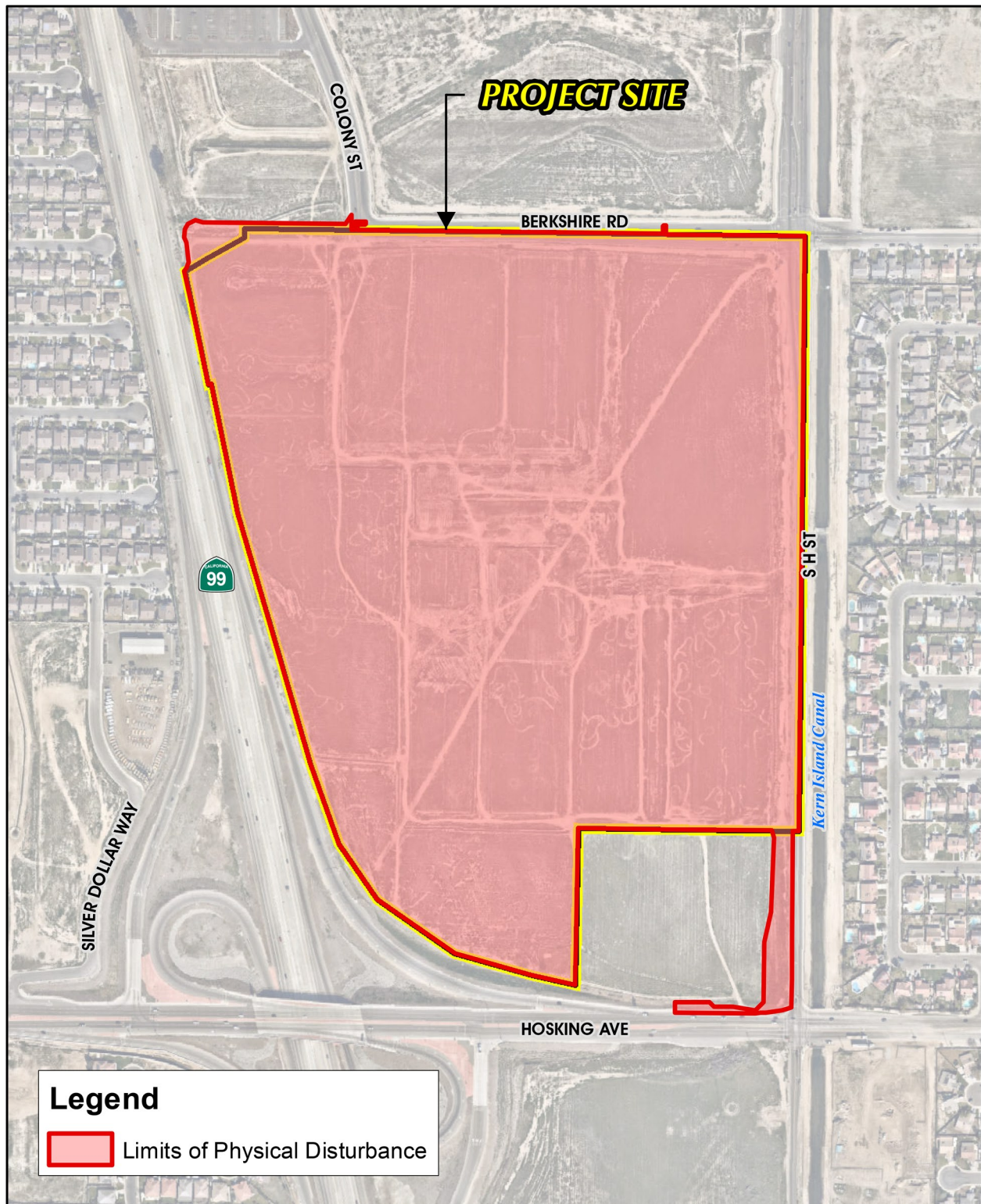
SCH No. 2022030196



Source(s): Commerce Construction Co. (10-18-2021)

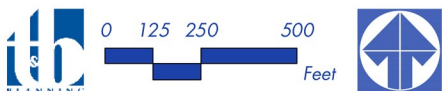
Figure 3-13





Source(s): Cornerstone Engineering (2022), ESRI, Nearmap Imagery (2022)

Figure 3-14



Extent of Physical Improvements

4.0 ENVIRONMENTAL ANALYSIS

4.0.1 SUMMARY OF EIR SCOPE

In accordance with California Environmental Quality Act (CEQA) Guidelines Sections 15126-15126.4, this EIR Section 4.0, *Environmental Analysis*, provides analyses of potential direct, indirect, and cumulatively-considerable impacts that could occur from planning, constructing, and operating the proposed Project.

In compliance with the procedural requirements of CEQA, an Initial Study was prepared to determine the scope of environmental analysis for this EIR. The City of Bakersfield distributed a Notice of Preparation (NOP) to public agencies and interested individuals and posted the NOP on its website to solicit input on the scope of study for the EIR. The City of Bakersfield also held two EIR Scoping Meetings to solicit input from the general public on the scope of study for the EIR. Taking all known information and public comments into consideration, 15 primary environmental factors are evaluated in detail in this Section 4.0, as listed below. Each subsection evaluates several specific topics related to the primary environmental subject. The title of each subsection is not limiting; therefore, refer to each subsection for a full account of the subject matters addressed therein.

- | | | | |
|-----|---------------------------------|------|-------------------------------|
| 4.1 | Aesthetics | 4.9 | Hydrology and Water Quality |
| 4.2 | Air Quality | 4.10 | Land Use and Planning |
| 4.3 | Biological Resources | 4.11 | Noise |
| 4.4 | Cultural Resources | 4.12 | Population and Housing |
| 4.5 | Energy | 4.13 | Transportation |
| 4.6 | Geology and Soils | 4.14 | Tribal Cultural Resources |
| 4.7 | Greenhouse Gas Emissions | 4.15 | Utilities and Service Systems |
| 4.8 | Hazards and Hazardous Materials | | |

4.0.2 SCOPE OF CUMULATIVE EFFECTS ANALYSIS

CEQA requires that an EIR contain an assessment of the cumulative impacts that may be associated with a proposed project. As noted in CEQA Guidelines § 15130(a), “an EIR shall discuss cumulative impacts of a project when the project’s incremental effect is cumulatively considerable.” “[A] cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects creating related impacts” (CEQA Guidelines §15130(a)(1)). As defined in CEQA Guidelines § 15355:

‘Cumulative Impacts’ refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

(a) The individual effects may be changes resulting from a single project or a number of separate projects.

(b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

CEQA Guidelines § 15130(b) describes two acceptable methods for identifying a study area for purposes of conducting a cumulative impact analysis. These two approaches include: 1) a list of past, present, and probable future projects producing related or cumulative impacts, including if necessary, those projects outside the control of the agency ('the list of projects approach'), or 2) a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact ('the summary of projections approach').

The summary of projections approach is used in this EIR, except for the evaluation of near-term transportation and noise impacts, which rely instead on the list of projects approach. This methodology was determined to be appropriate by the City of Bakersfield because long-range planning documents contain a sufficient amount of information to enable an analysis of cumulative effects for all subject areas, with exception of near-term transportation and noise effects, which require a greater level of detailed study.

Under this approach, the cumulative analysis under most subsections considers impacts to each issue area based on the presumed buildout of the Metropolitan Bakersfield General Plan as well as the general plans of any nearby jurisdictions that occur within the cumulative study area for each subject area. For example, for the issue area of aesthetics, the cumulative study area is defined by the Project's ground-level viewshed in the immediate vicinity of the Project site and horizon viewshed, which extends to the mountain ranges on all sides. For the issue of hydrology and water quality, by contrast, the cumulative study area is defined as the Kern River Watershed. For the issue of biology, the cumulative study area corresponds to the boundaries of the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP), as the MBHCP provides for the conservation of a wide variety of special status plant and animal species and encompasses a broad region that generally represents biological conditions associated with the Project area; thus, the cumulative study area for biological resources includes all future land uses within the MBHCP region. Refer to the individual subsections within EIR Section 4.0 for a description of the specific cumulative study area used for each subject area evaluated in this EIR.

The analysis of cumulatively-considerable transportation impacts uses a combined approach, utilizing the list of projects approach for the near-term analysis of cumulatively-considerable transportation impacts, and the summary of projections approach for the evaluation of long-term cumulatively-considerable transportation impacts. The cumulative impact analyses of near-term noise impacts, which relies on data from the Project's traffic study, also inherently utilize the combined approach.

With the combined approach, the cumulative impact analyses for the analysis of transportation impacts and noise impacts, overstate the Project's potential cumulatively-considerable impacts as compared to an analysis that would rely solely on the list of projects approach or solely on the summary of projections approach; therefore, the combined approach provides a conservative, "worst-case" analysis for cumulative transportation and noise impacts. For the issue of air quality, the cumulative study area comprises the San Joaquin Valley Air Basin.

For near-term conditions, the analyses of cumulatively-considerable transportation and noise impacts are based on existing traffic conditions plus ambient growth and the manual addition of traffic from past, present, and reasonably foreseeable projects, and includes approved and pending development projects in proximity to the Project site that would contribute traffic to the same transportation facilities as the Project. This methodology recognizes development projects that have the potential to contribute measurable traffic to the same intersections, roadway segments, and/or State highway system facilities as the proposed Project and have the potential to be made fully operational in the foreseeable future. Cumulative projects include:

- Retail commercial on the northwest corner of Hosking Avenue and South H Street (approximately 100,000 square feet).
- Retail commercial on the southwest corner of Hosking Avenue and South H Street (approximately 278,000 square feet);
- Retail commercial on the northeast corner of Hosking Avenue and Wible Road (approximately 75,000 square feet); and
- Medical office on the northwest corner of Berkshire Road and South H Street (approximately 160,000 square feet).

Environmental impacts associated with buildout of the cumulative study area were evaluated in CEQA compliance documents prepared for the Metropolitan Bakersfield General Plan and the Kern County General Plan, which are herein incorporated by reference pursuant to CEQA Guidelines § 15150.

- Metropolitan Bakersfield General Plan, December 11, 2007. Available for public review at the City of Bakersfield Development Services Department at 1715 Chester Avenue, 2nd Floor, Bakersfield, CA 93301.
- Metropolitan Bakersfield General Plan Update Program Environmental Impact Report. SCH No. 1989070302. June 26, 2002. Available for public review at the City of Bakersfield Development Services Department at 1715 Chester Avenue, 2nd Floor, Bakersfield, CA 93301.
- Kern County General Plan, September 22, 2009. Available for public review at the City of Bakersfield Development Services Department at 1715 Chester Avenue, 2nd Floor, Bakersfield, CA 93301.

- Recirculated Draft Program Environmental Impact Report SCH # 2002071027. January 2004. Available for public review at the City of Bakersfield Development Services Department at 1715 Chester Avenue, 2nd Floor, Bakersfield, CA 93301.

4.0.3 IDENTIFICATION OF IMPACTS

Subsections 4.1 through 4.15 of this EIR evaluate the 15 environmental subjects warranting analysis pursuant to CEQA. The format of discussion is standardized as much as possible in each Subsection for ease of review. The environmental setting is discussed first, followed by a discussion of the Project's potential environmental impacts based on specified thresholds of significance used as criteria to determine whether potential environmental effects are significant.

The thresholds of significance used in this EIR are based on the thresholds presented in CEQA Guidelines Appendix G and as applied by the City of Bakersfield. The thresholds are intended to assist the reader of this EIR in understanding how and why this EIR reaches a conclusion that an impact would or would not occur, is significant, or is less than significant.

Serving as the CEQA Lead Agency for this EIR, the City of Bakersfield is responsible for determining whether an adverse environmental effect identified in this EIR should be classified as significant or less than significant. While the City of Bakersfield has generally elected to use the thresholds presented in CEQA Guidelines Appendix G, it should be noted that CEQA affords the City discretion to formulate standards of significance, and recognizes that the significance of a particular impact may vary with the setting (14 Cal. Code Regs., § 15064(b).) The standards of significance used in this EIR are based on the independent judgment of the City of Bakersfield, taking into consideration the current CEQA Guidelines Appendix G, the City of Bakersfield's Municipal Code, and adopted City policies and ordinances; the judgment of the technical experts that prepared this EIR's Technical Appendices; performance standards adopted, implemented, and monitored by regulatory agencies; significance standards recommended by regulatory agencies; and the standards in CEQA that trigger the preparation of an EIR. As required by CEQA Guidelines Section 15126.2(a), impacts are identified in this EIR as direct, indirect, cumulative, short-term, long-term, on-site, and/or off-site impacts of the proposed Project. A summarized "impact statement" is provided in each Subsection following the analysis.

The following terms are used to describe the level of significance related to the physical conditions within the area affected by the proposed Project:

- No Impact: An adverse change in the physical environment would not occur.
- Less-than-Significant Impact: An adverse change in the physical environment would occur but the change would not be substantial or potentially substantial and would not exceed the threshold(s) of significance presented in this EIR.

- Significant Impact: A substantial or potentially substantial adverse change in the physical environment would occur and would exceed the threshold(s) of significance presented in this EIR, requiring the consideration of mitigation measures.

Each subsection also includes a discussion or listing of the applicable regulatory criteria (laws, policies, regulations, etc.) that the Project is required to comply with (if any). If impacts are identified as significant after mandatory compliance with regulatory criteria, feasible mitigation measures are presented that would either avoid the impact or reduce the magnitude of the impact. The following terms are used to describe the level of significance following the application of recommended mitigation measures:

- Less-than-Significant Impact with Mitigation: A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this EIR; however, the impact can be avoided or reduced to a less-than-significant level through the application of feasible mitigation measure(s).
- Significant and Unavoidable Impact: A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this EIR. Feasible and enforceable mitigation measure(s) that have a proportional nexus to the Project's impact are either not available or would not be fully effective in avoiding or reducing the impact to below a level of significance.

For any impact identified as significant and unavoidable, the City of Bakersfield would be required to adopt a statement of overriding considerations pursuant to CEQA Guidelines § 15093 in order to approve the Project despite its significant impact(s) to the environment. The statement of overriding considerations would list the specific economic, legal, social, technological, and other benefits of the Project, supported by substantial evidence in the Project's administrative record, that outweigh the unavoidable impacts.

4.1 AESTHETICS

This Subsection 4.1 describes the aesthetic qualities and visual resources present on the Project site and in the site's vicinity and evaluates the potential effects that the Project may have on these resources. Descriptions of existing visual characteristics, both on the site and in the vicinity of the Project site, and the analysis of potential impacts to aesthetic resources are based, in part, on a visual field survey conducted by and site photographs collected by T&B Planning, Inc. on April 11, 2022. Also relied upon were an analysis of aerial photography (Google Earth, 2022), a review of Project application materials related to the proposed development that were submitted to the City of Bakersfield by the Project Applicant and described in Section 3.0, *Project Description*, of this EIR, and a report titled "*Majestic Gateway Urban Decay Analysis*" prepared by ALH Urban & Regional Economics, dated November 2021, and included as *Technical Appendix K* to this EIR (AHL Economics, 2021). This Subsection also is based in part on information and policies contained in the Metropolitan Bakersfield General Plan (City of Bakersfield, 2007), Kern County General Plan (Kern County, 2009), and the City of Bakersfield Municipal Code (City of Bakersfield, 2021). These and other reference sources are listed in Section 7.0, *References*.

4.1.1 EXISTING CONDITIONS

A. Project Site and Surrounding Areas

The Project site comprises approximately ± 90.58 gross acres (± 84.67 net acres) of land located at the northeast corner of the State Route 99 (SR-99) and Hosking Avenue on- and off-ramps. The Project site is located east of SR-99, north of Hosking Avenue, west of South H Street, and south of Berkshire Road. Under existing conditions, the Project site is vacant and undeveloped, but was previously graded and much like the surrounding area was used for agricultural purposes from approximately 1932 to 2009 (Nova Group, 2021, p. 17).

There are no rock outcroppings or other unique topographic or aesthetic features present on the property (Google Earth, 2022). The Project site has been subject to various disturbances including off-road vehicle trespass, illegal dumping, and grass fires (MBI, 2021, p. 6). There are no prominent visual features present on the property other than utility poles supporting overhead powerlines along the Project site's frontage with South H Street. The topography of the Project site is characterized by relatively flat land that gently slopes south-southwest. The average site elevation is approximately 355 feet above mean sea level (amsl). Where vegetation is present, it is not visually prominent and is mostly low to the ground consisting of disturbed annual grassland and ruderal species (MBI, 2021, p. 19).

The Project site is located in the southern portion of the City of Bakersfield, which has transitioned to urban development over the last approximately 20 years. As shown in Section 2.0, *Environmental Setting*, under existing conditions, residential and commercial development exists around the site on all sides and a few vacant parcels to the north and south of the Project site are planned for commercial development. Commercial uses located north of the site and residential uses to the east, south, and west around the immediate vicinity of the Project site developed between the 1990s and early 2000s. The residential community to the east of South H Street was developed between approximately 1994-2006

and the residential community to the west of SR-99 was developed between approximately 2003-2008 (Google Earth, 1993). The character of these residential communities near the Project site contain typical characteristics of residential neighborhoods, including single-family homes (most with stucco exteriors) with driveways, landscaping, and side yard fences visible from the front yards. To the east of the Project site is South H Street, beyond which is the fenced Kern Island Channel, beyond which is a solid block wall separating the channel from the residential community to the east. As such, the Project site does not directly abut a residential community.

Pursuant to CEQA Guidelines Section 15125 and explained in Section 2.0 of this EIR, the physical environmental condition for purposes of establishing the setting of this EIR is the environment as it existed at the approximate time that the EIR's NOP was released for public review. The NOP for this EIR was released on March 8, 2022. As of that date, the Project site was vacant and undeveloped. To demonstrate the existing condition, T&B Planning, Inc. collected photographs of the Project site on April 11, 2022. Figure 4.1-1, *Public Viewpoint Key Map*, illustrates the locations of the photographs taken from ten public vantage points that are relied upon herein to describe the Project site's existing aesthetic condition and character. These photographs provide a representative visual depiction of the Project site's visual characteristics as seen from surrounding public viewing areas, which consist of public roads. Due to flat topography of the surrounding area and intervening development that blocks views, the Project site is not visible from any public parks, trails, schools, or other prominent public places. The photographs presented herein were all taken during the same session and reflect a field of view approximately five (5) feet above the ground.

- Figure 4.1-2, *Viewpoint 1*: Site Photograph 1 was collected near the intersection of Colony Street and Berkshire Road, looking southwest, and depicts views of the northwest portion of the Project site. As shown in this photograph, the Project site is relatively flat and undeveloped with ruderal vegetation. A dirt roadway is shown heading in a southerly direction through the site from the terminus of Colony Street. SR-99 and the noise wall on the southbound (west) side of SR-99 can be seen in the background. Mountain views associated with the Tehachapi Mountains are visible along the horizon.
- Figure 4.1-3, *Viewpoints 2 & 3*: Site Photograph 2 was collected along Berkshire Road near the north central edge of the Project site, looking south. Ruderal vegetation is visible across the Project site. In the far distance, South H Street, the Kern Island Canal, and the block wall that separates the canal from the residential community to the east of the Project site are visible. Also in the far distance, utility poles and overhead powerlines that run along South H Street are also visible in the left portion of the photograph. Mountain views associated with the Tehachapi Mountains are visible in the far distance along the horizon.
- Figure 4.1-3, *Viewpoints 2 & 3*: Site Photograph 3 was collected along Berkshire Road at the north central edge of the Project site, looking southwest, and depicts views of the northwest portion of the Project site. Berkshire Road is shown in the right portion of the photograph, running east/west along the northern boundary of the Project site. The Project site, with ruderal vegetation is shown on the left portion of the photograph. SR-99 and the noise wall located on

the southbound (west) side of SR-99 are visible in the background. Mountain views associated with the Coast Range are visible in the far distance along the horizon to the left.

- Figure 4.1-4, *Viewpoints 4 & 5*: Photograph 4 was collected along South H Street on the eastern boundary of the Project site, looking south. South H Street is visible running in a north/south direction along the eastern boundary of the Project site, which is visible in the left portion of the photograph. A dirt roadway and utility poles supporting overhead powerlines are visible, running in a north/south direction. A paved pull-off area is visible on the southbound side of South H Street. A chain-link fence is shown on the northbound side of South H Street, which separates South H Street from the Kern Island Canal that runs along the roadway. On the east side of the canal is a solid wall that separates a residential community from the canal, and several trees. In the distance, Hosking Avenue and several traffic signals are visible. Mountain views associated with the Tehachapi Mountains are visible in the far distance along the horizon.
- Figure 4.1-4, *Viewpoints 4 & 5*: Site Photograph 5 was collected along South H Street, looking southwest, and depicts views of the southern portion of the Project site. Ruderal vegetation is visible across the undeveloped Project site and a dirt roadway is shown in the foreground of the photograph. SR-99 and the overpass of Hosking Avenue over SR-99 is visible in the background. The noise wall located along the southbound (west) side of SR-99 is also visible. Mountain views associated with the Tehachapi Mountains are visible in the far distance along the horizon.
- Figure 4.1-5, *Viewpoint 6*: Site Photograph 6 was collected along Hosking Avenue, looking north. Visible in the foreground of the photograph is the median of Hosking Avenue, the westbound lanes of Hosking Avenue, and a concrete sidewalk along the westbound (north) side of Hosking Avenue. Several dirt paths are shown on the Project site. The residential community located east of the Project site and numerous trees located within that community are visible in the left portion of the photograph, beyond a solid block wall. The residential community located north of Berkshire Road along with a transmission tower is visible in the background. Mountain views associated with the Sierra Nevada Mountains are visible along the horizon.
- Figure 4.1-6, *Viewpoints 7 & 8*: Photograph 7 was collected along Hosking Avenue, looking northwest, and depicts views of the southwestern portion of the Project site. Visible in the foreground of the photograph is the median of Hosking Avenue, the westbound lanes of Hosking Avenue, and a portion of concrete sidewalk along the westbound (north) side of Hosking Avenue. The Project site is shown with ruderal vegetation and several dirt roadways traversing the site. SR-99 is visible in the left portion of the photograph. Development located north of Berkshire Road along with a transmission tower is visible in the background.
- Figure 4.1-6, *Viewpoints 7 & 8*: Site Photograph 8 was collected along South H Street, looking northwest. South H Street is visible in the foreground along with utility poles and overhead

powerlines and a raised curb that runs along the west side of South H Street. The Project site with ruderal vegetation and several dirt paths is shown. SR-99 and the noise wall located on the southbound (west) side of SR-99 are visible in the background. The commercial building, Floor & Décor, is visible in the background on the right portion of the photograph.

Figure 4.1-7, *Viewpoint 9*: Site Photograph 9 was collected along southbound SR-99 looking east toward the Project site. In the foreground of the photograph, SR-99, jersey walls, and light poles located along SR-99 are visible. A chain link fence is shown, separating SR-99 from the Project site. In the far background, the residential community and its perimeter wall located on east of the Project site and east of South H Street is visible. Mountain views associated with the Tehachapi Mountains are visible in the far distance along the horizon. The existing visual setting along SR-99 north of the Project site is dominated by large commercial buildings including but not limited to stores, restaurants, and hotels.

- Figure 4.1-8, *Viewpoint 10*: Site Photograph 10 was collected along Badger Pass, which is one of the local streets located within the residential community developed to the east of South H Street and the Kern Island Canal, looking west toward the Project site. Several single-family homes are shown in the photograph. The homes depicted in the background of the photograph back up to South H Street and the canal that runs along it. This photograph shows that the Project site is not visible from the public streets within the residential community and the only view of the Project site would potentially be from the private backyards of the houses lining South H Street. Most of the homes in this area are one-story so any viewer sensitivity would be low because most do not have a readily available private view of the Project site due to the presence of the solid block perimeter wall.

B. Scenic Vistas and Scenic Resources

The Project site is located within a relatively flat valley floor surrounded by rugged hills and mountains. Major scenic resources in Bakersfield that contribute to scenic vistas include the Sierra Nevada Mountains to the east, the Tehachapi Mountains to the south, and the Coast Range to the west. In the far distance on clear days, views are possible from the Project site and the roads surrounding the Project site to the Tehachapi Mountains ridgelines to the south, the Coast Range to the west, and the Sierra Nevada Mountains to the northeast. (Google Earth, 2022)

Daylight, dusk, or nighttime views of the Project site and its visual setting are not distinctive, and visual quality is low because the viewshed lacks vivid or highly noticeable features and is characterized by uninteresting and unvaried natural and human-built landscapes. Distant views of mountain ridgelines are the principal visual resource in this setting. Such views are easily acquired at present due to the open setting, although atmospheric haze in the region often obscures or completely blocks these distant views.

C. Light and Glare

The Project site contains minimal sources of artificial, exterior lighting under existing conditions. Artificial lighting sources occur in the immediate vicinity of the Project site, with the most notable sources of light emanating from street lights along Berkshire Road to the north, Hosking Avenue to the south, and SR-99 to the west. Exterior lighting also is located in the developed areas surrounding the Project site, including in residential communities, commercial areas etc.

4.1.2 REGULATORY SETTING

A. Metropolitan Bakersfield General Plan

The Metropolitan Bakersfield General Plan (MBGP) is a policy document with land use maps and related information. It is designed to give long-range guidance to City staff and officials who make decisions that affect growth and resources in the metropolitan Bakersfield planning area. This document helps to ensure that day-to-day decisions conform to the long-range program, which was designed to protect and further the public interest as it relates to the City's growth and development, and mitigate environmental impacts. The MBGP also serves as a guide to the private sector regarding the economy so that development initiatives conform to the City's public plans, objectives, and policies.

Information in the Land Use Element, Circulation Element, and Public Services and Facilities Element is relevant to the topic of aesthetics. Land Use Element goals and policies focus on establishing a built environment that achieves a compatible functional and visual relationship among individual building and sites, encourages high-quality design and landscaping, minimizes light pollution, and requires that new large retail commercial development projects be evaluated for potential urban decay impacts. The Circulation Element discusses providing and maintaining landscaping on both sides and in the median of arterial streets and on both sides of collector streets. The Public Services and Facilities Element states that street lighting should be installed in all new developments in accord with adopted city standards and county policies.

B. City of Bakersfield Municipal Code

The City's Municipal Code addresses specific issues regarding lighting and urban decay. Code relevant provisions with applicability to the Project are discussed below.

1. Lighting

Specific provisions in the City of Bakersfield Municipal Code address lighting standards for parking lots, signs, and all development areas. Lighting is required to be designed so that light is reflected away from adjacent residential properties and streets by using glare shields or baffles to reduce glare and control backlight. Applicable standards are contained in Municipal Code Sections 17.71.010 through 17.71.080, "Outdoor Lighting," Municipal Code Section 17.60.060 related to sign illumination, and Municipal Code Section 17.58.060 pertaining to parking lot lighting. Municipal Code Section 17.60.060 places restrictions on floodlighting, neon tubing, exposed bulbs, flashing

signs, changeable copy signs. Municipal Code Section 17.71.030.D restricts light trespass that extends beyond the property or project boundaries within or adjacent to residentially zoned and/or designated properties to be limited to an intensity level of 0.5 foot-candles at the property line as measured three feet above the ground or finished grade (City of Bakersfield, 2021).

2. *Visual Blight*

The City's Municipal Code extensively regulates actions that have the potential to contribute to visual blight, including deferred maintenance, graffiti, vandalism, boarded windows and doors, broken sidewalks, dead landscaping, refuse dumping, illegal vehicle parking, and similar signs of deterioration. Enforcement is provided by the Code Enforcement Department, and violations by a landowner may be prosecuted as a criminal misdemeanor. Urban Decay and property maintenance issues are addressed in Municipal Code Sections 8.27.010 (Property Maintenance), 8.80.010 (Abatement of Public Nuisances), and 12.40.050 (Inspection and Removal [of Trees]).

3. *Quality Design*

The Municipal Code sets forth zoning standards for development. Relevant to the Project are standards pertaining to the Light Manufacturing (M-1) zone for the proposed warehouse distribution portion of the Project site and standards for the Planned Commercial Development Exclusive (PCD) zoning pertaining to the commercial and retention basin portions of the Project site.

M-1 zoning standards are contained in Municipal Code Sections 17.28.010 through 17.28.090. All permitted uses are subject to a Site Plan Review as provided for in Municipal Code Section 17.08. Requirements are imposed on landscaping, parking and loading, and signs. Along street frontages, either landscaping or a solid wall, as determined by the development service is required, and any areas of open storage of material and equipment are also required to be surrounded and screened by a solid wall or fence not less than six feet in height. Materials are not allowed to be stacked above the height of the screening. Building heights are limited to 75 feet and any roof-top areas of structures adjacent to properties zoned or designated for residential development are required to be completely screened from view by parapets or other finished architectural features constructed to a height of the highest equipment and unfinished structural element or architectural feature of the building (City of Bakersfield, 2021).

PCD zoning standards are contained in Municipal Code Sections 17.54.010 through 17.54.110. The intent of the PCD zone is to allow for innovative design and diversification in the relationship of various uses, buildings, structures, lot sizes and open spaces while ensuring compliance with the Metropolitan Bakersfield General Plan and the intent of the Municipal Code. It enables a developer to obtain approval of a specific, detailed plan for a commercial development which ensures that the uniqueness of the project design being proposed is preserved. In the approval of PCD plans, the City of Bakersfield Planning Commission or City Council may approve or require in the final development plan, standards, regulations, limitations and restrictions either more or less restrictive than those specified elsewhere in the Municipal Code and which are designed to protect and maintain property values and provide or protect community amenities which would foster and maintain the health, safety

and general welfare of the community, including and relating to but not limited to building height and bulk, percent coverage of the land by buildings, parking ratios, lights and signs, drive aisle design, wall and fence design, building arrangement, location and size of off-street loading areas and docks, architectural design of buildings, and landscaping (City of Bakersfield, 2021).

4. Hillside Development

Municipal Code Sections 17.66.101 through 17.66.118 address development in the City's hillside areas, located around the Kern River in the northern portion of the City approximately 8.5 miles north of the Project site. The Municipal Code identifies this area as scenic and imposes restrictions to ensure the long-term scenic qualities of the area. The topography of the Project site is flat and the Project site is not subject to these regulations.

C. Kern County Zoning Ordinance Chapter 19.81. Dark Skies Ordinance (Outdoor Lighting)

Although not directly applicable to the Project, but applicable to nearby areas in unincorporated Kern County, the County Dark Skies ordinance requires a minimal approach to outdoor lighting in order to maintain the existing character of Kern County. The Ordinance, enacted in November 2011, ensures that the glow created by excessive illumination and glare, which could obscure the night sky and constitute a nuisance, is reduced or eliminated. Outdoor lighting requirements within specified unincorporated areas of Kern County are established in the ordinance (Kern County, 2021).

4.1.3 BASIS FOR DETERMINING SIGNIFICANCE

According to Section I of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to aesthetics if the Project or any Project-related component would (OPR, 2019):

- a) *Have a substantial adverse effect on a scenic vista;*
- b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;*
- 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;*
- d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.*

Regarding the determination of significance under Threshold a), the scenic vistas available in the vicinity of the Project site are views of mountains in the far distance on clear days; as such, if views of the mountains would be blocked, obscured, or substantially and adversely affected as seen from a

public viewing area, leaving no opportunity for the public to experience the scenic view, the impact will be regarded as significant.

Regarding the determination of significance under Threshold c), because the Project site is located in an urbanized area, the Project would result in a significant impact if it were to conflict with applicable zoning and other regulations governing scenic quality as specified in the Metropolitan Bakersfield General Plan or the City of Bakersfield's Municipal Code.

Regarding the determination of significance under Threshold d), if the Project would result in new source of substantial light and glare that may adversely affect daytime and nighttime views, the impact would be regarded as significant. In this context, "substantial" will mean light that produces more than 0.5-foot candle of light spillover beyond the property line when adjacent to a residentially zoned or designated area per City Municipal Code Section 17.71.030.D, and more than 1.0 footcandle of light spillover when adjacent to non-light sensitive uses.

4.1.4 IMPACT ANALYSIS

<i>Threshold a: Would the Project have a substantial adverse effect on a scenic vista?</i>

The representative photographs provided in Figure 4.1-2 through Figure 4.1-8 depict the Project site and its immediate surroundings under existing conditions. As shown, the Project site is vacant and undeveloped and does not contain any special or unique scenic attributes, like rock outcroppings, native vegetation, or a substantial number of mature trees. The Project site is not located in an area designated as scenic in the Metropolitan Bakersfield General Plan, is not within the City's Hillside Development Combining Zone (Bakersfield Municipal Code Chapter 17.66), and is not within a City-designated Class I or II Visual Resource Area, Viewshed, or Slope Protection Area (City of Bakersfield, 2007).

Scenic resources within and surrounding the City of Bakersfield include the Sierra Nevada Mountains, located approximately 13.5 miles to the northeast, the Tehachapi Mountains, located approximately 16.9 miles to the south, and the Coast Range, located approximately 16.1 miles to the west. In the far distance on clear days, views are possible from the Project site and its surrounding area to the Tehachapi Mountains to the south, the Coast Range to the west, and the Sierra Nevada Mountains to the northeast.

The Project would involve the construction and operation of a commercial area conceptually designed with 12 buildings in addition to one warehouse building. Because the existing visual setting of the Project site does not contain significant visual resources except in the far distance, the construction process, which would entail excavation and earth-moving activities and the temporary introduction of construction vehicles and equipment to the area, has no potential to obscure a scenic view. Construction activities have been a frequent occurrence in this area of Bakersfield as residential and urban development projects have continued to occur and passersby and motorists are accustomed to these types of activities. There are no pieces of construction equipment so large that scenic views in the distance could be blocked, obscured, or substantially and adversely affected as seen from public roads surrounding the Project site; the temporary impact would be less than significant.

Artist renderings of the Project at the completion of construction and maturity of landscaping as would be seen from abutting roadways are shown in Figure 4.1-9, *Photo Simulation A*, Figure 4.1-10, *Photo Simulation B*, and Figure 4.1-11, *Photo Simulation C*. These renderings were provided to the City by the Project Applicant. Simulation A depicts the proposed visual condition of the Project site from the intersection of Berkshire Road and South H Street, looking southwest. Simulation B depicts the proposed visual condition of the Project site from South H Street at one of the Project's proposed entry driveways, looking due west. Simulation C depicts the proposed visual condition of the Project site from the SR-99, looking due west. As shown in the simulations, extensive landscaping would obscure the view of the proposed buildings, although some portions of the buildings would be visible.

The proposed warehouse building would have a maximum height of ± 50 feet to the top of the office area parapets. The conceptually designed commercial structures are shown to range in height from ± 29 ft to ± 43 feet. Implementation of the Project also would introduce other vertical features to the Project site (walls, fences, landscaping, etc.) that would be shorter and would have substantially less physical mass than the buildings. At a maximum height of 50 feet, the proposed warehouse and commercial buildings would not be so tall as to obstruct public views or otherwise substantially detract from public views of the surrounding topographic features and landforms, including the Sierra Nevada, Tehachapi, and Coast Range Mountains, which due to the heights of these landform features ranging from approximately 7,981 feet to 14,505 feet amsl at their highest elevations and distances from the Project site, would still be visible along and above the horizon. In some instances, the landscaping and buildings constructed on the Project site may intermittently obstruct mountain views in the distance as drivers travel immediately adjacent to the Project site along SR-99, Hosking Avenue, Berkshire Road, and South H Street. Single views toward the mountains in the distance across the Project site from these roads typically are of short duration due to travel speeds, and viewer sensitivity is considered low-to-moderate because as the passing landscape becomes familiar, vehicle occupants, pedestrians, and bicyclists using roadway corridors typically focus their attention on the roadway, roadway signs, and surrounding traffic. Views would remain available to a front-facing viewer on these roads, and the only potential for the Project to intermittently obscure a long-distance view would be if a viewer were to look to their side across the Project site. As such, the Project would not have a substantial adverse effect on scenic mountain views, and impacts would be less than significant.

Threshold b: Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway??

There are no designated or eligible State scenic highways within the Project site's immediate vicinity (CalTrans, 2022). The nearest eligible State scenic highway in Kern County is the SR 14 extension from SR 58 (near Mojave) to SR 395 (near Little Lake), located approximately 50.4 miles southeast of the Project site. The view from the Project site to this eligible State scenic highway is obscured by the Piute Mountains. Additionally, there are no rock outcroppings or known historic buildings in the vicinity of the Project site. Due to the distance of this highway to the Project site and the presence of intervening development and topography, the Project site does not offer views of scenic resources from this road segment. Thus, implementation of the Project would result in no impacts associated with views from a State scenic highway.

Threshold 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?

The U.S. Census Bureau defines an “urbanized area” as a densely settled core of census tracts and/or census blocks that have 50,000 or more residents and meet minimum requirements while also being adjacent to areas containing non-residential urban land uses. The Project site is located within the boundaries of the Census-defined Bakersfield urbanized area (United States Census Bureau, 2010). Because the Project site is located in an area that meets the U.S. Census Bureau’s definition of an “urbanized area” and is planned for urban uses by the City’s General Plan, the evaluation herein focuses on the Project’s compatibility with or potential conflict with applicable zoning and other regulations governing scenic quality. Applicable policies and regulations are those contained in the Metropolitan Bakersfield General Plan and Municipal Code.

For reference associated with the below evaluation, the Project design, including site layout, architecture, and landscaping are discussed in EIR Section 3.0, *Project Description*.

To implement the Project, the Project Applicant applied for General Plan Amendment/Zone Change No. 21-0184 (GPA/ZC No. 21-0184) to modify the Land Use Element of the Metropolitan Bakersfield General Plan and the City’s official zoning map. Pertaining to the 52.28 net-acre warehouse distribution portion of the Project site, the General Plan land use designation would be modified from General Commercial (GC) to Light Industrial (LI), and the zoning classification would be modified from Regional Commercial-Planned Commercial Development Combining (C-2/PCD) to Light Manufacturing (M-1). Pertaining to the 27.91 net-acre commercial portion of the Project site and the 4.48-acre retention basin portion of the Project site, the zoning classification would be changed from C-2/PCD to Exclusive PCD.

The physical characteristics of the proposed Project entail a proposed commercial development and warehouse distribution center that would include one warehouse building having 1,012,185 s.f. of building space and up to 12 commercial buildings conceptually designed to include up to 187,500 s.f. of building space. The warehouse building would have a maximum height of 50 feet to the top of the office area parapets and would be designed in a contemporary style, painted shades of white, gray, and dark gray, with blue accents. The 12 commercial buildings are conceptually designed to range from ±29 feet to ±43 feet in height with a contemporary architectural style, painted shades of white, gray, and tan, with a mixture of color accent materials including but not limited to brick and siding. The Project would include landscaping, ornamental in nature, and would feature trees, hedges, shrubs, groundcovers, and accent plants which would soften the views of proposed building frontages from surrounding public streets.

The applicable provisions of the City’s Municipal Code and Metropolitan Bakersfield General Plan that address aesthetics are evaluated below.

1. *Municipal Code Lighting Standards*

The Project has no reasonable possibility of conflicting with the City's lighting standards contained in Municipal Code Sections 17.71.010 through 17.71.080, Outdoor Lighting, standards for the illumination of signs contained in Municipal Code Section 17.60.060, and standards for the illumination of parking lots contained in Municipal Code Section 17.58.060. All implementing development would undergo review and approval by City staff for compliance with all applicable lighting standards as part of implementing construction documents and drawings (City of Bakersfield, 2021). Compliance with the Municipal Code is mandatory.

2. *Municipal Code Visual Blight Standards*

The Project has no reasonable possibility of conflicting with the City's Municipal Code standards pertaining to visual blight, codified in Municipal Code Sections 8.27.010 (Property Maintenance), 8.80.010 (Abatement of Public Nuisances), and 12.40.050 (Inspection and Removal [of Trees]). Per Section 8.27.010, it is unlawful and a public nuisance for any person having charge or possession of property in the City of Bakersfield to allow a property to become partially destroyed or left in a state of partial construction for more than 6 months, or for any doorway, window or other opening to be broken and not closed and maintained, or for landscaping to become overgrown, dead, decayed, diseased or hazardous. Building exteriors, walls, fences, driveways, sidewalks, and walkways must be maintained and all lumber, junk, trash, debris or salvage materials cannot be visible from a public right-of-way. Per Section 8.80.010A, any property owner who fails to abate a public nuisance within the time prescribed in any notice or order provided will be charged with the cost of inspection and can face monetary fines (City of Bakersfield, 2021). Compliance with the Municipal Code is mandatory. Specifically pertaining to the proposed Project, the Project Applicant indicated that site maintenance will be performed by a Property Owners' Association (POA). One of the responsibilities of a POA is to ensure that the property is in a good state of repair regardless of which tenants/users are occupying the buildings and regardless if any or all of the buildings are occupied or unoccupied.

3. *Municipal Code M-1 Zoning Standards*

The Municipal Code sets forth zoning standards for development. Standards pertaining to the Light Manufacturing (M-1) zone are relevant to the proposed warehouse distribution portion of the Project. M-1 zoning standards are contained in Municipal Code Sections 17.28.010 through 17.28.090. All permitted uses are subject to a Site Plan Review as provided for in Municipal Code Section 17.08. The Project Applicant submitted a Site Plan Review application for the warehouse distribution portion of the Project as described in EIR Subsection 3.5.3, *Site Plan Review No. 21-0185*.

Proposed Site Plan Review No. 21-0185 is a proposed site plan for the development of a warehouse building on ±52.28 acres of the Project site, as well as implementation of an adjacent water retention basin on 4.48 acres zoned Exclusive PCD. The proposed warehouse building is designed to have up to 1,012,185 s.f. of interior floor space. Office areas consisting of up to 50,000 s.f. of office space to support the warehouse functions would occur at the northwest, northeast, and southeast corners of the

building, with the remainder of the building used as warehouse. The proposed building is rectangular in shape and would be positioned with the long sides of the building facing east and west and the shorter sides of the building facing north and south. The building is designed in a contemporary style and would be painted shades of white, gray, dark gray, with blue accents. The east-facing building elevation is designed to include 90 dock doors and two grade-level ramps with roll-up doors; the west-facing building elevation is designed to include 83 dock doors and two grade-level ramps with roll-up doors.

Warehouse is a permitted use in the M-1 zone. The building height is proposed at ± 50 feet, which is within the M-1 zoning classification's height limit of 75 feet. The City's Development Services Director is responsible for ensuring that the Site Plan Review materials meet all required Municipal Code provisions including but not limited to the landscaping requirements of Section 17.61.010 et. seq., the off-street parking and loading requirements of Section 17.58.010 et. seq., the signage requirements of Section 17.60.010 et. seq., and other applicable requirements. In reviewing the application materials submitted by the Project Applicant for Site Plan Review No. 21-0185, the materials appear to meet all applicable Municipal Code requirements including but not limited to the following items pertaining to visual screening.

- Perimeter Screening and Landscaping. The M-1 zone regulations require that development proposed adjacent to property zoned or designated for residential development shall be required to be separated by a solid masonry wall or landscaping with a requirement for landscaping along street frontages. Landscaping that will obscure views is proposed along South H Street. The proposed passenger vehicle parking areas including the parking area located west of South H Street will be shaded at 54.7% upon the maturity of trees. The Municipal Code requirement is 40% shading. As indicated on the Site Plan Review's Conceptual Landscape Plan (refer to Figure 3-13 in Section 3.0, *Project Description*) 921 trees would be planted on or adjacent to the property, including approximately 181 perimeter trees, 605 parking lot trees, and 135 street trees at minimum 24-inch box size at the time of planting. A row of Canary Island Pine trees is proposed along the perimeter of the site and adjacent to the existing chain link fence paralleling SR-99 and the SR-99/Hosking Avenue on-ramp. California Pepper trees are proposed in the streetscape along Berkshire Road and a mixture of Oak tree varieties are proposed along South H Street and in the passenger vehicle parking lots. Landscaping also would occur at building entries and around building perimeters.
- Screening of Storage Areas. The M-1 zone regulations require that any open storage areas be surrounded and screened by a wall or fence. Although outdoor storage is not anticipated in the warehouse building's truck courts, the truck courts proposed on the east- and west-facing sides of the building are designed to be completely enclosed by a perimeter wall.
- Screening of Rooftop Equipment. The M-1 zone regulations require that any rooftop areas of structures adjacent to properties zoned or designated for residential development be completely screened from view by parapets or other finished architectural features. Although the Project is not adjacent to properties zoned or designated for residential development, residential

development is located to the east of the Project site, east of South H Street and the Kern Island Canal. As such, and according to the Site Plan Review's proposed architectural elevations, parapets are proposed along the warehouse building's roofline to provide visual screening of rooftop equipment.

4. *Municipal Code PCD Exclusive Zoning Standards*

PCD zoning standards are contained in Municipal Code Sections 17.54.010 through 17.54.110. The intent of the PCD zone is to allow for innovative design and it enables a developer to obtain approval of a specific, detailed plan for a commercial development that ensures that the uniqueness of the project design being proposed is preserved. The PCD Exclusive Zone requires the City Council to approve a final development plan that specifies the design, and such design is required to be implemented within three years of its approval.

Although the Applicant submitted a preliminary development plan that conceptually proposes 12 commercial buildings collectively having a maximum of 187,500 s.f. of building space, the proposed Exclusive PCD zoning will require the Applicant to obtain approval of a final commercial development plan by the City Council at a future date. The preliminary and conceptual development plan is a reasonably foreseeable design for the commercial area of the Project, and is used herein for analysis.

The Project Applicant's conceptual, preliminary development plan depicts 12 commercial buildings, with three buildings located in the northwestern portion of the Project site and nine buildings located in the southern portion of the Project site. In the northwest portion, a 57,200 s.f. building is conceptually planned to house a major commercial tenant expected to be a general retail tenant. In addition, two buildings having 7,200 s.f. and 3,600 s.f. of building space are conceptually planned, which are expected to accommodate uses such as food and beverage tenants. Vehicular access to this area would be provided from Berkshire Road. In the southern portion of the Project site, nine buildings are conceptually planned ranging in size from 6,000 s.f. to 42,000 s.f. Based on the building layout and design, tenants are expected to include food and beverage and general retail. Six of the buildings are conceptually laid out in a "main street" concept, in anticipation of future development of the vacant property to the south at the northwest corner of Hosking Avenue and South H Street, forming the south side of the "main street." The commercial structures are conceptually designed to range in height from ± 29 ft to ± 43 feet with a contemporary architectural style and painted shades of white, gray, and tan, with a mixture of color accent materials including but not limited to brick and siding. Refer to EIR Subsection 3.5.1.A, *GPA/ZC NO. 21-0184 Conceptual PCD Exclusive Development Plan*, for additional information on the proposed commercial development's design. There are no components of the proposed design based on the conceptual design that would conflict with the PCD Exclusive zoning standards pertaining to aesthetics.

5. *Metropolitan Bakersfield General Plan (MBGP) Land Use Element*

The MBGP Land Use Element goals and policies focus on establishing a built environment that achieves a compatible functional and visual relationship among individual building and sites, encourages high-quality design and landscaping, minimizes light pollution, and requires that new large

retail commercial development projects be evaluated for potential urban decay impacts. Refer to the discussion above regarding Project design, landscaping, and lighting. Streetscape landscaping also is discussed below under Item 6, and light and glare also is discussed below under Threshold d). The analysis herein thus focuses on the commercial component of the Project and its potential to result in off-site urban decay.

An Urban Decay Analysis was prepared for the commercial component of the Project and is included as *Technical Appendix K*. The study was prepared by professional economists at ALH Economics, and estimates the extent to which development of the commercial component of the Project may or may not contribute to urban decay pursuant to potential impacts on existing retailers. The key indicator from a CEQA perspective is impacts on the existing physical environment, which in the context of an urban decay analysis for a retail project includes the commercial real estate base and other germane real estate conditions, as measured by the current baseline. Characteristics of physical deterioration contributing to urban decay include abandoned buildings, boarded up doors and windows, parked trucks on vacant sites, long-term unauthorized use of the properties and parking lots, extensive or offensive graffiti painted on buildings, dumping of refuse or overturned dumpsters on properties, dead trees and shrubbery, and uncontrolled weed growth. The concept is based on the potential for a new commercial development to be established and pull tenants from existing buildings or compete with tenants in other buildings such that those buildings and their properties would physically deteriorate.

According to the Project's Urban Decay Analysis, the primary Retail Market Area for the commercial component of the proposed Project is estimated to extend a distance up to approximately 5.0 miles from the Project site depending upon direction. A relatively small portion of sales are expected to originate from other sources, including households living beyond this market area, visitors to the area, and nearby workers. The Project's Retail Market Area and surrounding areas have at least an estimated 4.8 million s.f. feet of retail space, with no less than 27 shopping centers of various sizes, ranging from less than 50,000 square feet to over 1.1 million square feet. The Project's proposed retail space will comprise a modest addition to this inventory, and its location close to Highway 99 as well as residential nodes will serve to generate demand to support the Project (AHL Economics, 2021, p. 2).

AHL Economics calculated that the Retail Market Area and proximate surrounding area inventory had an estimated to have a post-COVID 3.3% vacancy rate as of late summer/early fall 2021. As in any retail market, there will be vacancies and some chronic vacancies, particularly when newer retail is constructed, with some retailers preferring newer updated developments. Nevertheless, most existing area vacancies appear to be reasonably well-maintained, with the retail base in the market area and surrounding areas serving a broad range of consumer shopping needs. The retail analysis found that development of the Project's retail component could potentially increase the retail vacancy rate in the retail market and surrounding areas. However, even with the proposed Project, the increased vacancy rate is expected to be below 5.0%, which is a rate indicative of a healthy retail market and is well below the national average.

AHL Economics found that the vacancy rate is low and that the addition of the proposed Project is not expected to lead to or contribute to urban decay, as the vacancy rate is within the range indicative of a

healthy retail market. As shown in Table 4.1-1, *Project Sales Impact on Existing Bakersfield Retail Base, 2021 and 2026*, AHL Economics found that considering the entirety of the City of Bakersfield retail base absent any new household growth, the commercial component of the Project would comprise only 0.7% of the City's retail base. ALH Economics reported that the anticipated lack of urban decay is especially the case given the market area's recent propensity to backfill some of the area's anchor tenants. In addition, the market has the demonstrated ability to repurpose vacant retail buildings or redevelop obsolete retail sites (AHL Economics, 2021, pp. 3-4). For these reasons, the potential for the Project to cause physical urban decay is found to be a less-than-significant impact.

Table 4.1-1 Project Sales Impact on Existing Bakersfield Retail Base, 2021 and 2026

Type of Retailer	Sales Base Impact	
	2021	2026
Motor Vehicles & Parts Dealers	0.0%	NA
Home Furnishings & Appliance Stores	1.6%	1.2%
Building Materials & Garden Equip	0.7%	0.5%
Food & Beverage Stores	0.0%	NA
Gasoline Stations	0.0%	NA
Clothing & Clothing Accessories Stores	0.8%	0.3%
General Merchandise Stores	1.0%	0.8%
Food Services & Drinking Places	1.4%	1.0%
Other Retail Group	2.2%	1.8%
Total	0.7%	0.5%

Source: (AHL Economics, 2021, p. 25)

6. Metropolitan Bakersfield General Plan (MBGP) Public Services and Facilities Element

The MBGP Circulation Element discusses providing and maintaining landscaping on both sides and in the median of arterial streets and on both sides of collector streets. The Project site is located west of SR-99, south of Berkshire Road, west of South H Street, and north of Hosking Avenue, and the developer(s) of the Project would install landscaping along all of these street frontages concurrent with construction of the Project.

SR-99 and the SR-99/Hosking interchange are fully improved and would not require right-of-way dedication or improvements by the Project Applicant. However, streetscape landscaping would be installed concurrent with construction of site-adjacent development.

Along the Project site's frontage with Berkshire Road, the Project Applicant would be responsible for dedicating right-of-way and improving the road to include 45 feet of total right-of-way on the south side of the centerline, including 34 feet of pavement and an 11-foot parkway inclusive of a new 7-foot-wide sidewalk and 4 feet of landscaping. Trees along Berkshire Road are planned with a mix of California Pepper, Crape Myrtle, and Canary Island Pine trees. Along the Project site's frontage with South H Street and extending beyond the frontage continuing between the southeast corner of the Project site to the intersection of South H Street and Hosking Avenue, the Project Applicant would be

responsible for dedicating right-of-way and ensuring dedication of right-of-way by the off-site property owner to the south of the Project site to widen and improve South H Street to provide a minimum of 55 feet of right-of-way on the west side of the centerline, with additional widening as South H Street approaches and meets the Hosking Avenue intersection. When complete, South H Street would be improved to full arterial roadway width standards from Berkshire Road to Hosking Avenue. South H Street would be improved to include a new raised center median and the western side of the road would be improved to include new pavement and a curb-adjacent sidewalk, with 7 feet of the sidewalk in the public right-of-way and 1 foot of the sidewalk in a pedestrian easement. A mixture of evergreen trees would be planted on the Project side (west side) of South H Street in the Project site's private property and outside of the public right-of-way.

7. *Metropolitan Bakersfield General Plan (MBGP) Circulation Element*

The MBGP Public Services and Facilities Element states that street lighting should be installed in all new developments in accord with adopted City standards and county policies. As part of the Project's implementation, new street lighting would be installed along the Project site's frontages with Berkshire Road and South H Street, in compliance with this policy. SR-99 and the SR-99/Hosking interchange are fully improved and street lighting is already in place.

Threshold d: Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The proposed Project would transform the Project site from an undeveloped property to a developed property containing commercial and warehouse distribution uses, which would be illuminated and have small elements of reflective building materials such as window glass. The analysis below discusses the Project's potential to result in substantial artificial light and glare.

1. *Artificial Light*

Under existing conditions, the Project site is undeveloped and contains no sources of artificial lighting other than perimeter street lights. Implementation of the proposed Project would introduce new lighting elements on the site and in the streetscapes of Berkshire Road (south side of the road fronting the Project site) and South H Street (west side of the road fronting the Project site). Lighting interior to the site would primarily be used to illuminate the parking areas, truck docking areas, and building entrances. It should be noted that the Project site is bounded by SR-99, Hosking Avenue, and Berkshire Road, all of which have street pole lighting and are well-traveled by vehicles. All new light sources associated with the Project would be required to comply with the Metropolitan Bakersfield Municipal Code standards for exterior lighting standards, which prevent light spillover, glare, nuisance, inconvenience, or hazardous interference of any kind on adjacent properties and streets. Mandatory compliance with Municipal Code Sections 17.71.010 to 17.71.080, "Outdoor Lighting," would ensure that the Project's pole-mounted and building-mounted light fixtures would not introduce any design features that would cause artificial light or glare to extents that would adversely affect day or nighttime views in the area.

As part of proposed Site Plan Review No. 21-0185 for the warehouse development, a photometric plan was submitted by the Project Applicant for City review. Refer to Figure 4.1-12, *Site Plan Review No. 21-0185 - Photometric Plan*. For the commercial component of the Project, although the design is conceptual, the Project Applicant submitted conceptual photometric plans as shown on Figure 4.1-13, *Conceptual PCD Exclusive Development Plan - Photometric Plan Sheet 1*, and Figure 4.1-15, *Conceptual PCD Exclusive Development Plan - Photometric Plan Sheet 2*. As shown on these exhibits, the lighting level at the perimeter property lines would be reduced to 0.0 footcandles in all places, with the exception of a few small areas along the western and northwestern boundaries of the commercial area abutting the SR-99 right-of-way and the proposed Berkshire Road cul-de-sac ranging from 0.1 to 0.7 footcandles. As part of City review and approval of Site Plan Review No. 21-0185 and the review of implementing plans for construction in any area of the Project site, City staff is obligated to assure that the lighting plans meet all applicable Municipal Code standards. Based on the Project's lighting plans and mandatory requirement to comply with the Municipal Code, lighting impacts would be less than significant.

2. Glare

With respect to glare, a majority of the Project's building materials would consist of painted tilt-up concrete panels. The paint colors proposed for the Project have a matte finish and would not produce glare, although the buildings would incorporate some glass elements. While window glazing has a potential to result in minor glare effects, such effects would not adversely affect daytime views experienced from surrounding properties, including motorists along adjacent roadways, because the glass proposed for the Project is low-reflective, blue glass. Also, the Project's conceptual landscaping plan discussed in Section 3.0, *Project Description*, calls for the perimeter of the site to be landscaped, inclusive of perimeter trees with a continuous canopy which would filter light from the surrounding street system and limit the ability for vehicle headlights on public streets to directly shine onto any glass building elements. The glass elements in the building designs also would be softened by landscaping proposed near building entrances, thereby precluding any substantial sun glare. Last, the Project Applicant has committed to using concrete paving materials instead of asphalt in the warehouse building's truck courts, which would not be shaded by landscaping. Concrete has less heat flux than asphalt, thereby reducing the potential for sun glare on paved surfaces (Akpınar & Sevin, 2018). Furthermore, the passenger vehicle parking areas would be substantially shaded by tree canopies, as shown on the Project's conceptual landscaping plan. Thus, glare impacts from proposed building elements and parking surfaces would be less than significant. Should any photovoltaic panels be installed on the Project site including but not limited to building roofs, glare would be precluded, as solar panels are designed to absorb and not reflect sunlight.

4.1.5 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development in the area within the same viewsheds. The ground-level viewshed of the Project site extends to the immediate site vicinity, as the Project site is a vacant property surrounded on all sides by roads and development. To the east, the ground-level viewshed extends to the perimeter of the residential community located east of South H Street and east

of the Kern Island Canal, where there is a block wall and one- and two-story homes that block views at ground level. To the west, the ground-level viewshed extends to the southbound lanes (west side) of SR-99, where there is a noise wall and development that blocks views further to the west. From SR-99, the Project site is visible from the northbound and southbound travel lanes for a distance of approximately 0.3-mile from the northbound direction and 0.2-mile from the southbound direction. The Project site also is visible from the northbound SR-99 off-ramp and SR-99 on-ramp at Hosking Avenue, as well as from eastbound Hosking Avenue where the road spans over SR-99. To the south, the ground-level viewshed extends beyond Hosking Avenue, across properties that are currently vacant. From the south, distant views of the Project site are available along South H Street, traveling northbound from approximately McKee Road. In this viewshed, cumulative development projects are considered at the northwest, southwest, and southeast corners of the intersection of South H Street and Hosking Avenue, with commercial developments proposed or planned at all three corners.

From the north, the ground-level viewshed extends beyond Berkshire Road, across properties that are currently vacant. From the north, distant views of the Project site are available from southbound Colony Street, starting at approximately the Arvin-Edison Intake Canal. In this viewshed, cumulative development projects are considered immediately north of Berkshire Road across the street from the Project site, where there is a planned retail center with one major tenant, Floor & Décor, already sited on the property, and vacant land owned Kaiser Permanente which it is holding as a real estate asset with no current plans for development.

The Project site and its surroundings are located within a relatively flat valley floor flanked by rugged hills and mountains. Although views to the mountains are often obscured due to atmospheric haze, the horizon viewshed on a clear day extends to the Sierra Nevada Mountains to the east, the Tehachapi Mountains to the south, and the Coast Range to the west.

Cumulative Effects to Scenic Vistas

The Project site is relatively flat and does not contribute to any prominent scenic vistas under existing conditions. Although views of the surrounding mountains are available in the Project area, such views are available throughout the cumulative study area including in the ground-level viewshed and horizon viewshed and are not unique to the Project site or the site's vicinity. Furthermore, other development projects in the cumulative study area with the potential to intermittently obstruct horizon views in visual foregrounds would be required to comply with the applicable policies of governing municipal codes which limit building heights and other physical features. Because of the low-profile nature of urban development compared to the heights of the mountains, there is no reasonable possibility that cumulative development in the Bakersfield valley floor would block, obscure, or substantially and adversely affect mountain views as seen from public streets around the Project site and other public streets and public viewing area across the valley. Because opportunities would remain for scenic mountain views after development of the Project and after the development of cumulative projects in the ground-level and horizon viewsheds, the Project would not result in a cumulatively considerable effect on scenic vistas. Views of the mountains would remain available to the public traveling on SR-99, Hosking Avenue, South H Street, Berkshire Road, Colony Street, and other public roads adjacent to and near the Project site. Because the public would have opportunities to experience mountain views

on the horizon, regardless of development in the ground-level foreground, the cumulative impact to scenic vistas is less than significant and the Project's contribution is less than cumulatively considerable.

Cumulative Effects to Views from a State Scenic Highway

There are no designated or eligible State scenic highways within the Project site's immediate vicinity (CalTrans, 2022). The nearest eligible State scenic highway in Kern County is the SR 14 extension from SR 58 (near Mojave) to SR 395 (near Little Lake), located approximately 50.4 miles southeast of the Project site. Therefore, the proposed Project has no potential contribute to a cumulatively significant impact to scenic resources within a designated scenic route corridor. No impact would occur on a direct or cumulatively considerable basis.

Cumulative Effects Associated with Inconsistencies with Policies and Regulations Governing Scenic Quality

Under existing conditions, the area surrounding the Project site is mix of residential, commercial, and undeveloped vacant land. As with the Project, any development in the surrounding area would be subject to applicable development regulations and design standards, including, but not limited to the City of Bakersfield Municipal Code or the Kern County Code of Ordinances pertaining to surrounding areas in unincorporated areas of Kern County. Mandatory compliance to applicable development regulations and design standards would ensure that cumulative developments projects would incorporate high quality building materials, site design principles, and landscaping to preclude potential conflicts with applicable zoning and other regulations governing visual quality.

Cumulative Effects Pertaining to Urban Decay

Pertaining to General Plan requirement to study urban decay, the Project's Urban Decay Analysis considered 27 other commercial developments in and outside of the Project's retail market area, as well as several commercial projects that are planned but not yet developed. Refer to Map 4 and Exhibits 3, 4, and 18 of *Technical Appendix K* (AHL Economics, 2021).

In the Project's urban decay study area, AHL Economics reports that three projects that are developed or in the process of being developed total approximately 282,300 s.f. of space, with 187,900 s.f. still available for lease or anticipated in future phases. Of these, only the Floor & Décor Center is located relatively close to the Project site at 1.6 miles, also in Bakersfield's southwest quadrant. The other two projects – Panama Village and Old River Ranch - are 3.2 and 6 miles distant from the Project site, respectively. With these locations, and their smaller sizes relative to the Project, AHL Economics reports that they are likely to be less competitive with the Project and the Project's demand pool. The other cumulative retail projects not yet developed total approximately 350,000 to 400,000 s.f., which include the currently-proposed Crossings project located at the southwest corner of Hosking Avenue and South H Street and the vacant land located at the northwest corner of Hosking Avenue and South H Street. These planned projects, also located in Bakersfield's southwest quadrant, are likely to be most competitive with the Project. ALH Economics concluded that the demand analysis results contained in *Technical Appendix K* indicate that existing and new Bakersfield retail shoppers are estimated to have the ability to support 195,700 square feet of new retail space by 2026, or almost

200,000 square feet of space. Assuming the market continues to attract 50% of retail sales, this figure grosses up to estimated demand for 391,401 square feet of new retail by 2026, or almost 400,000 square feet. (AHL Economics, 2021, pp. 26-29).

In 2020, a retail opportunities study was prepared for the City of Bakersfield by The Natelson Dale Group (TNDG). This report, titled “Bakersfield Market Opportunities Analysis – Retail Land Uses” was prepared as a background report to the City’s Economic Development Strategy, adopted by the City Council on September 15, 2021. The TNDG report includes projections of new retail demand for the City of Bakersfield for benchmark years 2019, 2025, 2030, and 2035.¹⁴ TNDG’s overall approach to analyzing the retail market is similar to the ALH Economics approach, but assumptions incorporated into the analyses vary between the two firms. Despite these variations, the retail demand projections for the approximate 5-year period between 2021 and 2026 are reasonably close, with the ALH Economics estimate more conservative than the TNDG estimate. Based upon interpolation of the TNDG demand projections between 2019 and 2030, ALH Economics estimates a TNDG projection of about 620,000 square feet of new Bakersfield retail demand between 2021 and 2026. This compares to the more conservative ALH Economics estimate of almost 400,000 square feet.

As shown in Table 4.1-2, *Bakersfield Retail Base Cumulative Retail Projects Impact, 2026*, the cumulative retail analysis results indicate that assuming all the identified cumulative retail projects are developed by 2026, there will be an excess of new supply totaling 476,766 square feet (i.e., a projected shortfall of demand to support the cumulative projects). Similar to the Project only analysis, the cumulative analysis assumes that one-half the excess supply is absorbed through lower sales at existing stores, with the other one-half comprising a vacancy impact. Thus, the cumulative projects analysis is estimated to result in 238,383 square feet of vacancy impact. This is a nominal amount of vacancy impact based upon the estimated size of the Bakersfield retail market, which is estimated to total 14.7 million square feet, exclusive of space for auto sales or gasoline stations. If new store sales impacts resulted in store closures and this amount of space becoming vacant, it would comprise a cumulative project vacancy impact of 1.6%. In other words, 1.6% of the estimated existing non-auto retail base would become vacant as a result of development and absorption of the Project and other identified planned retail projects. The estimated 1.6% retail vacancy increment is very low, and would comprise a less than significant impact on the market area’s retail base. The cumulative impact would be less than significant and the Project’s contribution would be less than cumulatively considerable.

Table 4.1-2 Bakersfield Retail Base Cumulative Retail Projects Impact, 2026

Supply and Demand Characteristic	Figure
Cumulative Supply	868,167
Future Demand (2026)	391,401
Excess New Supply	476,766
Existing City of Bakersfield Retail Inventory	14,700,000
Cumulative Projects Vacancy Impacts	
Square Feet Impact	238,383
Percent of Retail Base	1.6%

(AHL Economics, 2021, p. 28)

Cumulative Light or Glare Effects

With respect to potential cumulative light and glare impacts, the Project would be required to comply with all applicable requirements contained in the Metropolitan Bakersfield Municipal Code including but not limited to Municipal Code Sections 17.71.010 to 17.71.080, “Outdoor Lighting,” Municipal Code Section 17.60.060 related to sign illumination, and Municipal Code Section 17.58.060 pertaining to parking lot lighting. In turn, other development projects in the City of Bakersfield also would be required to these same requirements (City of Bakersfield, 2021). Beyond the Project site and immediately surrounding areas are properties in unincorporated Kern County. Development in those areas would be required to comply with the Kern County Zoning Ordinance Chapter 19.81, Dark Skies Ordinance (Outdoor Lighting) (Kern County, 2021). Mandatory compliance with regulatory requirements combined with the Project’s proposed design features that reduce light and glare would assure that impacts are less than cumulatively significant and that the Project’s contribution to light and glare would be less than cumulatively considerable.

4.1.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less than Significant Impact. The Project site does not comprise all or part of a scenic vista and does not contain any visually prominent scenic features. No unique views to scenic vistas are visible from the property. The Project would not substantially change a scenic view or substantially block or obscure a scenic vista; therefore, impacts to scenic vistas would be less than significant.

Threshold b: No Impact. The Project site is not located within the viewshed of a scenic highway and, therefore, the Project site does not contain any scenic resources visible from a scenic highway.

Threshold c: Less than Significant Impact. The Project site is located within an urbanized area and would not conflict with applicable zoning and other regulations governing scenic quality during construction or operation.

Threshold d: Less than Significant Impact. Project-related development would not create substantial light or glare. Compliance with Bakersfield Municipal Code requirements for lighting would ensure less than significant impacts associated with light and glare affecting day or nighttime views in the area from on-site lighting elements.

4.1.7 MITIGATION

Impacts would be less than significant; therefore, no mitigation is required.

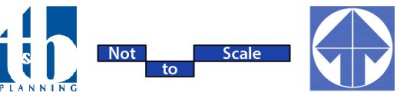
4.1.8 DESIGN FEATURES AND REGULATORY REQUIREMENTS

The City of Bakersfield is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Aesthetics, which include the following:

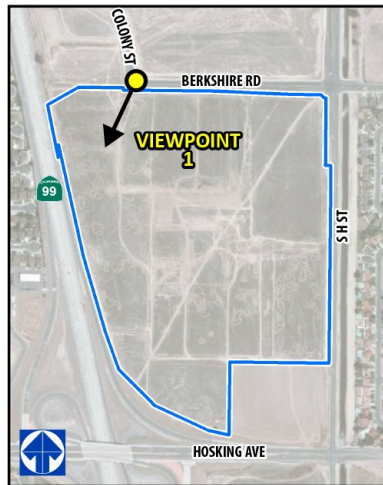
- AES DF-1 Prior to the approval of building permits and other permits and approvals that authorize construction, the City of Bakersfield shall review the construction documents and plans to assure the following:
- a. All building paint colors shall have a matte finish.
 - b. All building glass shall be anti-glare or anti-reflective.
 - c. Any photovoltaic panels installed on the property or on building roofs shall be anti-glare or anti-reflective.
 - d. All lighting fixtures shall comply with applicable City of Bakersfield Municipal Code Requirements pertaining to lighting and illumination of buildings, parking areas, and signs.
 - e. The warehouse building truck courts shall be composed of concrete.
 - f. All loading dock areas of the warehouse building shall be screened by a solid perimeter wall on all sides. Any gates visible from a public street shall be of an opaque design.
 - g. All landscaping shall be installed to comply with all applicable City of Bakersfield Municipal Code standards pertaining to perimeter landscaping and minimum shade cover.



Figure 4.1-1



Key Map

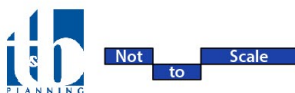


Source(s): Esri, Kern County (2022)



Viewpoint 1: From Colony St & Berkshire Road looking southwest.

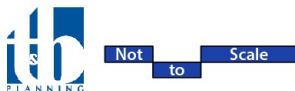
Figure 4.1-2



Viewpoint 1



Figure 4.1-3



Viewpoints 2 & 3



Viewpoint 4: From South H Street looking south.



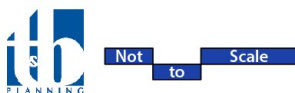
Viewpoint 5: From South H Street looking southwest.

Key Map



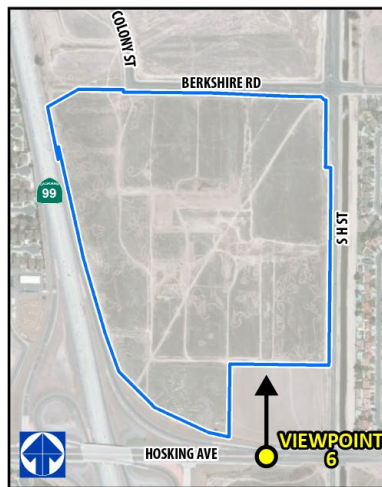
Source(s): Esri, Kern County (2022)

Figure 4.1-4



Viewpoints 4 & 5

Key Map

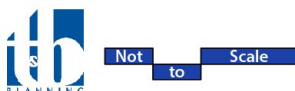


Source(s): Esri, Kern County (2022)



Viewpoint 6: From Hosking Avenue looking north.

Figure 4.1-5



Viewpoint 6

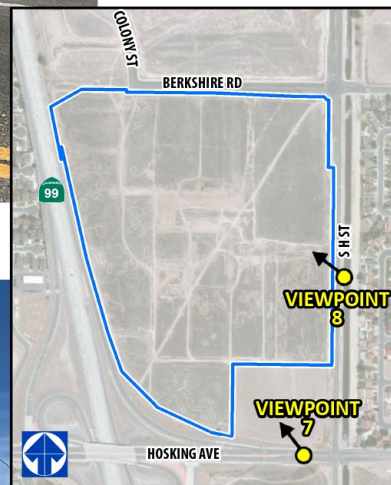


Viewpoint 7: From Hosking Avenue looking northwest.



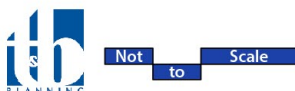
Viewpoint 8: From South H Avenue looking northwest.

Key Map



Source(s): Esri, Kern County (2022)

Figure 4.1-6



Viewpoints 7 & 8

Key Map

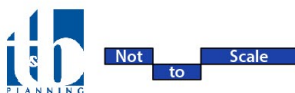


Source(s): Esri, Kern County (2022)



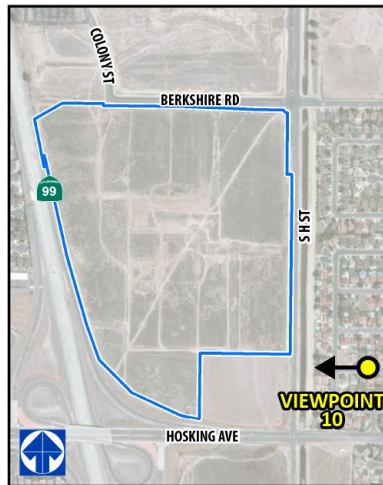
Viewpoint 9: From Southbound along SR99 looking east.

Figure 4.1-7



Viewpoint 9

Key Map

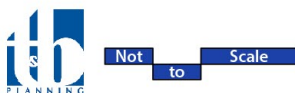


Source(s): Esri, Kern County (2022)



Viewpoint 10: From Badger Pass Ave, looking west (site not visible from residential streets).

Figure 4.1-8



Viewpoint 10



Source(s): McKently Malak Architects (04-13-2021)

Figure 4.1-9

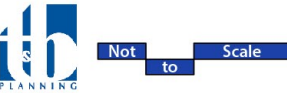


Photo Simulation A



Source(s): McKently Malak Architects (04-13-2021)

Figure 4.1-10

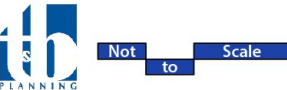


Photo Simulation B



Source(s): McKently Malak Architects (04-13-2021)

Figure 4.1-11

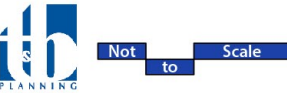
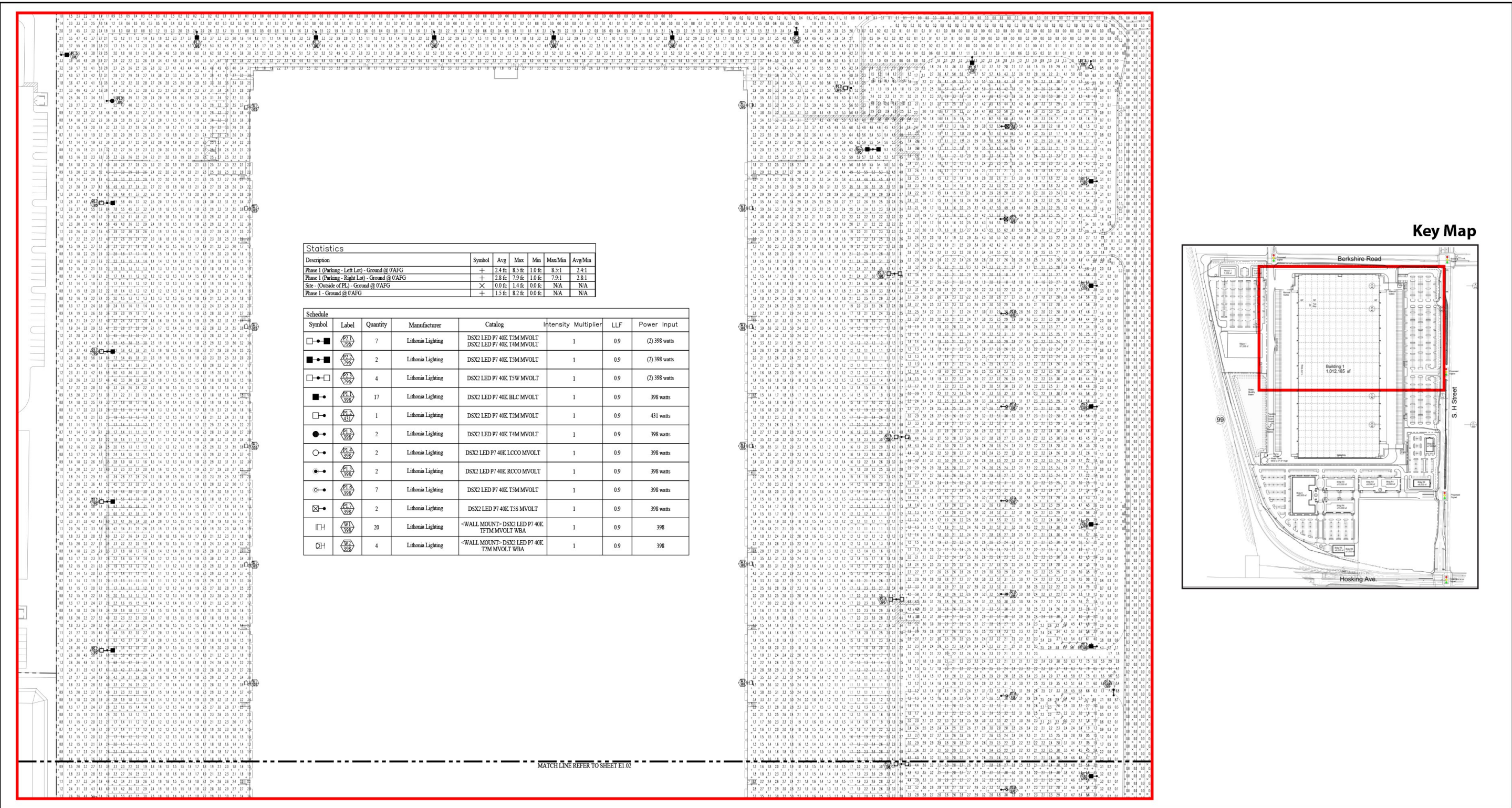
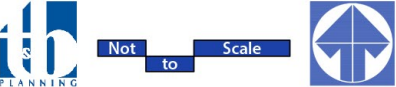


Photo Simulation C



Source(s): PMD Engineering (05-03-2022)

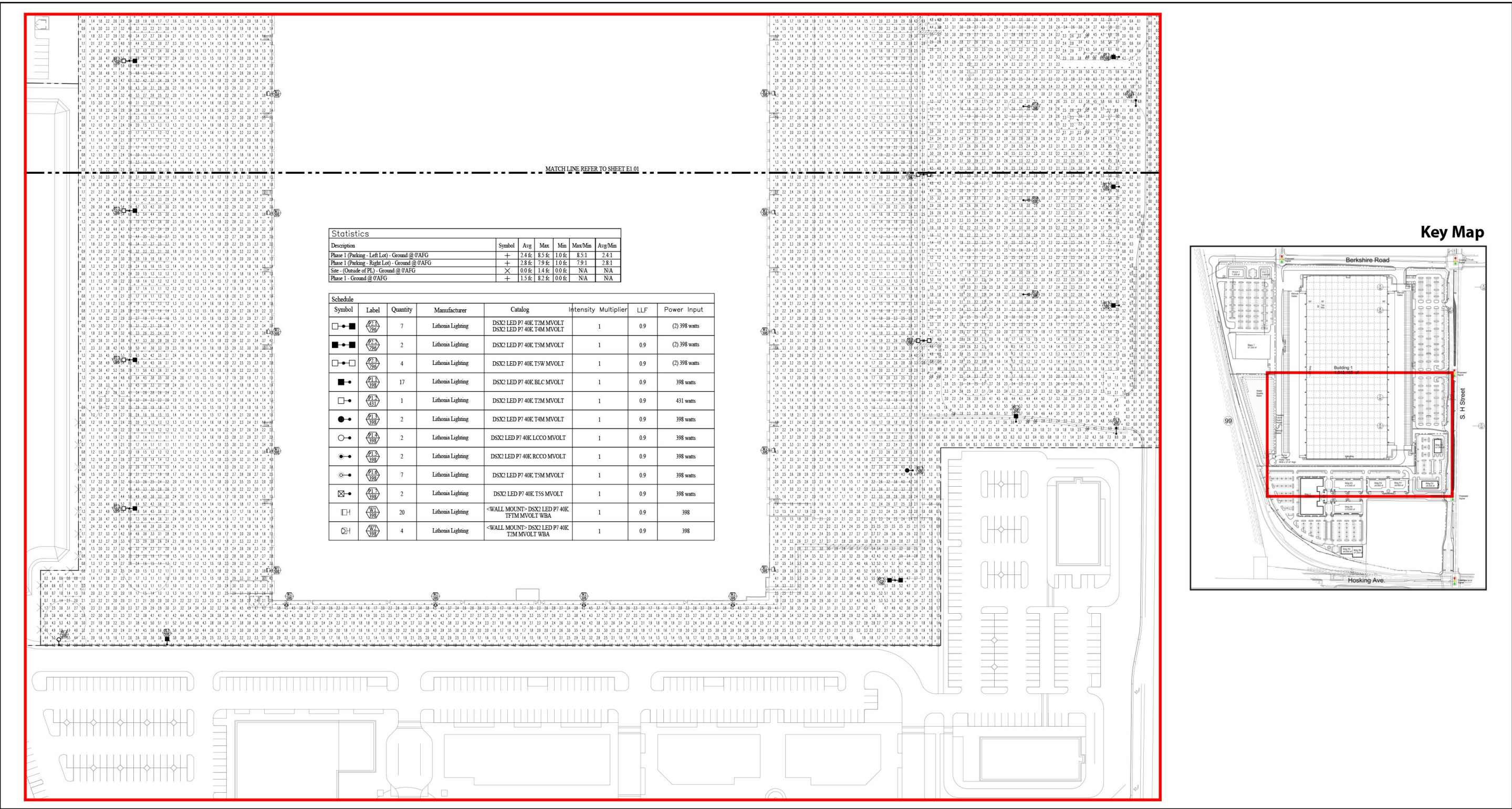
Figure 4.1-12

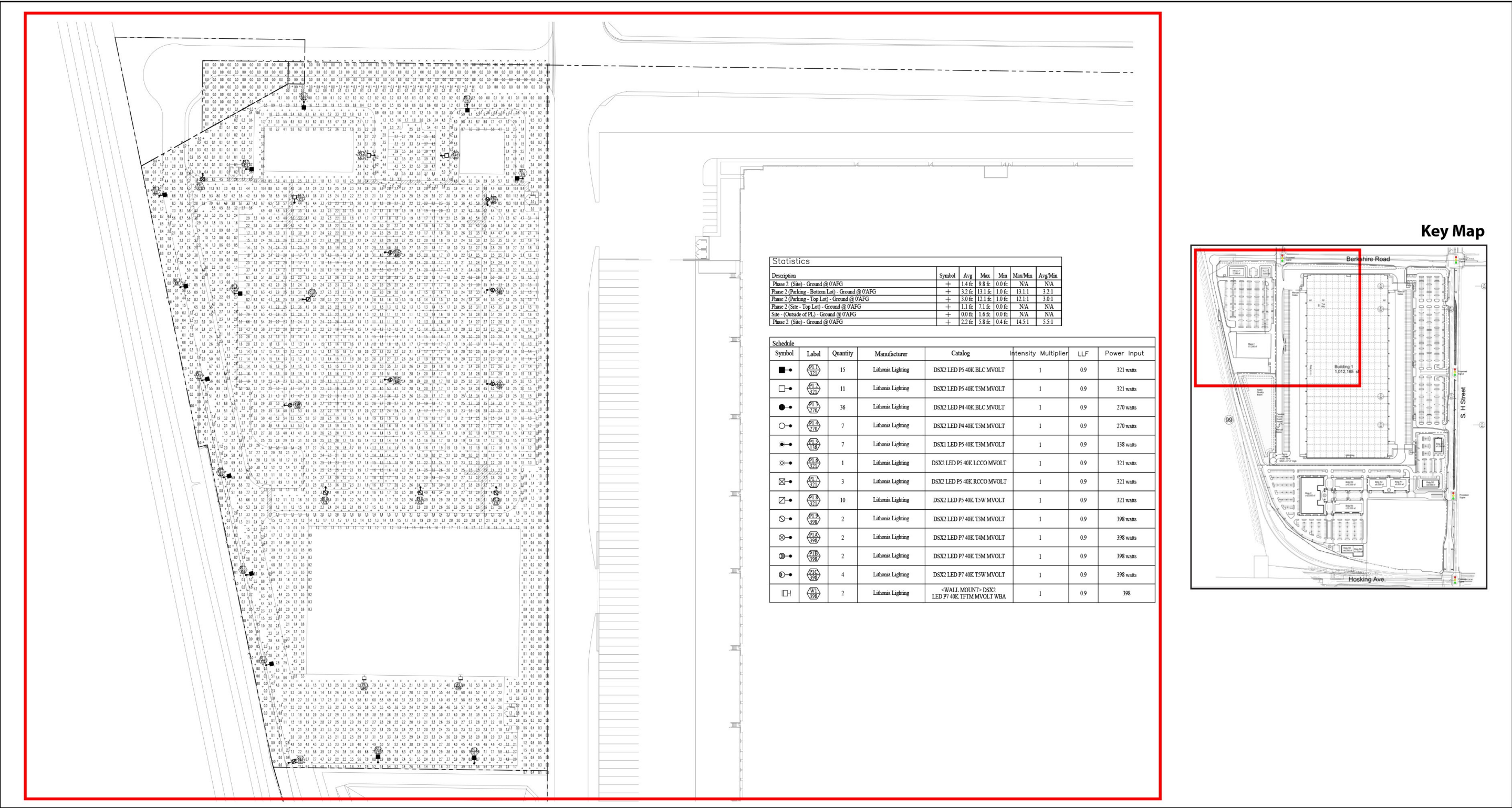


Site Plan Review No. 21-0185 - Photometric Plan Sheet 1

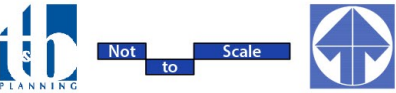
Lead Agency: City of Bakersfield

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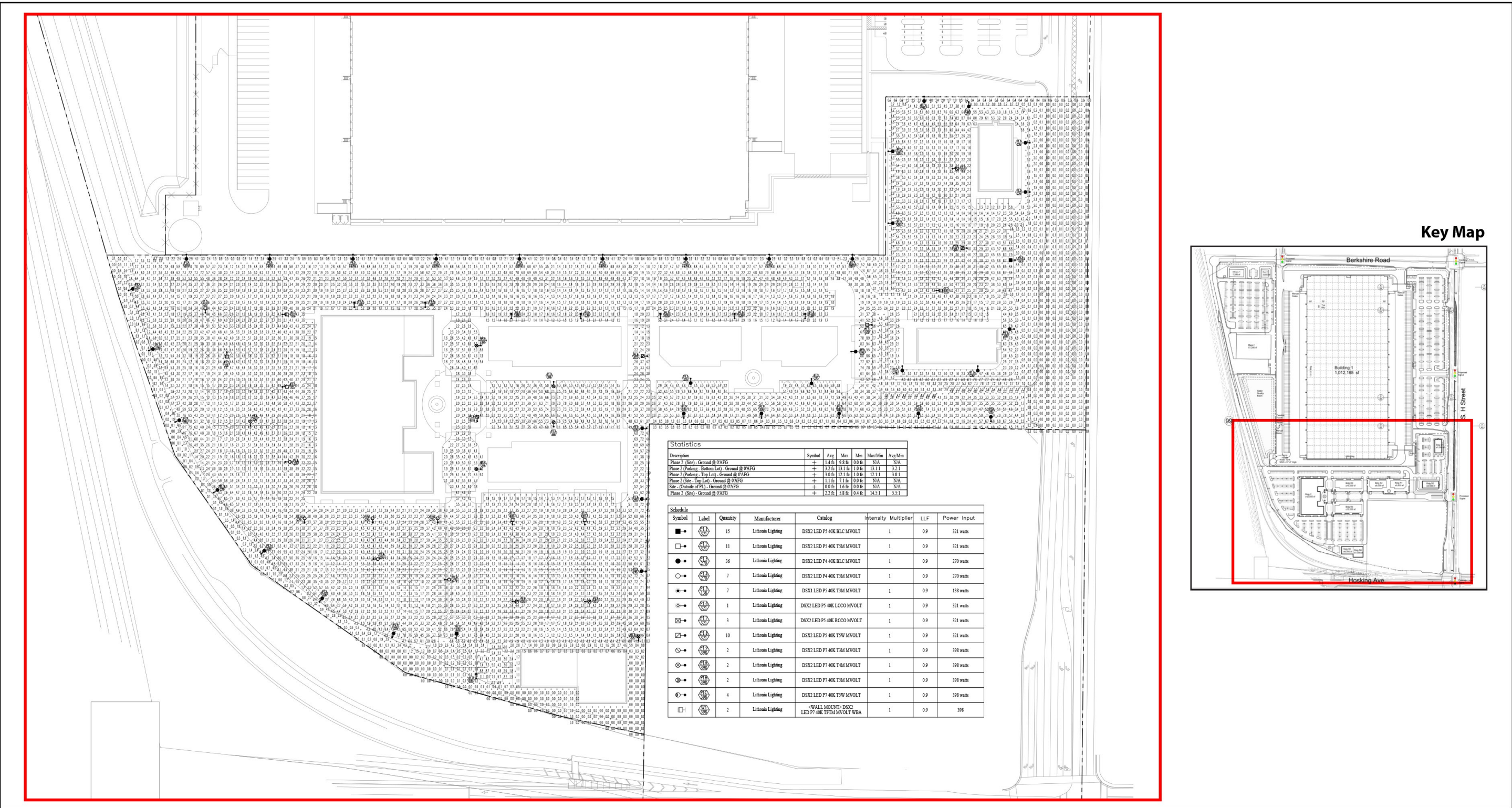
Source(s): PMD Engineering (05-03-2022)



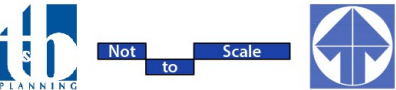
Lead Agency: City of Bakersfield

Conceptual PCD Exclusive Development Plan - Photometric Plan Sheet 1

SCH No. 2022030196



Source(s): PMD Engineering (05-03-2022)



Lead Agency: City of Bakersfield

Figure 4.1-15

Conceptual PCD Exclusive Development Plan - Photometric Plan Sheet 2

SCH No. 2022030196

4.2 AIR QUALITY

The analysis in this Subsection 4.2 is based on a technical study prepared by Trinity Consultants (herein, “Trinity”), entitled, “Air Quality Impact Analysis, Majestic Gateway, Bakersfield, CA” (herein, “AQIA”). The AQIA is dated July 2022, and is included as *Technical Appendix B* to this EIR (Trinity, 2022a).

4.2.1 EXISTING CONDITIONS

A. Air Quality Standards

Protection of the public health is maintained through the attainment and maintenance of ambient air quality standards for various atmospheric compounds and the enforcement of emissions limits for individual stationary sources. The Federal Clean Air Act (CAA) requires that the U.S. Environmental Protection Agency (EPA) establish National Ambient Air Quality Standards (NAAQS) to protect the health, safety, and welfare of the public. NAAQS have been established for ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter of 10 microns (PM₁₀), particulate matter of less than 2.5 microns (PM_{2.5}), and lead (Pb). California has also adopted ambient air quality standards (CAAQS) for these “criteria” air pollutants. CAAQS are more stringent than the corresponding NAAQS and include standards for hydrogen sulfide (H₂S), vinyl chloride (chloroethene), and visibility reducing particles. The CAA Amendments of 1977 required each state to identify areas that were in non-attainment of the NAAQS and to develop State Implementation Plans (SIP’s) containing strategies to bring these non-attainment areas into compliance (Trinity, 2022a, p. 3-1).

Responsibility for regulation of air quality in California lies with the California Air Resources Board (CARB) and the 35 local air districts with oversight responsibility held by the EPA. CARB is responsible for regulating mobile source emissions, establishing CAAQS, conducting research, managing regulation development, and providing oversight and coordination of the activities of the 35 air districts. The air districts are primarily responsible for regulating stationary source emissions and monitoring ambient pollutant concentrations. CARB also determines whether air basins, or portions thereof, are “unclassified,” in “attainment” or in “non-attainment” for the NAAQS and CAAQS relying on statewide air quality monitoring data (Trinity, 2022a, p. 3-1).

The Majestic Gateway Project site is located within Kern County’s portion of the San Joaquin Valley Air Basin (“SJVAB” or “Basin”). Kern County is included among the eight counties that comprise the San Joaquin Valley Air Pollution Control District (SJVAPCD). The SJVAPCD acts as the regulatory agency for air pollution control in the Basin and is the local agency empowered to regulate air pollutant emissions for the Project area. Table 4.2-1, *Federal and California Air Quality Standards*, provides the NAAQS and CAAQS (Trinity, 2022a, p. 3-1).

Table 4.2-1 Federal and California Air Quality Standards

Pollutant	Averaging Time	NAAQS	CAAQS
		Concentration	
O ₃	8-hour	0.070 ppm (137 µg/m ³) ^a	0.070 ppm (137 µg/m ³)
	1-hour		0.09 ppm (180 µg/m ³)
CO	8-hour	9 ppm (10 µg/m ³)	9 ppm (10 µg/m ³)
	1-hour	35 ppm (40 µg/m ³)	20 ppm (23 µg/m ³)
NO ₂	Annual Average	53 ppb (100 µg/m ³)	0.030 ppm (57 µg/m ³)
	1-Hour	100 ppb (188.68 µg/m ³)	0.18 ppm (339 µg/m ³)
SO ₂	3-Hour	0.5 ppm (1,300 µg/m ³)	
	24 Hour	0.14 ppm (365 µg/m ³)	0.04 ppm (105 µg/m ³)
	1-Hour	75 ppb (196 µg/m ³)	0.25 ppm (655 µg/m ³)
Particulate Matter (PM ₁₀)	Annual Arithmetic Mean		20 µg/m ³
	24-Hour	150 µg/m ³	50 µg/m ³
Fine Particulate Matter (PM _{2.5})	Annual Arithmetic Mean	12 µg/m ³	12 µg/m ³
	24-Hour	35 µg/m ³	
Sulfates	24-Hour		25 µg/m ³
Pb ^d	Rolling Three-Month Average	0.15 µg/m ³	
	30 Day Average		1.5 µg/m ³
H ₂ S	1-Hour		0.03 ppm (42 µg/m ³)
Vinyl Chloride (chloroethene)	24-Hour		0.010 ppm (26 µg/m ³)
Visibility Reducing particles	8 Hour (1000 to 1800 PST)		b
ppm = parts per million ppb = parts per billion		mg/m ³ = milligrams per cubic meter	µg/m ³ = micrograms per cubic meter
Source: CARB 2016			
a. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm			
b. In 1989, CARB converted both the general statewide 10-mile visibility standards and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.			

(Trinity, 2022a, Table 3-1)

Table 4.2-2, *SJVAB Attainment Status* provides the SJVAB's designation and classification based on the various criteria pollutants under both NAAQS and CAAQS.

Table 4.2-2 SJVAB Attainment Status

Pollutant	NAAQS ^a	CAAQS ^b
O ₃ , 1-hour	No Federal Standard ^f	Nonattainment/Severe
O ₃ , 8-hour	Nonattainment/Extreme ^e	Nonattainment
PM ₁₀	Attainment ^c	Nonattainment
PM _{2.5}	Nonattainment ^d	Nonattainment
CO	Attainment/Unclassified	Attainment/Unclassified
NO ₂	Attainment/Unclassified	Attainment
SO ₂	Attainment/Unclassified	Attainment
Pb (Particulate)	No Designation/Classification	Attainment
H ₂ S	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particulates	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

Source: SJVAPCD 2021a

Note:

a. See 40 CFR Part 81

b. See CCR Title 17 Sections 60200-60210

c. On September 25, 2008, EPA redesignated the San Joaquin Valley to attainment for the PM₁₀ National Ambient Air Quality Standard (NAAQS) and approved the PM₁₀ Maintenance Plan.

d. The Valley is designated nonattainment for the 1997 PM_{2.5} NAAQS. EPA designated the Valley as nonattainment for the 2006 PM_{2.5} NAAQS on November 13, 2009 (effective December 14, 2009).

e. Though the Valley was initially classified as serious nonattainment for the 1997 8-hour O₃ standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).

f. Effective June 15, 2005, the EPA revoked the federal 1-hour O₃ standard, including associated designations and classifications. EPA had previously classified the SJVAB as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour O₃ nonattainment areas continue to apply to the SJVAB.

(Trinity, 2022a, Table 3-2)

The SJVAPCD, along with CARB, operates an air quality monitoring network that provides information on average concentrations of those pollutants for which federal or state agencies have established NAAQS and CAAQS, respectively. The monitoring stations in the San Joaquin Valley are depicted in Figure 3-1 of the Project's AQIA (*Technical Appendix B*).

B. Climate

The most substantial single control on the weather pattern of the San Joaquin Valley is the semi-permanent subtropical high-pressure cell, referred to as the "Pacific High." During the summer, the Pacific High is positioned off the coast of northern California, diverting ocean-derived storms to the north. Hence, the summer months are virtually rainless. During the winter, the Pacific High moves southward allowing storms to pass through the San Joaquin Valley. Almost all of the precipitation expected during a given year occurs from December through April. During the summer, the predominant surface winds are out of the northwest. Air enters the Valley through the Carquinez strait and flows toward the Tehachapi Mountains. This up-valley (northwesterly) wind flow is interrupted in early fall by the emergence of nocturnal, down-valley (southeasterly) winds which become progressively more predominant as winter approaches. Wind speeds are generally highest during the

spring and lightest in fall and winter. The relatively cool air flowing through the Carquinez strait is warmed on its journey south through the Valley. On reaching the southern end of the Valley, the average high temperature during the summer is nearly 100 degrees Fahrenheit (°F). Relative humidity during the summer is quite low, causing large diurnal temperature variations. Temperatures during the summer often drop into the upper 60s. In winter, the average high temperatures reach into the mid-50s and the average low drops to the mid-30s. In addition, another high-pressure cell, known as the "Great Basin High," develops east of the Sierra Nevada Mountain Range during winter. When this cell is weak, a layer of cool, damp air becomes trapped in the basin and extensive fog results. During inversions, vertical dispersion is restricted, and pollutant emissions are trapped beneath the inversion and pushed against the mountains, adversely affecting regional air quality. Surface-based inversions, while shallow and typically short-lived, are present most mornings. Elevated inversions, while less frequent than ground-based inversions, are typically longer lasting and create the more severe air stagnation problems. The winter season characteristically has the poorest conditions for vertical mixing of the entire year (Trinity, 2022a, p. 3-13).

Meteorological data for various monitoring stations is maintained by the Western Regional Climate Center. Meteorological data for the Project site is expected to be similar to the data recorded at the Bakersfield AP monitoring station. This data is provided in Table 3-4 of the Project's AQIA (*Technical Appendix B*), which contains average precipitation data recorded at the Bakersfield AP monitoring station. Over the 79-year period from October of 1937 through June of 2016 (the most recent data available), the average annual precipitation was 6.17 inches (Trinity, 2022a, p. 3-14).

C. Existing Air Quality

For the purposes of background data, the analysis herein relies on data collected in the last three years for the CARB monitoring stations that are located in the closest proximity to the Project site. Table 4.2-3, *Existing Air Quality Monitoring Data in Project Area*, provides the background concentrations for O₃, PM₁₀, PM_{2.5}, CO, NO₂, SO₂, and Pb. Information is provided for the Bakersfield-5558 California Avenue, Bakersfield-Golden State Highway, Bakersfield-Municipal Airport, Bakersfield-410 E. Planz Rd., and Edison monitoring stations for 2018 through 2020. No data is available for H₂S, Vinyl Chloride, or other toxic air contaminants in Kern County (Trinity, 2022a, p. 3-5).

D. Criteria Pollutants, Sources, and Health Effects

Provided below is a description of criteria air pollutants, typical sources, health effects, and the recently documented pollutant levels in the Project vicinity.

1. Ozone (O₃)

The most severe air quality problem in the San Joaquin Valley is high concentrations of O₃. O₃ is not emitted directly into the atmosphere but is a secondary pollutant produced through photochemical reactions involving hydrocarbons and nitrogen oxides (NO_x). Significant O₃ generation requires about one to three hours in a stable atmosphere with strong sunlight. For this reason, the months of April

Table 4.2-3 Existing Air Quality Monitoring Data in Project Area

Pollutant and Monitoring Station Location	Maximum Concentration			Days Exceeding Standard		
	2018	2019	2020	2018	2019	2020
O₃ – 1-hour CAAQS (0.09 ppm)						
Bakersfield – Municipal Airport	0.111	0.092	0.118	9	0	8
Bakersfield-5558 California Avenue	0.107	0.097	0.110	8	2	3
Edison	0.120	0.105	0.131	27	13	35
O₃ – 8-hour CAAQS (0.07 ppm)						
Bakersfield – Municipal Airport	0.098	0.080	0.102	59	24	40
Bakersfield-5558 California Avenue	0.098	0.088	0.098	64	28	25
Edison	0.102	0.086	0.111	87	58	82
O₃ – 8-hour NAAQS (0.070 ppm)						
Bakersfield – Municipal Airport	0.098	0.080	0.101	54	19	38
Bakersfield-5558 California Avenue	0.098	0.088	0.098	60	24	25
Edison	0.101	0.086	0.110	82	54	79
PM₁₀ – 24-hour CAAQS (50 µg/m³)						
Bakersfield-5558 California Avenue	142	125.9	196.8	13	17	18
Bakersfield – Golden State Hwy	159	664.2	144	27	21	26
PM₁₀ – 24-hour NAAQS (150 µg/m³)						
Bakersfield-5558 California Avenue	136.1	116.3	193.8	0	0	1
Bakersfield – Golden State Hwy	155.2	652.2	146.8	1	1	0
PM_{2.5} - 24-hour NAAQS (35 µg/m³)						
Bakersfield – 410 E Planz Rd.	100.9	83.7	158.6	9	3	17
Bakersfield-5558 California Avenue	98.5	59.1	150.7	36	12	44
Bakersfield-Golden State Highway	99.1	66.1	150.2	11	4	10
CO - 8-Hour CAAQS & NAAQS (9.0 ppm)						
No data collected	*	*	*	*	*	*
NO₂ - 1-Hour CAAQS (0.18 ppm)						
Bakersfield – Municipal Airport	0.057	0.064	0.065	0	0	0
Bakersfield-5558 California Avenue	0.061	0.067	0.050	0	0	0
NO₂ - 1-Hour NAAQS (0.10 ppm)						
Bakersfield – Municipal Airport	0.057	0.064	0.066	0	0	0
Bakersfield-5558 California Avenue	0.062	0.067	0.050	0	0	0
SO₂ – 24-hour Concentration - CAAQS (0.04 ppm) & NAAQS (0.14 ppm)						
No data collected	*	*	*	*	*	*
Pb - Maximum 30-Day Concentration CAAQS (1500 ng/m³)						
Bakersfield-5558 California Avenue	9.3	8.5	5.7	0	0	0
Source: CARB 2021a Notes: ppm= parts per million * There was insufficient (or no) data available to determine the value.						

(Trinity, 2022a, Table 3-3)

through October comprise the "ozone season." O₃ is a regional pollutant because O₃ precursors are transported and diffused by wind concurrently with the reaction process. The data contained in Table 4.2-3 shows that the Bakersfield area exceeded the 1-hour average ambient O₃ CAAQS and the 8-hour average ambient O₃ NAAQS and CAAQS for the 2018 through 2020 period (Trinity, 2022a, p. 3-6).

Health Effects

High levels of O₃ cause eye irritation and can impair respiratory functions. O₃ can cause chest pain, coughing, shortness of breath, and throat irritation; it can also worsen chronic respiratory diseases such as asthma and compromise the ability of the body to fight respiratory infections. High levels of O₃ can also affect plants and materials. Grapes, lettuce, spinach and many types of garden flowers and shrubs are particularly vulnerable to O₃ damage (Trinity, 2022a, p. 3-6).

2. *Suspended Particulate Matter (PM₁₀ and PM_{2.5})*

Both State and federal particulate standards now apply to PM₁₀ rather than to total suspended particulate (TSP), which includes particulates up to 30 microns in diameter. Continuing studies have shown that the smaller-diameter fraction of TSP represents the greatest health hazard posed by the pollutant; therefore, EPA has recently established NAAQS for PM_{2.5}. The Project area is classified as attainment for PM₁₀ and non-attainment for PM_{2.5} for NAAQS (Trinity, 2022a, p. 3-6).

Particulate matter consists of particles in the atmosphere resulting from many kinds of dust and fume-producing industrial and agricultural operations, from combustion, and from atmospheric photochemical reactions. Natural activities also increase the level of particulates in the atmosphere, such as wind-raised dust. The largest sources of PM₁₀ and PM_{2.5} in Kern County are vehicle movement over paved and unpaved roads, demolition and construction activities, farming operations, and unplanned fires. PM₁₀ and PM_{2.5} are considered regional pollutants with elevated levels typically occurring over a wide geographic area. Concentrations tend to be highest in the winter, during periods of high atmospheric stability and low wind speed (Trinity, 2022a, p. 3-6).

Table 4.2-3 shows that PM₁₀ levels regularly exceeded the CAAQS and NAAQS at the Bakersfield-5558 California Avenue and at the Bakersfield-Golden State Highway monitoring stations over the three-year period of 2018 through 2020. Table 4.2-3 shows that PM_{2.5} NAAQS were exceeded from 2018 through 2020. Similar levels can be expected to occur in the vicinity of the Project site (Trinity, 2022a, p. 3-6).

Health Effects

In the respiratory tract, very small particles of certain substances may produce injury by themselves or may contain absorbed gases that are injurious. Particulates of aerosol size suspended in the air can both scatter and absorb sunlight, producing haze and reducing visibility. They can also cause a wide range of damage to materials (Trinity, 2022a, p. 3-6).

3. *Carbon Monoxide (CO)*

Ambient CO concentrations normally correspond closely to the spatial and temporal distributions of vehicular traffic. Relatively high concentrations of CO would be expected along heavily traveled roads and near busy intersections. Wind speed and atmospheric mixing also influence CO concentrations; however, under inversion conditions prevalent in the San Joaquin Valley, CO concentrations may be more uniformly distributed over a broad area (Trinity, 2022a, p. 3-7).

Internal combustion engines, principally in vehicles, produce CO due to incomplete fuel combustion. Various industrial processes also produce CO emissions through incomplete combustion. Gasoline-powered motor vehicles are typically the major source of this contaminant. Table 4.2-3 reports no CO data is available for the three-year period from 2018 through 2020; historically Bakersfield area data for CO has been below the CAAQS and NAAQS (Trinity, 2022a, p. 3-7).

Health Effects

CO does not irritate the respiratory tract but passes through the lungs directly into the blood stream, and by interfering with the transfer of fresh oxygen to the blood, deprives sensitive tissues of oxygen, thereby aggravate cardiovascular disease, causing fatigue, headaches, and dizziness. CO is not known to have adverse effects on vegetation, visibility, or materials (Trinity, 2022a, p. 3-7).

4. *Nitrogen Dioxide (NO₂) and Hydrocarbons*

Kern County has been designated as an attainment area for the NAAQS for NO₂. NO₂ is the "whiskey brown" colored gas readily visible during periods of heavy air pollution. Mobile sources and oil and gas production account for nearly all of the County's NO_x emissions, most of which is emitted as NO₂. Combustion in motor vehicle engines, power plants, refineries and other industrial operations are the primary sources in the region. Railroads and aircraft are other potentially significant sources of combustion air contaminants. Oxides of nitrogen are direct participants in photochemical smog reactions. The emitted compound, nitric oxide, combines with oxygen in the atmosphere in the presence of hydrocarbons and sunlight to form NO₂ and O₃. NO₂, the most significant of these pollutants, can color the atmosphere at concentrations as low as 0.5 ppm on days of 10-mile visibility. Oxides of nitrogen (NO_x) are an important air pollutant in the region because it is a primary receptor of ultraviolet light, which initiates the reactions producing photochemical smog. It also reacts in the air to form nitrate particulates (Trinity, 2022a, p. 3-7).

Motor vehicles are the major source of reactive hydrocarbons in the basin. Other sources include evaporation of organic solvents and petroleum production and refining operations. Table 4.2-3 shows that the Federal and State NO₂ standards have not been exceeded at the Bakersfield area-monitoring stations over the three-year period of 2018 through 2020. Hydrocarbons are not currently monitored.

Health Effects

Certain hydrocarbons can damage plants by inhibiting growth and by causing flowers and leaves to fall. Levels of hydrocarbons currently measured in urban areas are not known to cause adverse effects in humans. However, certain members of this contaminant group are important components in the reactions, which produce photochemical oxidants (Trinity, 2022a, p. 3-7).

5. *Sulfur Dioxide (SO₂)*

Kern County has been designated as an attainment area for the NAAQS for SO₂. SO₂ is the primary combustion product of sulfur, or sulfur containing fuels. Fuel combustion is the major source of this pollutant, while chemical plants, sulfur recovery plants, and metal processing facilities are minor contributors. Gaseous fuels (natural gas, propane, etc.) typically have lower percentages of sulfur containing compounds than liquid fuels such as diesel or crude oil. SO₂ levels are generally higher in the winter months. Decreasing levels of SO₂ in the atmosphere reflect the use of natural gas in power plants and boilers. Table 4.2-3 shows no data has been reported over the three-year period in Kern County (Trinity, 2022a, pp. 3-7 to 3-8).

Health Effects

At high concentrations, SO₂ irritates the upper respiratory tract. At lower concentrations, when respiration in combination with particulates, SO₂ can result in greater harm by injuring lung tissues. Sulfur oxides (SO_x), in combination with moisture and oxygen, results in the formation of sulfuric acid, which can yellow the leaves of plants, dissolve marble, and oxidize iron and steel. SO_x can also react to produce sulfates that reduce visibility and sunlight. (Trinity, 2022a, p. 3-8)

6. *Lead (Pb) and Suspended Sulfate*

Ambient Pb levels have dropped dramatically due to the increase in the percentage of motor vehicles that run exclusively on unleaded fuel. Ambient Pb levels in Bakersfield are well below the ambient standard and are expected to continue to decline; the data reported in Table 4.2-3 only shows the highest concentration as the number of days exceeding standards are not reported. Suspended sulfate levels have stabilized to the point where no excesses of the State standard are expected in any given year. (Trinity, 2022a, p. 3-8).

Health Effects

Pb affects most organs in the body, and children are most susceptible to the effects of Pb. In children, Pb can cause behavior and learning problems, slowed growth, anemia, and hearing problems. In adults, Pb can lead to decreased kidney function, reproductive problems, and cardiovascular effects, such as increased blood pressure and incidence of hypertension. Suspended sulfates are part of PM_{2.5} and therefore have similar health effects. These health effects include reduced lung function, aggravated asthmatic symptoms, and increased risk of emergency department visits, hospitalizations, and death in people who have chronic heart or lung disease (Trinity, 2022a, p. 3-8).

7. *Volatile Organic Compounds (VOCs) and Reactive Organic Gases (ROGs)*

The terms VOCs and ROGs are used interchangeably. VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O₃ to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.

Similar to VOC, ROGs are also precursors in forming O₃ and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and NO_x react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O₃, which is a criteria pollutant.

Organic chemicals are widely used as ingredients in household products. Paints, varnishes and wax all contain organic solvents, as do many cleaning, disinfecting, cosmetic, degreasing and hobby products. Fuels are made up of organic chemicals. All of these products can release organic compounds while you are using them, and, to some degree, when they are stored.

Health Effects

Breathing VOCs or ROGs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system as well as other organs. Some VOCs and ROGs can cause cancer. Not all VOCs and ROGs have all these health effects, though many have several.

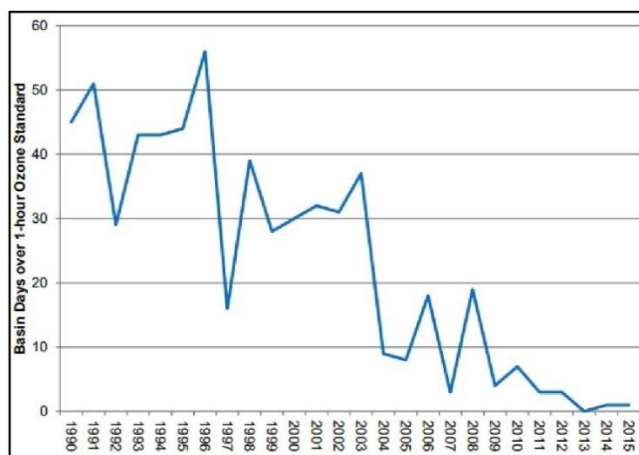
E. Regional Air Quality Trends

The Project site is within the jurisdiction of the SJVAPCD. The SJVAPCD is made up of eight counties in California's Central Valley: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and the SJVAB portion of Kern. This region makes up the SJVAB. The SJVAPCD is responsible for developing comprehensive plans and regulatory programs for the region to attain federal air quality standards by dates specified in federal law. The SJVAPCD also is responsible for meeting State standards by the earliest date achievable, using reasonably available control measures. The SJVAPCD's air programs began development in the 1980s and have greatly improved the air quality in the San Joaquin Valley (Valley). Emissions in the Valley have reduced drastically through clean air technology and emission control measures for stationary sources and area sources, while vehicular emissions have been reduced by technologies implemented at the State level by CARB (Trinity, 2022a, p. 3-8).

As discussed above, the SJVAPCD is the lead agency charged with regulating air quality emission reductions for the entire SJVAB. SJVAPCD created various Air Quality Attainment Plans (AQAPs)

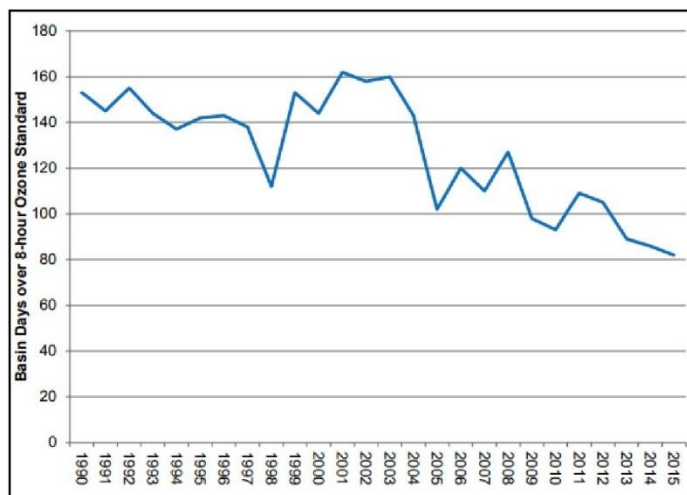
which represent a regional blueprint for achieving healthful air in the Valley. Emissions of O₃, NO_x, PM₁₀, and PM_{2.5} have been decreasing in the Valley since 1980 and are projected to continue to decrease despite challenging geography and meteorology that exacerbate the formation and retention of high levels of air pollution. In addition, the SJVAB is one of the fastest growing regions in California, with increasing population resulting in increasing vehicle miles traveled (VMTs). Although vehicle miles traveled in the Valley continue to increase, NO_x and Volatile Organic Compound (VOC) levels are decreasing because of the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. NO_x emissions from electric utilities have also decreased due to use of cleaner fuels and renewable energy. As shown in Figure 4.2-1, *Basin Days Exceeding O₃ 1-Hour Standard*, and Figure 4.2-2, *Basin Days Exceeding O₃ 8-Hour Standard*, the total number of days exceeding federal O₃ 1-hour and 8-hour standards (respectively) has significantly decreased since 1990 (Trinity, 2022a, pp. 3-8 to 3-9).

Figure 4.2-1 Basin Days Exceeding O₃ 1-Hour Standard



(Trinity, 2022a, Figure 3-2)

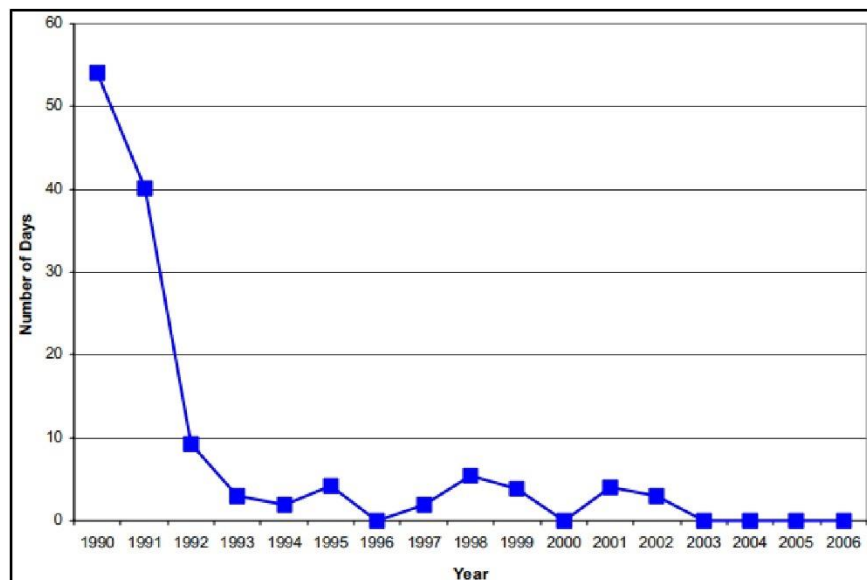
Figure 4.2-2 Basin Days Exceeding O₃ 8-Hour Standard



(Trinity, 2022a, Figure 3-3)

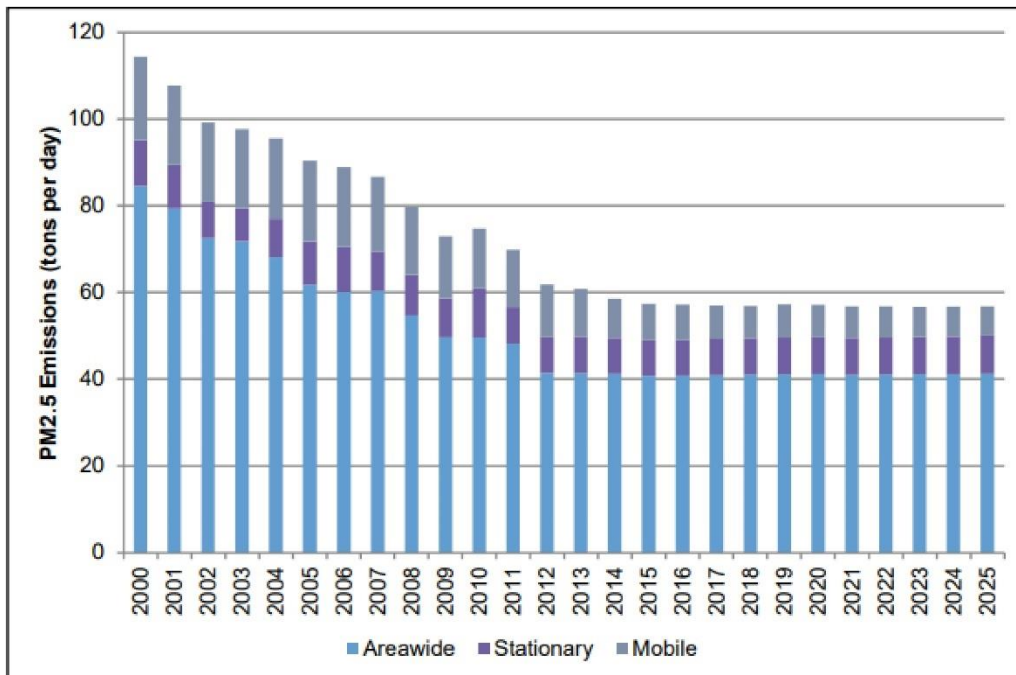
The overall trends of PM₁₀ and PM_{2.5} levels in the air (not emissions) show an overall improvement since 1990. Area wide sources (fugitive dust from roads, consumer products, wood burning, and other sources) contribute the greatest amount of direct particulate matter emissions. PM₁₀ levels in the Valley have improved greatly; San Joaquin Valley has not had a single 24-hour PM₁₀ violation since 2003, as shown in Figure 4.2-3, *Number of Days Exceeding PM₁₀ NAAQS*. PM_{2.5} and NO_x emissions have decreased significantly since 2000, as shown in Figure 4.2-4, *Average Annual PM_{2.5} Emissions*, and Figure 4.2-5, *Average Annual NO_x Emissions*, which also conservatively project emissions out to 2025. NO_x is a significant PM_{2.5} precursor, and the Valley is NO_x-limited, so SJVAPCD relies heavily on NO_x emissions to reduce PM_{2.5}. Figure 4.2-6, *Average PM_{2.5} Concentrations*, shows that average PM_{2.5} concentrations have also decreased since 2000, despite low precipitation totals and increase in atmospheric stability, which provides evidence that the SJVAPCD and CARB efforts have been achieving permanent emissions reductions (Trinity, 2022a, pp. 3-9 to 3-10).

Figure 4.2-3 Number of Days Exceeding PM₁₀ NAAQS



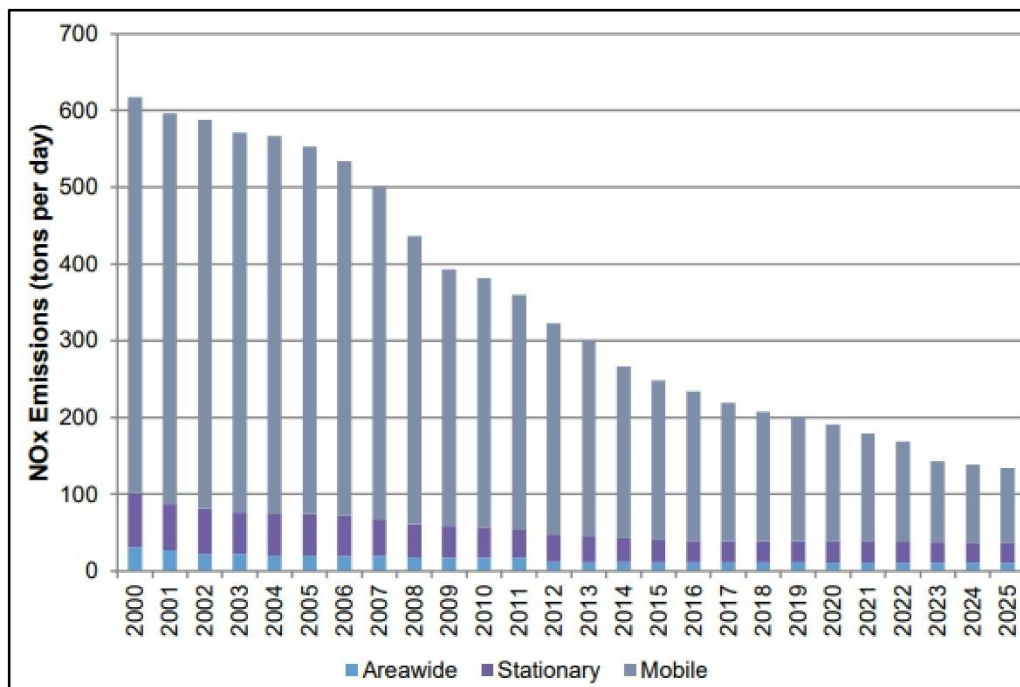
(Trinity, 2022a, Figure 3-4)

Figure 4.2-4 Average Annual PM_{2.5} Emissions



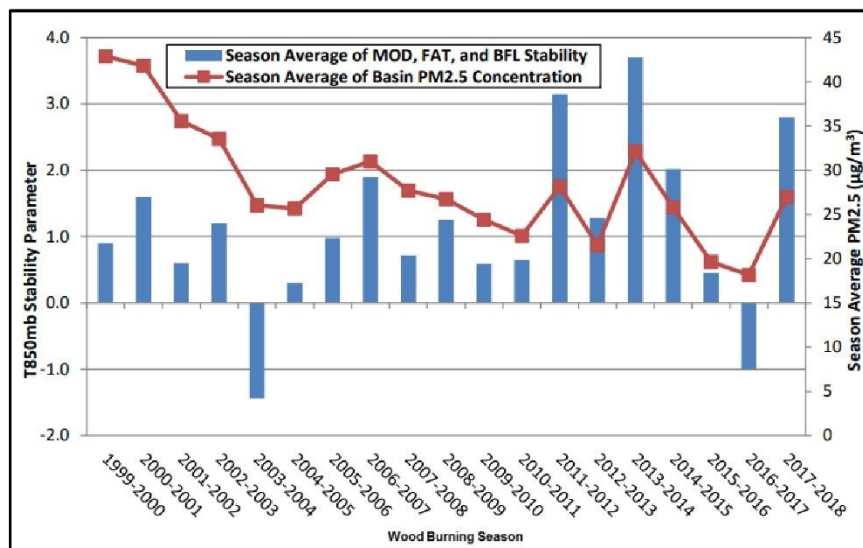
(Trinity, 2022a, Figure 3-5)

Figure 4.2-5 Average Annual NO_x Emissions



(Trinity, 2022a, Table 3-6)

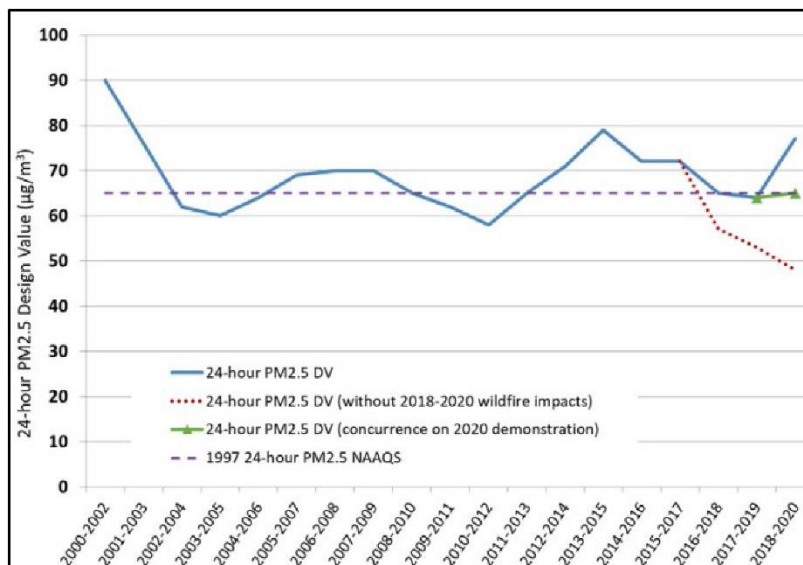
Figure 4.2-6 Average PM_{2.5} Concentrations



(Trinity, 2022a, Table 3-7)

California experienced its worst drought in over a century between 2011 and 2015. The lack of ample precipitation and extended periods of stagnation in the winter seasons overwhelmed the SJVAPCD's control measures and strategies, which contributed to higher than expected PM_{2.5} concentrations in the Valley. In addition, the Valley experienced significant wildfire impacts as well as data collection issues at the Valley's peak air monitoring site in Bakersfield during the 2018-2020 period. Through the 2018 Plan for the 1997, 2006, and 2012 PM_{2.5} Standards (2018 PM_{2.5} Plan), SJVAPCD submitted documentation to CARB and EPA to demonstrate that the 1997 PM_{2.5} 24-hour standard was met by the 2020 attainment target. The demonstration included documenting the severe wildfire impacts in 2020 as an "exceptional event." Figure 4.2-7, *PM_{2.5} 24-Hour Design Value Trend*, shows the Valley's 24-hour PM_{2.5} design value through 2020, with trend lines for the design value including and excluding the exceptional event impacts. EPA formally approved the exceptional event in July 2021, so the Valley was able to demonstrate that it meets the 1997 PM_{2.5} 24-hour standard (Trinity, 2022a, pp. 3-11 to 3-12).

Figure 4.2-7 PM_{2.5} 24-Hour Design Value Trend

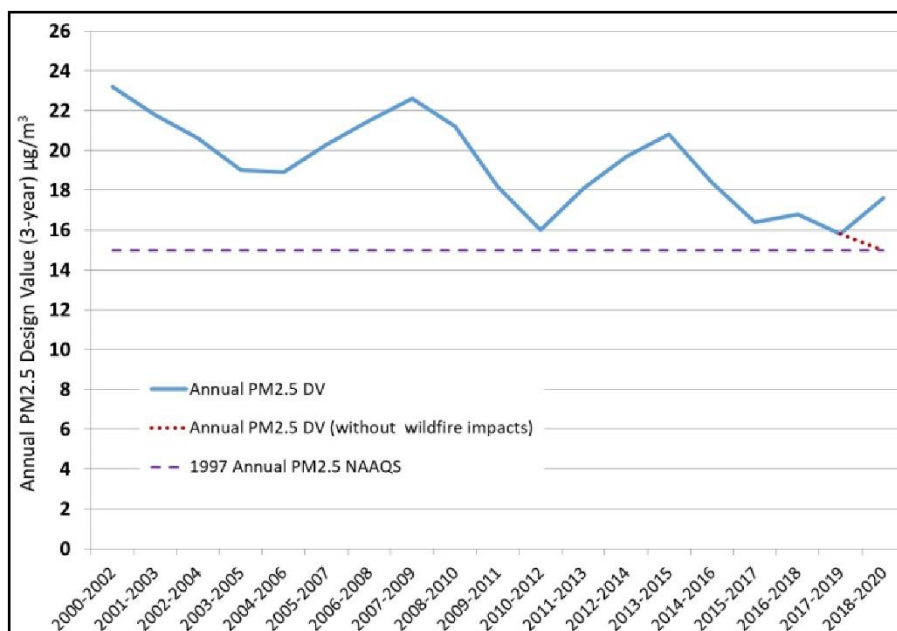


(Trinity, 2022a, Figure 3-8)

Regarding the 1997 PM_{2.5} annual standard, the Valley would have met the standard by 2020 if not for the significant wildfire impacts and the data collection issues. The annual PM_{2.5} levels in the Valley have seen a continued steady decline, as shown in Figure 4.2-8, *PM_{2.5} Annual Average Design Value Trend*. After excluding the exceptional event, only one Bakersfield monitoring site exceeded the annual standard due to the data collection issues. Due to this issue, SJVAPCD and CARB prepared an administrative revision to the 2018 PM_{2.5} Plan to establish a new attainment target date for the 1997 annual PM_{2.5} standard of December 31, 2023 (Trinity, 2022a, p. 3-12).

Through the combined efforts of SJVAPCD and CARB air programs, emissions of O₃, NO_x, PM₁₀, and PM_{2.5} in the Valley have decreased significantly. However, as the Valley is still in nonattainment for PM_{2.5} and O₃, SJVAPCD continues to implement different strategies to meet the federal air quality standards (Trinity, 2022a, p. 3-13).

Figure 4.2-8 PM_{2.5} Annual Average Design Value Trend



(Trinity, 2022a, Figure 3-9)

4.2.2 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the federal and State environmental laws and related regulations governing air quality emissions.

A. Federal Regulations

1. Federal Clean Air Act

The Clean Air Act (CAA; 42 U.S.C. § 7401 et seq.) is the comprehensive federal law that regulates air emissions from stationary and mobile sources. Among other things, this law authorizes Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and public welfare and to regulate emissions of hazardous air pollutants, which include ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO_x), sulfur dioxide (SO₂), particulate matter (PM₁₀), PM_{2.5}, and lead (Pb).

One of the goals of the CAA was to set and achieve NAAQS in every state by 1975 in order to address the public health and welfare risks posed by certain widespread air pollutants. The setting of these pollutant standards was coupled with directing the states to develop state implementation plans (SIPs), applicable to appropriate industrial sources in the state, in order to achieve these standards. The CAA was amended in 1977 and 1990 primarily to set new goals (dates) for achieving attainment of NAAQS since many areas of the country had failed to meet the deadlines (EPA, 2021h).

The sections of the federal CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions). Title I provisions address

the urban air pollution problems of O₃ (smog), CO, and PM₁₀. Specifically, it clarifies how areas are designated and re-designated "attainment." It also allows EPA to define the boundaries of "nonattainment" areas: geographical areas whose air quality does not meet Federal air quality standards designed to protect public health (EPA, 2021f). Mobile source emissions are regulated in accordance with the CAA Title II provisions. These standards are intended to reduce tailpipe emissions of hydrocarbons, CO, and NO_x on a phased-in basis that began in model year 1994. Automobile manufacturers also are required to reduce vehicle emissions resulting from the evaporation of gasoline during refueling. These provisions further require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas (EPA, 2021g).

Section 112 of the Clean Air Act addresses emissions of hazardous air pollutants. Prior to 1990, CAA established a risk-based program under which only a few standards were developed. The 1990 Clean Air Act Amendments revised Section 112 to first require issuance of technology-based standards for major sources and certain area sources. "Major sources" are defined as a stationary source or group of stationary sources that emit or have the potential to emit 10 tons per year or more of a hazardous air pollutant or 25 tons per year or more of a combination of hazardous air pollutants. An "area source" is any stationary source that is not a major source (EPA, 2021h).

For major sources, Section 112 requires that EPA establish emission standards that require the maximum degree of reduction in emissions of hazardous air pollutants. These emission standards are commonly referred to as "maximum achievable control technology" or "MACT" standards. Eight years after the technology-based MACT standards are issued for a source category, EPA is required to review those standards to determine whether any residual risk exists for that source category and, if necessary, revise the standards to address such risk (EPA, 2021h).

2. *National Emissions Standards for Hazardous Air Pollutants (NESHAPs) Program*

National Emission Standards for Hazardous Air Pollutants (NESHAP) are stationary source standards for hazardous air pollutants. Hazardous air pollutants (HAPs) are those pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects. The EPA develops national enforcement initiatives that focus on significant environmental risks and noncompliance patterns. For Fiscal Years 2014 to 2016, the Cutting Hazardous Air Pollutants National Initiatives Strategy focuses on categories of sources that emit HAPs (EPA, 2022).

Sources subject to NESHAPs are required to perform an initial performance test to demonstrate compliance. To demonstrate continuous compliance, sources are generally required to monitor control device operating parameters which are established during the initial performance test. Sources may also be required to install and operate continuous emission monitors to demonstrate compliance. Consistent with EPA's Clean Air Act Stationary Source Compliance Monitoring Strategy, NESHAP sources that meet the Clean Air Act definition of "major source" generally receive a full compliance evaluation by the state or regional office at least once every two years (EPA, 2022).

B. State Regulations

1. California Clean Air Act (CCAA)

The California Clean Air Act (CCAA) establishes numerous requirements for district plans to attain state ambient air quality standards for criteria air contaminants. The CCAA mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the State's ambient air quality standards, the California Ambient Air Quality Standards (CAAQS), by the earliest practical date. The California Air Resources Board (CARB) established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, established standards for sulfates, visibility, hydrogen sulfide, and vinyl chloride. Generally, the CAAQS are more stringent than the NAAQS. For districts with serious air pollution, its attainment plan should include the following: no net increase in emissions from new and modified stationary sources; and best available retrofit technology for existing sources (SCAQMD, n.d.).

2. Air Toxic "Hot Spots" Information and Assessment Act

The Air Toxic "Hot Spots" Information and Assessment Act of 1987, commonly known as AB 2588, (Health & Safety Code §§ 44300, et seq.) requires facilities emitting specified quantities of pollutants to conduct risk assessments describing the health impacts to neighboring communities created by their emissions of numerous specified hazardous compounds. If the district determines the health impact to be significant, neighbors must be notified. In addition, state law requires the facility to develop and implement a plan to reduce the health impacts to below significance, generally within five years. Additional control requirements for hazardous emissions from specific industries are established by the state and enforced by districts (SCAQMD, n.d.).

3. Air Quality Management Planning

The California Air Resources Board (CARB) and local air districts throughout the State are responsible for developing clean air plans to demonstrate how and when California will attain air quality standards established under both the CAA and CCAA. For the areas within California that have not attained air quality standards, CARB works with local air districts to develop and implement State and local attainment plans. In general, attainment plans contain a discussion of ambient air quality data and trends; a baseline emissions inventory; future year projections of emissions, which account for growth projections and already adopted control measures; a comprehensive control strategy of additional measures needed to reach attainment; an attainment demonstration, which generally involves complex modeling; and contingency measures. Plans may also include interim milestones for progress toward attainment. Air quality planning activities undertaken by CARB also include the development of policies, guidance, and regulations related to State and federal ambient air quality standards; coordination with local agencies on transportation plans and strategies; and providing assistance to local districts and transportation agencies (CARB, 2012).

4. *California Air Resources Board Rules*

The CARB enforces rules related to air pollutant emissions in the State of California. Rules with applicability to the Project include, but are not limited to, those listed below.

- CARB Rule 2480 (13 CCR 2480): Airborne Toxics Control Measure to Limit School Bus Idling and Idling at Schools, which limits nonessential idling for commercial trucks and school buses within 100 feet of a school.
- CARB Rule 2485 (13 CCR 2485): Airborne Toxic Control Measure to Limit Diesel-Fuel Commercial Vehicle Idling, which limits nonessential idling to five minutes or less for commercial trucks.
- CARB Rule 2449 (13 CCR 2449): In-Use Off-Road Diesel Idling Restricts, which limits nonessential idling to five minutes or less for diesel-powered off-road equipment.

5. *San Joaquin Valley Air Pollution Control District Rules*

The SJVAPCD enforces rules related to air pollutant emissions in the SCAB. Rules with applicability to the Project include, but are not limited to, those listed below.

- Rule 4102 (Nuisance): Rule 4102 prohibits a facility from posing as a nuisance to surrounding receptors and can impose penalties for nuisance issues such as dust, smoke, excess emissions, etc. Compliance with this rule ensures that the area around the Project site will not be adversely impacted by such issues.
- Regulation VIII (Fugitive PM₁₀ Prohibitions): Regulation VIII contains a series of regulations to reduce and/or eliminate generation of particulate matter (PM) that can adversely impact visibility as well as the health and safety of people on-site or in the vicinity of the Project.
 - Rule 8011 (General Requirements): Rule 8011 is to reduce ambient concentrations of fine particulate matter (PM₁₀) by requiring actions to prevent, reduce or mitigate anthropogenic (human-caused) fugitive dust emissions.
 - Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities): Rule 8021 restricts generation of airborne dust and visibility impacts from these activities. Places limits on opacity and equipment operation under certain adverse weather conditions.
 - Rule 8041 (Carryout and Trackout): Rule 8041 requires that equipment and vehicles leaving a construction site control the amount of dirt, soil or mud that is tracked offsite and onto public roadways. This helps eliminate or minimize dust generation and opacity degradation.
 - Rule 8051 (Open Areas): Rule 8051 limits fugitive dust from open areas, i.e., areas on a construction site that are not actively being constructed upon but may generate wind-blown dust.

6. *Truck & Bus Regulation*

Under the Truck and Bus Regulation, adopted by CARB in 2008, all diesel truck fleets operating in California are required to adhere to an aggressive schedule for upgrading and replacing heavy-duty truck engines. Older, more polluting trucks are required to be replaced first, while trucks that already have relatively clean engines are not required to be replaced until later. Pursuant to the Truck and Bus Regulation, all pre-1994 heavy trucks (trucks with a gross vehicle weight rating greater than 26,000 pounds) were removed from service on California roads by 2015. Between 2015 and 2020, pre-2000 heavy trucks were equipped with PM filters and upgraded or replaced with an engine that meets 2010 emissions standards. The upgrades/replacements occurred on a rolling basis based on model year. By 2023, all heavy trucks operating on California roads must have engines that meet 2010 emissions standards. Lighter trucks (those with a gross vehicle weight rating of 14,001 to 26,000 pounds) adhered to a similar schedule, and were all replaced by 2020 (CARB, n.d.).

7. *Advanced Clean Truck Regulation*

In June, 2020, CARB adopted a new Rule requiring truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California will be required to be zero-emission. Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines would be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales. CARB reports that as of 2020, most commercially-available models of zero-emission vans, trucks and buses operate less than 100 miles per day. Commercial availability of electric-powered long-haul trucks is very limited. However, as technology advances over the next 20 years, zero-emission trucks will become suitable for more applications, and several truck manufacturers have announced plans to introduce market ready zero-emission trucks in the future (CARB, 2021).

8. *Senate Bill 535 – Disadvantaged Communities*

Senate Bill 535 (“SB 535”; De León, Chapter 830, 2012) recognizes the potential vulnerability of low-income and disadvantaged communities to poor air quality. Disadvantaged communities in California are specifically targeted for investment of proceeds from the State’s cap-and-trade program. These investments are aimed at improving public health, quality of life, and economic opportunity in California’s most burdened communities while at the same time reducing pollution that causes climate change. Authorized by the California Global Warming Solutions Act of 2006 (AB 32), the State’s cap-and-trade program is one of several strategies that California uses to reduce greenhouse gas emissions that cause climate change. The funds must be used for programs that further reduce emissions of greenhouse gases. SB 535 requires that 25 percent of the proceeds from the Greenhouse Gas Reduction Fund go to projects that provide a benefit to disadvantaged communities. The California Environmental Protection Agency (CalEPA) is charged with the duty to identify disadvantaged communities. CalEPA bases its identification of these communities on geographic, socioeconomic,

public health, and environmental hazard criteria (Health and Safety Code, section 39711, subsection (a)). In this capacity, CalEPA currently defines a disadvantaged community, from an environmental hazard and socioeconomic standpoint, as a community that scores within the top 25 percent of the census tracts, as analyzed by the California Communities Environmental Health Screening Tool (CalEnviroScreen) (OEHHA, 2017).

The Project site's Census Tract 6029003202 is designated as a disadvantaged community. It is ranked by the State as being in the 82nd percentile for pollution burden which, based on the Census Tract's demographic characteristics, results in the Office of Environmental Health Hazard Assessment (OEHHA) ranking the area in the 89th percentile of communities that are disproportionately burdened by multiple sources of pollution (OEHHA, 2022). OEHHA's CalEnviroScreen 4.0, is a screening methodology that the State uses to identify California communities that are disproportionately burdened by multiple sources of pollution. The CalEnviroScreen 4.0 indicators for the Project site's Census Tract were shown in Table 2-1 in EIR Section 2.0, *Environmental Setting*. As indicated in Table 2-1, for the Project site's Census Tract, the highest environmental exposures from air pollutants are from ozone (O₃) (95% pollution burden) and fine particulate matter (PM_{2.5}) (99% pollution burden). The highest human health hazard factors in the Project site's Census Tract are compromised health conditions related to asthma and cardiovascular disease (OEHHA, 2022).

9. Senate Bill 1000 – Environmental Justice in Local Land Use Planning

In an effort to address the inequitable distribution of pollution and associated health effects in low-income communities and communities of color, the Legislature passed and Governor Brown signed Senate Bill 1000 (SB 1000) in 2016, requiring local governments to identify environmental justice communities (called “disadvantaged communities”) in their jurisdictions and address environmental justice in their general plans. This new law has several purposes, including to facilitate transparency and public engagement in local governments' planning and decision-making processes, reduce harmful pollutants and the associated health risks in environmental justice communities, and promote equitable access to health-inducing benefits, such as healthy food options, housing, public facilities, and recreation. SB 1000 requires environmental justice elements to identify objectives and policies to reduce unique or compounded health risks in disadvantaged communities. Generally, environmental justice elements will include policies to reduce the community's exposure to pollution through air quality improvement. SB 1000 affirms the need to integrate environmental justice principles into the planning process to prioritize improvements and programs that address the needs of disadvantaged communities (OAG, n.d.).

10. Assembly Bill 617

Assembly Bill 617 (AB 617) was enacted into law in 2017, and relates to criteria air pollutants and toxic air contaminants from sources other than vehicles. In response to AB 617, the California Air Resources Board (CARB) established the Community Air Protection Program (CAPP or Program). The Program's focus is to reduce exposure in communities most impacted by air pollution. Communities around the State are working together to develop and implement new strategies to measure air pollution and reduce health impacts. This first-of-its-kind statewide effort includes

community air monitoring and community emissions reduction programs. In addition, the Legislature appropriated funding to support early actions to address localized air pollution through targeted incentive funding to deploy cleaner technologies in these communities, as well as grants to support community participation in the AB 617 process. AB 617 also includes new requirements for accelerated retrofit of pollution controls on industrial sources, increased penalty fees, and greater transparency and availability of air quality and emissions data, which will help advance air pollution control efforts throughout the State. This new effort provides an opportunity to continue to enhance air quality planning efforts and better integrate community, regional, and State level programs to provide clean air (CARB, n.d.).

The nearest AB 167 community to the Majestic Gateway Project site is the Arvin, Lamont Community, located approximately 4.5 miles east of the Project site.

4.2.3 BASIS FOR DETERMINING SIGNIFICANCE

According to Section III of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to air quality if the Project or any Project-related component would (OPR, 2019):

- a. Conflict with or obstruct implementation of the applicable air quality plan;*
- b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard;*
- c. Expose sensitive receptors to substantial pollutant concentrations;*
- d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.*

The analysis of Threshold a. focuses on evaluating the Project's consistency with the SJVAPCD's adopted Air Quality Attainment Plans (AQAP) for O₃ and PM₁₀, which are the applicable air quality plans for the Project site and surrounding area.

The analysis of Threshold b. is based on the thresholds of significance identified by SJVAPCD's *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI). The SJVAPCD GAMAQI thresholds are designed to implement the general criteria for air quality emissions as required by the CEQA Guidelines. Table 4.2-4, *SJVAPCD CEQA Thresholds of Significance*, summarizes the SJVAPCD's specific CEQA air quality thresholds.

Table 4.2-4 SJVAPCD CEQA Thresholds of Significance

Criteria Pollutant	Significance Level	
	Construction	Operational
CO	100 tons/yr	100 tons/yr
NOx	10 tons/yr	10 tons/yr
ROG	10 tons/yr	10 tons/yr
SOx	27 tons/yr	27 tons/yr
PM ₁₀	15 tons/yr	15 tons/yr
PM _{2.5}	15 tons/yr	15 tons/yr

(Trinity, 2022a, Table 4-1)

The analysis of Threshold c. is focused on potential localized impacts to air quality, including localized health risks associated with hazardous air pollutants (HAPs). The SJVAPCD's GAMAQI states, "From a health risk perspective there are basically two types of land use projects that have the potential to cause long-term public health risk impacts:

- Type A Projects: Land use projects that will place new toxic sources in the vicinity of existing receptors.
- Type B Projects: Land use projects that will place new receptors in the vicinity of existing toxics sources."

Table 4.2-5, *Measures of Significance - Toxic Air Contaminants*, presents the thresholds of significance used with toxic air contaminants when evaluating HAPs.

Table 4.2-5 Measures of Significance - Toxic Air Contaminants

Agency	Level	Description
Significance Thresholds Adopted for the Evaluation of Impacts Under CEQA		
SJVAPCD	Carcinogens	Maximally Exposed Individual risk equals or exceeds 20 in one million.
	Non-Carcinogens	Acute: Hazard Index equals or exceeds 1 for the Maximally Exposed Individual.
		Chronic: Hazard Index equals or exceeds 1 for the Maximally Exposed Individual.

(Trinity, 2022a, Table 4-2)

The analysis of Threshold c. also is based on whether the Project would cause or contribute to CO "hotspots." The localized Project impacts depend on whether ambient CO levels in the Project vicinity would be above or below NAAQS. If ambient levels are below the standards, a project is considered to have significant impacts if a project's emissions would exceed one or more of these standards. If ambient levels already exceed a State standard, a project's emissions are considered significant if they would increase one-hour CO concentrations by 10 ppm or more or eight-hour CO concentrations by 0.45 ppm or more (Trinity, 2022a, pp. 4-7 to 4-8).

In addition, the analysis of Threshold c. also is based on whether the proposed Project has the potential to generate fugitive dust and suspend Valley Fever spores with the dust that could then reach nearby sensitive receptors, and whether the Project would result in potential impacts to construction workers from naturally occurring asbestos (Trinity, 2022a, pp. 4-10 to 4-11).

The analysis of Threshold d. focuses on the Project's potential to result in odor impacts that could affect a substantial number of people. The SJVAPCD's GAMAQI states "An analysis of potential odor impacts should be conducted for both of the following two situations:

1. Generators – projects that would potentially generate odorous emissions proposed to locate near existing sensitive receptors or other land uses where people may congregate, and
2. Receivers – residential or other sensitive receptor projects or other projects built for the intent of attracting people locating near existing odor sources" (Trinity, 2022a, p. 4-11).

The GAMAQI also states, "The District has identified some common types of facilities that have been known to produce odors in the San Joaquin Valley Air Basin. These are presented in [Table 4.2-6, *SJVAPCD Screening Levels for Potential Odor Sources*], along with a reasonable distance from the source within which, the degree of odors could possibly be significant. [Table 4.2-6] can be used as a screening tool to qualitatively assess a project's potential to adversely affect area receptors." Projects that do not include any of the uses identified in Table 4.2-6 are not expected to be a source of objectionable odors (Trinity, 2022a, p. 4-11).

With respect to cumulatively-considerable impacts, Attachment A of Kern County's *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* states "the following threshold are defined for purposes of determining cumulative effects as the baseline for 'considerable'...Projects in the San Joaquin Valley Air Pollution Control District...will be subject to the following significance thresholds." The thresholds outlined in the guidelines mirror the individual project significance thresholds of 15 tons per year for PM₁₀ and 10 tons per year for NO_x and ROG. Therefore, owing to the inherently cumulative nature of air quality impacts, the threshold for whether a project would make a cumulatively considerable contribution to a significant cumulative impact is simply whether the project would exceed project-level thresholds (Trinity, 2022a, pp. 4-2 to 4-3).

Table 4.2-6 SJVAPCD Screening Levels for Potential Odor Sources

Type of Facility	Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations (e.g. auto body shops)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile

(SJAPCD, 2015, Table 6)

4.2.4 IMPACT ANALYSIS

Threshold a: Would the Project conflict with or obstruct implementation of the applicable air quality plan?

Air quality impacts from proposed projects within the City of Bakersfield are controlled through policies and provisions of the SJVAPCD and the Metropolitan Bakersfield General Plan. In order to demonstrate that a proposed project would not cause further air quality degradation in either the SJVAPCD's plan to improve air quality within the air basin or the federal requirements to meet certain air quality compliance goals, each project should also demonstrate consistency with the SJVAPCD's adopted AQAPs for O₃ and PM₁₀. The SJVAPCD is required to submit a "Rate of Progress" document to CARB that demonstrates past and planned progress toward reaching attainment for all criteria pollutants. The California Clean Air Act (CCAA) requires air pollution control districts with severe or extreme air quality problems to provide for a 5% reduction in non-attainment emissions per year. The AQAP prepared for the San Joaquin Valley by the SJVAPCD complies with this requirement. CARB reviews, approves, or amends the document and forwards the plan to the EPA for final review and approval within the SIP (Trinity, 2022a, p. 6-1).

Air pollution sources associated with stationary sources are regulated through the permitting authority of the SJVAPCD under the New and Modified Stationary Source Review Rule (SJVAPCD Rule 2201). Owners of any new or modified equipment that emits, reduces, or controls air contaminants, except those specifically exempted by the SJVAPCD, are required to apply for an Authority to Construct and Permit to Operate (SJVAPCD Rule 2010). Additionally, best available control technology (BACT) is required on specific types of stationary equipment and are required to offset both stationary source emission increases along with increases in cargo carrier emissions if the specified threshold levels are exceeded (SJVAPCD Rule 2201, 4.7.1). Through this mechanism, the SJVAPCD would ensure that all stationary sources within the Project site would be subject to the standards of the SJVAPCD to

ensure that new developments do not result in net increases in stationary sources of criteria air pollutants (Trinity, 2022a, p. 6-1).

Required Evaluation Guidelines

State CEQA Guidelines and the Federal Clean Air Act (Sections 176 and 316) contain specific references on the need to evaluate consistencies between the proposed Project and the applicable AQAP. To accomplish this, CARB has developed a three-step approach to determine a project's conformity with the applicable AQAP:

1. *Determination that an AQAP is being implemented in the area where the project is being proposed.* The SJVAPCD has implemented the current, modified AQAP as approved by CARB.
2. *The proposed project must be consistent with the growth assumptions of the applicable AQAP.* The proposed Project land use type was not anticipated in the current growth assumptions. Therefore, growth assumptions in the Kern County General Plans would be modified with the approval of the proposed Project.
3. *The Project must contain in its design all reasonably available and feasible air quality control measures.* The proposed Project incorporates various policy and rule-required implementation measures that would reduce related emissions.

The CCAA and AQAP identify transportation control measures as methods to further reduce emissions from mobile sources. Strategies identified to reduce vehicular emissions such as reductions in vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, and traffic congestion, in order to reduce vehicular emissions, can be implemented as control measures under the CCAA as well. Additional measures may also be implemented through the building process such as providing electrical outlets on exterior walls of structures to encourage use of electrical landscape maintenance equipment or measures such as electrical outlets for electrical systems on diesel trucks to reduce or eliminate idling time (Trinity, 2022a, p. 6-1).

As the growth represented by the proposed Project would be updated in the City of Bakersfield and Kern County General Plans and incorporated into the AQAP, conclusions may be drawn from the following criteria (Trinity, 2022a, p. 6-2):

1. That, by definition, the proposed emissions from the Project are below the SJVAPCD's established emissions impact thresholds;
2. That the primary source of emissions from the Project will be motor vehicles that are licensed through the State of California and whose emissions are already incorporated into CARB's San Joaquin Valley Emissions Inventory.

Based on these factors and the analysis presented under Threshold b., below, while the primary source of air pollutant emissions from the Project would be from motor vehicles, prior to mitigation the Project

would generate operational emissions of ROG and NO_x that exceed the SJVAPCD's thresholds, and as such the proposed Project would be inconsistent with the AQAP prior to mitigation (Trinity, 2022a, p. 6-2).

Consistency with the Kern County Council of Government's Regional Conformity Analysis

The Kern Council of Governments (Kern COG) Regional Conformity Analysis (Kern COG 2018) Determination demonstrates that the regional transportation expenditure plans (Destination 2042 Regional Transportation Plan and Federal Transportation Improvement Program) in the Kern County portion of the San Joaquin Valley air quality attainment areas would not hinder the efforts set out in CARB's SIP for each area's non-attainment pollutants (CO, O₃, and PM₁₀). The analysis uses an adopted regional growth forecast, governed by both the adopted Kern COG Policy and Procedure Manual and a Memorandum of Understanding between the County of Kern and Kern COG (representing itself and outlying municipal member agencies) (Trinity, 2022a, p. 6-2).

The Kern COG Regional Conformity Analysis considers General Plan Amendments (GPA) and zone changes that were enacted at the time of the analysis as projected growth within the area based on land use designations incorporated within the Kern County General Plan. Land use designations that are altered based on subsequent GPAs that were not included in the Regional Conformity Analysis were not incorporated into the Kern COG analysis. Consequently, if a proposed project is not included in the regional growth forecast using the latest planning assumptions, it may not be said to conform to the regional growth forecast. Under the current City of Bakersfield Zoning, the Project site is designated as "C-2/P.C.D. Combining" and "C-2 Commercial" (Trinity, 2022a, p. 6-2).

Under current policies, only after a General Plan Amendment (GPA) is approved can housing and employment assumptions be updated to reflect the capacity changes. Since the proposed development does require a GPA and zone change, the existing growth forecast would be modified to reflect these changes. In order to determine whether the forecasted growth for the Project area is sufficient to account for the projected increases in employment, an analysis based on Kern COG regional forecast was conducted (Trinity, 2022a, p. 6-3).

The adopted growth forecast for the project site is distributed to Traffic Analysis Zones (TAZ) (see Figure 6-2 of the Project's AQIA, included as *Technical Appendix B*). In order to evaluate the impacts to the Project area, a one-mile radius analysis was conducted that included TAZs 133, 134, 135, 136, 137, 138, 168, 170, 171, 172, 404, 966, 967, 1131, 1132, 1133, 1134, 1135, 1136, 1148, and 1312. This places the Project site at the center of the analysis area and provides a conservative evaluation of the TAZ data. Kern COG has predicted an increase in growth in population (21%), an increase in growth in housing (25%), and an increase in employment (36%) between 2020 and 2030. Table 4.2-7, *TAZ Analysis Area Projected Growth Analysis*, provides the projected growth rates for the TAZ analysis area, while Table 4.2-8, *Percent Increase/Decrease on TAZ Analysis Area*, provides the percent increase/decrease for the analysis area population, households, and employment (Trinity, 2022a, pp. 6-3 to 6-4).

Table 4.2-7 TAZ Analysis Area Projected Growth Analysis

Years	2017	2020	2030
Population	27,356	28,566	34,563
Households	7,726	8,200	10,249
Employment	2,017	2,249	3,060

(Trinity, 2022a, Table 6-1)

Table 4.2-8 Percent Increase/Decrease on TAZ Analysis Area

Years	Percent Increase / Decrease		
	Population	Households	Employment
2017*	0	0	0
2020	4	6	12
2030	21	25	36

*Baseline year of 2017 was valued at "0" to measure net percent increase/decrease.

(Trinity, 2022a, Table 6-2)

Employment forecast for the TAZ analysis area appears to be sufficient to account for 100% of the planned employment growth attributed to the proposed Project. In order to be considered “consistent” and, therefore, in conformance with the AQAP, these increases would need to occur over the same time as the adopted growth forecast. From 2020 through 2030, 811 new jobs are forecasted to be added to the analysis area (Trinity, 2022a, p. 6-4). Because the proposed Project would be built before 2030 and could potentially provide more jobs than AQAP forecasted for the area, it is conservatively concluded that the Project would be inconsistent with the AQAP.

Conclusion

Based on the foregoing analysis, prior to mitigation the proposed Project would conflict with the AQAP due to emissions of ROG and NO_x that exceed the SJVAPCD thresholds of significance for these pollutants, and by potentially providing more jobs in the area beyond those projected by the AQAP through 2030. Accordingly, prior to mitigation the proposed Project would conflict with the applicable air quality plan, and impacts would be significant on both a direct and cumulatively-considerable basis.

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

A. Project-Related Emissions

The analysis of Threshold b. focuses on whether the proposed Project would violate the short-term (construction) or long-term (operational) thresholds of significance established as part of SJVAPCD’s GAMAQI. Project emissions were estimated for the following Project development stages (Trinity, 2022a, p. 4-3):

- **Short-term (Construction and Demolition):** Construction emissions of the proposed Project were estimated in the California Emissions Estimator Model (CalEEMod) using

the proposed construction schedule and defaults for construction equipment for the development of a 910,966 square feet of distribution warehousing, 101,219 square feet of refrigerated warehousing, and 187,500 square foot of retail shopping center.

- **Long-term (Operations):** Long term emissions also were estimated in CalEEMod using model defaults for operations of a 910,966 square feet of distribution warehousing, 101,219 square feet of refrigerated warehousing, and 187,500 square foot of retail shopping center. Vehicle trip rates were revised per the Project Trip Generation data provided in the Project's Traffic Impact Study (EIR *Technical Appendix J*). The commercial-nonwork (C-NW) trip distance was revised to a standard 50-mile distance for the distribution warehouse.

Provided below is an analysis of the Project's potential to result in near- and long-term impacts to regional air quality.

1. Short-Term Emissions (Construction)

A list of specific construction equipment was provided by the Project Applicant; the construction emissions were therefore based on the equipment list and adjusted accordingly for the proposed Project's land use type and development intensity. Applying model defaults as well as a conservative analysis approach, construction emissions were estimated as if the warehouse (Phase 1) construction started in March of 2023 and the commercial uses (Phase 2) construction started in January of 2025. Phase 1 construction is estimated to take 22 months, with operations starting in 2024. Phase 2 is estimated to take 59 months, with operations starting in 2029. The dates entered into the CalEEMod program represent the earliest construction timeline, which would estimate the worst-case emissions as construction equipment technology and emissions improve over time; therefore, all estimated emission totals are conservative and reflect a reasonable and legally sufficient estimate of potential impacts. All construction equipment activity levels assumed were based on the applicant-specified values for type and number of equipment and CalEEMod adjusted hours per day and horsepower (Trinity, 2022a, p. 4-4).

SJVAPCD's required measures for all projects also were applied, which require construction contractors to water exposed areas 3 times per day, and to ensure vehicle speeds on site are restricted to 15 miles per hour (mph) (Trinity, 2022a, p. 4-4).

Table 4.2-9, *Short-Term Construction-Related Project Emissions*, presents the Project's short-term emissions based on the anticipated construction period. As calculated with CalEEMod, the estimated short-term construction-related emissions would not exceed SJVAPCD significance threshold levels during any given year and would therefore be less than significant (Trinity, 2022a, pp. 4-4 to 4-5).

2. Long-Term Emissions (Project Operation)

Long-term emissions are caused by operational mobile, area, and energy sources. Provided below is an evaluation of the Project's operational emissions and a determination as to whether the Project's

operational emissions would exceed the thresholds of significance established by the SJVAPCD. (Trinity, 2022a, p. 4-5)

Fugitive Dust Emissions

Operation of the Project at full build-out is not expected to present a substantial source of fugitive dust (PM₁₀) emissions. The main source of PM₁₀ emissions would be from vehicular traffic associated with the Project. (Trinity, 2022a, p. 4-5).

PM₁₀, on its own as well as in combination with other pollutants, creates a health hazard. The SJVAPCD's Regulation VIII establishes required controls to reduce and minimizing fugitive dust emissions. Applicable SJVAPCD Rules and Regulations were previously summarized above in Subsection 4.2.2.B.5. The Project would comply with applicable SJVAPCD Rules and Regulations, as well as the local zoning codes (Trinity, 2022a, p. 4-5).

Table 4.2-9 Short-Term Construction-Related Project Emissions

Emissions Source	Pollutant (tons/year)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Unmitigated						
2023	0.60	4.93	4.93	0.01	0.80	0.38
2024	7.57	1.23	1.75	0.00	0.18	0.08
2025	0.30	2.38	2.53	0.01	0.88	0.35
2026	0.21	1.00	2.17	0.01	0.46	0.15
2027	0.20	1.00	2.11	0.01	0.46	0.15
2028	0.20	0.99	2.06	0.01	0.46	0.15
2029	1.64	0.54	1.09	0.00	0.20	0.07
Maximum Annual Emission	7.57	4.93	4.93	0.01	0.88	0.38
Mitigated						
2023	0.60	4.93	4.93	0.01	0.60	0.31
2024	7.57	1.23	1.75	0.00	0.18	0.08
2025	0.30	2.38	2.53	0.01	0.52	0.22
2026	0.21	1.00	2.17	0.01	0.46	0.15
2027	0.20	1.00	2.11	0.01	0.46	0.15
2028	0.20	0.99	2.06	0.01	0.46	0.15
2029	1.64	0.54	1.09	0.00	0.20	0.07
Maximum Annual Emission	7.57	4.93	4.93	0.01	0.60	0.31
Significance Threshold	10	10	100	27	15	15
Is Threshold Exceeded for a Single Year After Mitigation?	No	No	No	No	No	No

(Trinity, 2022a, Table 4-3)

Exhaust Emissions

Project-related transportation activities from employees and consumers would generate mobile source ROG, NO_x, SO_x, CO, PM₁₀, and PM_{2.5} exhaust emissions. Exhaust emissions would vary substantially from day to day but would average out over the course of an operational year. The variables factored into estimating total Project emissions include: level of activity, site characteristics, weather conditions, and number of visitors. As the Project is not expected to generate an adverse change in current activity levels, substantial emissions are not anticipated (Trinity, 2022a, p. 4-5).

3. Projected Emissions

The proposed Project is expected to have long-term air quality impacts as shown in Table 4.2-10, *Project Operational Emissions*. The output from the CalEEMod runs is available in Appendix B to the Project's AQIA (*Technical Appendix B*). As shown in Table 4.2-10, operation-related emissions, as calculated by CalEEMod and without the implementation of mitigation measures, would be less than the SJVAPCD significant threshold levels for CO, SO_x, PM₁₀, and PM_{2.5}, but would exceed significant threshold levels for ROG and NO_x. Prior to mitigation, the Project would emit 10.57 tons/year of ROG whereas the significance threshold is 10 tons/year. Prior to mitigation, the Project also would emit 26.91 tons/year of NO_x whereas the significance threshold is 10 tons/year.

Both ROG and NO_x are precursors to ozone. Accordingly, prior to mitigation, the proposed Project would result in a cumulatively-considerable net increase of criteria pollutants (i.e., O₃) for which the Project region is non-attainment under an applicable federal or State ambient air quality standard, resulting a significant direct and cumulatively-considerable impact (Trinity, 2022a, p. 4-6).

Table 4.2-10 Project Operational Emissions

Emissions Source	Pollutant (tons/year)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Unmitigated Operational Emissions						
Area Emissions	5.76	0.00	0.03	0.00	0.00	0.00
Energy Emissions	0.10	0.90	0.75	0.01	0.07	0.07
Mobile Emissions	4.71	26.01	43.36	0.20	14.76	4.17
<i>Total</i>	<i>10.57</i>	<i>26.91</i>	<i>44.15</i>	<i>0.21</i>	<i>14.83</i>	<i>4.24</i>
Mitigated Operational Emissions						
Area Emissions	5.76	0.00	0.03	0.00	0.00	0.00
Energy Emissions	0.10	0.90	0.75	0.01	0.07	0.07
Mobile Emissions	4.51	23.25	39.78	0.18	13.02	3.68
<i>Total</i>	<i>10.37</i>	<i>24.14</i>	<i>40.57</i>	<i>0.19</i>	<i>13.09</i>	<i>3.75</i>
Mitigated Operational Emissions (Mitigated with ISR)						
Phase 1	5.99	15.80	14.21	0.13	3.97	2.10
Phase 2	4.38	2.23	26.36	0.05	3.44	1.65
<i>Total</i>	<i>10.37</i>	<i>18.03</i>	<i>40.57</i>	<i>0.19</i>	<i>7.41</i>	<i>3.75</i>
Mitigated Operational Emissions (Mitigated with VERA¹)						
Final Operational Emissions	9.50	9.50	40.57	0.19	13.09	3.75
SJVAPCD Threshold	10	10	100	27	15	15
Is Threshold Exceeded After Mitigation?	No	No	No	No	No	No
Source: Trinity Consultants 2021						
1. See Section 7.4 for discussion on VERA.						

1. VERA = Voluntary Emissions Reduction Agreement
(Trinity, 2022a, Table 4-4)

B. Project Impacts to Ambient Air Quality

An ambient air quality analysis also was performed to determine if the proposed Project has the potential to impact ambient air quality through a violation of the ambient air quality standards or a substantial contribution to an existing or projected air quality standard. The basis for the analysis is dispersion modeling and the Project's long-term air quality impacts, as shown in Table 4.2-10 (Trinity, 2022a, p. 4-12).

The maximum off-site ground level concentration of each pollutant for the 1-hour, 3-hour, 8-hour, 24-hour, and annual periods was predicted using the most recent version of EPA's AMS/EPA Regulatory Model (AERMOD) dispersion software under the BREEZE AERMOD interface. Emissions were evaluated for each pollutant on a short-term (correlating to pollutant averaging period) and long-term (annual) basis, with the exception of CO that was evaluated only for short-term exposures since there are no long-term significance thresholds for CO (Trinity, 2022a, p. 4-12).

Most mobile emissions predicted by CalEEMod would occur beyond the Project boundary because of vehicle trips. The results of the air dispersion modeling, presented in Table 4.2-11, *Predicted Ambient Air Quality Impacts*, demonstrate that the maximum impacts attributable to the Project, when considered in addition to the existing background concentrations, are below the applicable ambient air quality standard for NO_x, SO_x, and CO. The electronic AERMOD output files are provided in Appendix E to the Project's AQIA (*Technical Appendix B*) (Trinity, 2022a, p. 4-12).

Table 4.2-11 Predicted Ambient Air Quality Impacts

Pollutant	Averaging Period	Background (µg/m ³)	Project (µg/m ³)	Project + Background (µg/m ³)	NAAQS (µg/m ³)	CAAQS (µg/m ³)
NO ₂	1-hour	115.1	34.14	149.24	188.68	338
	Annual	12	1.32	13.32	100	56
SO ₂	1-hour	45.7	0.34	46.04	196	655
	3-hour	41.13	0.18	41.31	1,300	---
	24-hour	6.21	0.07	6.28	365	105
	Annual	1.3	0.01	1.31	---	---
CO	1-hour	2100	137.40	2237.40	40,000	23,000
	8-hour	1970	48.37	2018.37	10,000	10,000
PM ₁₀	24-hour	196.8	5.37	202.17	150	50
	Annual	39	1.28	40.28	---	20
PM _{2.5}	24-hour	159.7	1.93	161.63	35	---
	Annual	19.7	0.46	20.16	12	12

(Trinity, 2022a, Table 4-7)

Pre-Project concentrations of PM₁₀ and PM_{2.5} exceed their respective ambient air quality standards. Therefore, these averaging periods for PM_{2.5} and PM₁₀ are evaluated in accordance with the Prevention of Significant Deterioration (PSD) procedure in Title 40, Code of Federal Regulations (CFR), Part 52.21. It is EPA's policy to use significant impact levels (SIL) to determine whether a proposed new or modified source will cause or contribute significantly to an Ambient Air Quality Standard (AAQS) or PSD increment violation. The SJVAPCD has developed SILs for fugitive emissions of PM₁₀ and PM_{2.5}. Over 97% of the Project's predicted PM₁₀ and PM_{2.5} concentrations are attributable to fugitive emissions from unpaved road travel. Therefore, SJVAPCD SILs are applicable to this Project. If a source's maximum impacts are below the SIL, the source is judged to not cause or contribute significantly to an AAQS or increment violation (Trinity, 2022a, p. 4-13).

A comparison of the proposed impact from the Project to the District SIL values is provided in Table 4.2-12, *Comparison of Maximum Modeled Project Impacts with Significance Thresholds*. Because the Project's modelled PM₁₀ and PM_{2.5} would be below the SJVAPCD's significance levels for 24-hour and annual concentrations, the Project's contribution to potential violations of ambient air quality standards would be less than significant (Trinity, 2022a, p. 4-13).

Table 4.2-12 Comparison of Maximum Modeled Project Impacts with Significance Thresholds

Pollutant	Averaging Period	Predicted Concentration ($\mu\text{g}/\text{m}^3$)	SIL ($\mu\text{g}/\text{m}^3$)
PM ₁₀	24-hour	5.37	10.4
	Annual	1.28	2.08
PM _{2.5}	24-hour	1.93	42.5
	Annual	0.46	0.63

(Trinity, 2022a, Table 4-8)

Threshold c: Would the Project expose sensitive receptors to substantial pollutant concentrations?

The nearest AB 617 community to the Project site is the Arvin, Lamont Community, located approximately 4.5 miles east of the Project site. AB 617 communities are those that have been selected by the State to undergo air quality monitoring and receive assistance for air quality improvement programs due to findings that these communities are disproportionately burdened by socioeconomic disadvantages and air pollution, despite significant emissions reductions that have already been achieved regionally. On May 18, 2022, the SJVAPCD published a draft Community Emissions Reduction Program (CERP) for the Arvin, Lamont Community. Based on emissions inventory and current air monitoring data in this community, the CERP reports that the pollutants of concern include PM_{2.5}, Black Carbon, NO_x, CO, O₃, VOCs, and pesticides (SJVAPCD, 2022, p. 18).

AB 617 legislation requires that a CERP identify cost-effective measures to achieve emission reduction targets in the community. The SJVAPCD acknowledged that the District does not have regulatory authority over emissions from mobile sources (SJVAPCD, 2022, p. 63) but encourages voluntary participation in incentive programs for the replacement of older trucks, as the cost to replace older, heavy-duty diesel trucks operating in Arvin/Lamont with zero or near-zero emission technology is approximately \$200,000.00 per truck (SJVAPCD, 2022, p. 66). As discussed in Subsection 4.13, *Transportation*, the Project's truck traffic is expected to access the Project site from SR-99 with abuts the Project site to the west, and not travel through the Arvin or Lamont Communities. The other CERP measures relate to school busses, agricultural operations, agricultural equipment, lawn and garden equipment, use of older and high polluting passenger cars by community residents, electric car-sharing potential, e-bike programs, urban greening (landscaping), road/sidewalk/bike path improvements, public fleet vehicles, and stationary source inspection programs, none of which have relevancy to the proposed Project, which is located approximately 4.5 miles away from the AB 617 community.

Sensitive receptors located near the Project site, however, do have the potential to be adversely affected by Project-related air pollutants. Sensitive receptors are defined as locations where young children, chronically ill individuals, the elderly, or people who are more sensitive than the general population reside, such as schools, hospitals, nursing homes, and daycare centers. The nearest residential sensitive receptor to the proposed Project site is approximately 0.04-mile east of the Project site. The 19 known non-residential sensitive receptors within 2 miles of the Project site are listed below in Table 4.2-13, *Sensitive Receptors Located within Two Miles of the Project Site* (Trinity, 2022a, p. 4-6).

Table 4.2-13 Sensitive Receptors Located within Two Miles of the Project Site

Receptor	Type of Facility	Distance from Project in Miles	Direction from Project
Residences (various)		Closest – 0.04 miles	W, E
Greenfield State Preschool	Pre-K, Public	1.6	NE
Greenfield County Preschool	Pre-K, Public	1.2	E
Ridgeview Christian Preschool	Pre-K, Private	1.77	SE
Horizon Elementary	K-5, Public	0.6	E
Golden Valley High School	9-12, Public	0.75	SE
Ollivier Middle School	6-8, Public	0.72	E
Valle Verde Elementary School	K-5, Public	0.98	E
McKee Middle School	6-8, Public	1.23	SE
W A Kendrick Elementary School	K-5, Public	1.5	N
Greenfield Middle School	6-8, Public	1.56	NE
Greenfield Community School	K-8, Public	1.60	NE
Palla Raffaello Elementary	K-5, Public	1.43	NE
Fairview Elementary School	K-5, Public	1.94	NE
Loudon Elementary	K-6, Public	1.57	NW
Granite Point Elementary	K-5, Public	0.59	W
Berkshire Elementary School	K-6, Public	1.17	W
Stonecreek Junior High School	7-8, Public	1.10	W
Ridgeview High School	9-12, Public	1.89	SW
Dolores S. Whitley Elementary School	K-6, Public	1.00	SW

(Trinity, 2022a, Table 4-5)

The proposed Project has the potential to expose sensitive receptors to substantial pollutant concentrations due to emissions of Hazardous Air Pollutants (HAPs), visibility, due to CO “hot spots,” the generation of fugitive dust and the suspension of Valley Fever spores within the local area, and due to naturally occurring asbestos. Each is discussed below.

A. Predicted Health Risk Impacts

The SJVAPCD’s GAMAQI recommends that Lead Agencies consider situations wherein a new or modified source of HAPs is proposed for a location near an existing residential area or other sensitive receptor when evaluating potential impacts related to Hazardous Air Pollutants (HAPs). To predict the potential health risk to the population attributable to emissions of HAPs from the proposed Project, ambient air concentrations were predicted with dispersion modeling to arrive at a conservative estimate of increased individual carcinogenic risk that might occur as a result of continuous exposure over a 70-

year lifetime. Similarly, predicted concentrations were used to calculate non-cancer chronic and acute hazard indices (HIs), which are the ratio of expected exposure to acceptable exposure. The basis for evaluating potential health risk is the identification of sources with increased HAPs. HAP emissions from anticipated heavy-heavy duty (HHD) trucks were evaluated (Trinity, 2022a, p. 4-8).

Health risk is determined using the Hotspots Analysis and Reporting Program (HARP2) software distributed by the CARB. HARP2 requires peak 1-hour emission rates and annual-averaged emission rates for all pollutants for each modeling source. Assumptions used to calculate the emission rates for the proposed Project are discussed below (Trinity, 2022a, p. 4-8).

The most recent version of EPA's AMS/EPA Regulatory Model was used to predict the dispersion of emissions from the proposed Project (BREEZE AERMOD, 2021). The analysis employed all of the regulatory default AERMOD model keyword parameters, including elevated terrain options (Trinity, 2022a, p. 4-8).

For construction health impacts, diesel combustion emissions from diesel on-site construction equipment and HHD trucks from hauling and vendor trips were modeled as an area source for on-site construction activity on the property. Diesel particulate matter was calculated using CalEEMod for on-site construction equipment. A unit emission rate of 1 grams/second (g/sec) was input to AERMOD for the area source (Trinity, 2022a, p. 4-8).

For operational health impacts, diesel combustion emissions from diesel HHD trucks making 584 trips per day for the distribution and refrigerated warehouse combined and 5 trips per week for the retail shopping center were modeled as volume line sources for on-site travel following the most impactful route of travel. HHD truck idling emissions were modeled as a point source with fifteen minutes of idling per trip. Diesel particulate matter (DPM) was calculated using EMFAC approved emission factors for HHD trucks traveling at 15 miles per hour (representative of on-site speed). EMFAC idling emissions were used for Kern County, year 2024, annual for Phase 1 of the proposed Project and Kern County, year 2029, annual for Phase 2 of the proposed Project. EMFAC emission factors are provided by the California Air Resources Board (CARB 2021). A unit emission rate of 1 grams/second (g/sec) was input to AERMOD for each source (Trinity, 2022a, pp. 4-8 to 4-9).

Discrete receptors were placed on residences and businesses within close proximity of the Project site. A total of 970 discrete off-site receptors analyzed. The receptors are shown below in Figure 4.2-9, *Receptors Analyzed for Health Risk*. Elevated terrain options were employed even though there is not complex terrain in the Project area. It should be noted that any impacts to sensitive receptors located further away from the Project site than the modeled receptors would have a lesser impact, as pollutant concentrations disperse over distance (Trinity, 2022a, p. 4-9).

Figure 4.2-9 Receptors Analyzed for Health Risk



(Trinity, 2022a, Figure 4-1)

The SJVAPCD-provided AERMET UStar processed meteorological datasets for the Bakersfield monitoring station, calendar years 2013 through 2017, were input to AERMOD. This was the most recent available dataset available at the time the modeling was conducted. Rural dispersion parameters were used because the operation and the majority of the land surrounding the facility is considered "rural" under the Auer land use classification method (Trinity, 2022a, p. 4-9).

Plot files generated by AERMOD were uploaded to the Air Dispersion Modeling and Risk Assessment Tool (ADMRT) program in the Hotspots Analysis and Reporting Program Version 2 (HARP 2). ADMRT post-processing was used to assess the potential for excess cancer risk and chronic non-cancer effects using the most recent health effects data from the California EPA Office of Environmental Health Hazard Assessment (OEHHA). Risk reports were generated using the derived OEHHA analysis method for carcinogenic risk and non-carcinogenic chronic and acute risk. Site parameters are included in the HARP2 output files contained in the Project's AQIA (*Technical Appendix B*). Total cancer risk was predicted for the inhalation pathway at each receptor. A hazard index was computed for chronic non-cancer health effects for each applicable endpoint and each receptor. There is currently no acute risk associated with DPM emissions; therefore, acute risk has not been calculated (Trinity, 2022a, p. 4-9).

SJVAPCD has set the level of significance for carcinogenic risk at twenty in one million, which is understood as the possibility of causing twenty additional cancer cases in a population of one million people. The level of significance for chronic non-cancer risk is a hazard index of 1.0. All receptors were modeled as residential receptors with a 2-year exposure for Phase 1 construction, 5-year exposure for Phase 2 construction, 70-year exposure for operation. This is conservative since all on-site receptors and business receptors would be exposed less than 70 years (Trinity, 2022a, pp. 4-9 to 4-10).

The carcinogenic risk and the health hazard index (HI) for chronic non-cancer risk at the point of maximum impact (PMI) would not exceed the significance levels of twenty in one million (20×10^{-6}) and 1.0, respectively for the proposed Project. The PMIs are identified by receptor location and risk and are provided in Table 4.2-14, *Potential Maximum Impacts Predicted by HARP2*. The electronic AERMOD and HARP2 output files are provided in Attachment E to the Project's AQIA (*Technical Appendix B*). As shown in Table 4.2-14, the maximum predicted cancer risk for the proposed Project is $1.82\text{E-}05$. The maximum chronic non-cancer hazard index for the proposed Project is $9.75\text{E-}03$. Since the PMI remained below the significance threshold for cancer and chronic risk, the Project would not have a significant adverse effect to any of the surrounding communities (Trinity, 2022a, p. 4-10).

Table 4.2-14 Potential Maximum Impacts Predicted by HARP2

	Value	UTM East	UTM North
Excess Cancer Risk - Total	$1.82\text{E-}05$	316243.6	3906582.2
Construction Phase 1	$1.50\text{E-}05$		
Construction Phase 2	$1.44\text{E-}06$		
Operational	$1.68\text{E-}06$		
Chronic Hazard Index - Total	$9.75\text{E-}03$	316243.6	3906582.2
Construction Phase 1	$8.80\text{E-}03$		
Construction Phase 2	$6.27\text{E-}04$		
Operational	$3.20\text{E-}04$		

(Trinity, 2022a, Table 4-6)

The potential health risk attributable to the proposed Project is determined to be less than significant based on the following conclusions (Trinity, 2022a, p. 4-10):

1. Potential carcinogenic risk from the proposed Project is below the significance level of twenty in a million at each of the modeled receptors;
2. The hazard index for the potential chronic non-cancer risk from the proposed Project is below the significance level of 1.0 at each of the modeled receptors; and
3. The hazard index for the potential acute non-cancer risk was not calculated since there is no acute risk associated with DPM emission; therefore, the proposed Project is considered below the significance level.

Therefore, potential risk to the population attributable to emissions of HAPs from the proposed Project would be less than significant (Trinity, 2022a, p. 4-10).

B. Potential Impacts to Visibility to Nearby Areas

Visibility impact analyses are intended for stationary sources of emissions which are subject to the Prevention of Significant Deterioration (PSD) requirements in 40 Code of Federal Regulations (CFR) Part 60; however, they usually are not conducted for area sources. Because the Project's PM_{10} emissions increase is predicted to be less than the PSD threshold levels, an impact at any Class 1 area or military/airspace operation within 100 kilometers of the Project (including San Rafael Wilderness,

Domeland Wilderness, Edwards Air Force Base, China Lake Naval Weapons Station, and the entire R-2508 Airspace Complex) is extremely unlikely. Therefore, based on the Project's predicted less-than significant PM₁₀ emissions, the Project would be expected to have a less-than-significant impact to visibility at any Class 1 area or military/airspace operation (Trinity, 2022a, p. 4-7).

C. Carbon Monoxide "Hot Spots"

Ambient CO concentrations normally correspond closely to the spatial and temporal distributions of vehicular traffic. Relatively high concentrations of CO would be expected along heavily traveled roads and near busy intersections. CO concentrations also are influenced by wind speed and atmospheric mixing. CO concentrations may be more uniformly distributed when inversion conditions are prevalent in the valley. Under certain meteorological conditions, CO concentrations along a congested roadway or intersection may reach unhealthful levels for sensitive receptors (e.g., children, the elderly, hospital patients, etc.). This localized impact can result in elevated levels of CO, or "hot spots" even though concentrations at the closest air quality monitoring station may be below NAAQS and CAAQS (Trinity, 2022a, p. 4-7).

The localized Project impacts depend on whether ambient CO levels in the Project vicinity would be above or below NAAQS. If ambient levels are below the standards, a project is considered to have significant impacts if a project's emissions would exceed of one or more of these standards. If ambient levels already exceed a State standard, a project's emissions are considered significant if they would increase one-hour CO concentrations by 10 ppm or more or eight-hour CO concentrations by 0.45 ppm or more. There are two criteria established by the SJVAPCD's GAMAQI by which CO "hot spot" modeling is required (Trinity, 2022a, pp. 4-7 to 4-8):

1. A traffic study for the project indicates that the Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity would be reduced to LOS E or F; or
2. A traffic study indicates that the project would substantially worsen an already existing LOS F on one or more streets or at one or more intersections in the project vicinity.

A traffic impact analysis was prepared for the Project (refer to EIR *Technical Appendix J*). Due to the location and traffic increase anticipated from this Project, impacted intersections and roadway segments are anticipated to operate at a LOS of C or better. Therefore, CO "hot spot" modeling was not conducted for this Project and no concentrated excessive CO emissions are expected to be caused once the proposed Project is completed. Accordingly, Project impacts due to CO "hot spots" would be less than significant (Trinity, 2022a, p. 4-8).

D. Potential Impacts from Valley Fever

During construction activities, the proposed Project has the potential to generate fugitive dust and suspend Valley Fever spores (*Coccidioides*) with the dust. Valley Fever is an infection caused by the fungus *Coccidioides*. According to the Centers for Disease Control and Prevention (CDC), most people who breathe in the spores do not get sick, but some people do. Usually, people who get sick with Valley

fever will get better on their own, but some people need antifungal medication. According to the CDC, *Coccidioides* lives in dust and soil in some areas in the southwestern United States. The CDC reports that testing soil for *Coccidioides* is not likely to be useful because the fungus is thought to be common in the soil and even if the soil sample that tests positive for *Coccidioides*, it does not necessarily mean that the soil will release the fungus into the air and cause infection. Also, there are no commercially-available tests to detect *Coccidioides* in soil (CDC, 2022a).

It is possible that onsite workers could be exposed to concentrations of Valley Fever spores as fugitive dust is generated during construction. Accordingly, prior to mitigation the Project has the potential to result in significant localized impacts due to suspended Valley Fever spores that may be generated during Project construction activities and that could adversely affect construction workers and visitors on the Project site during construction (Trinity, 2022a, pp. 4-10 to 4-11).

E. Potential Impacts from Naturally-Occurring Asbestos

Naturally-occurring asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading of development projects, and at mining operations (Trinity, 2022a, p. 4-11).

Serpentinite and/or ultramafic rock are known to be present in 44 of California's 58 counties. These rocks are particularly abundant in the counties associated with the Sierra Nevada foothills, the Klamath Mountains, and Coast Ranges. However, according to information provided by the Department of Conservation Division of Mines and Geology, the Project site is not located in an area where naturally occurring asbestos is likely to be present. Therefore, impacts associated with exposure of construction workers and nearby sensitive receptors to asbestos would be less than significant (Trinity, 2022a, p. 4-11).

F. Conclusion

Based on the preceding analysis, the proposed Project would not expose nearby sensitive receptors to cancer or non-cancer risks exceeding the identified thresholds of significance, and impacts would be less than significant. The Project also would result in less-than-significant impacts associated with air visibility, CO "hot spots," and naturally occurring asbestos. However, the Project does have the potential to expose on-site construction workers to suspended Valley Fever spores that may be generated during Project grading activities. This is a potentially significant impact for which mitigation would be required.

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

As previously indicated, the SJVAPCD's GAMAQI states "An analysis of potential odor impacts should be conducted for both of the following two situations (Trinity, 2022a, p. 4-11):

1. Generators – projects that would potentially generate odorous emissions proposed to locate near existing sensitive receptors or other land uses where people may congregate, and
2. Receivers – residential or other sensitive receptor projects or other projects built for the intent of attracting people locating near existing odor sources."

The GAMAQI also states, "The District has identified some common types of facilities that have been known to produce odors in the San Joaquin Valley Air Basin. These are presented in [EIR Table 4.2-6], along with a reasonable distance from the source within which, the degree of odors could possibly be significant. [EIR Table 4.2-6] can be used as a screening tool to qualitatively assess a project's potential to adversely affect area receptors." Because the Project includes only warehouse and shopping center land uses, and because the anticipated activities for the Project site are not listed in EIR Table 4.2-6 as a source that would create objectionable odors, the Project is not reasonably expected to be a source of objectionable odors (Trinity, 2022a, p. 4-11).

Based on the provisions of the SJVAPCD's GAMAQI, the proposed Project would not exceed any screening trigger levels to be considered a source of objectionable odors or odorous compounds. Furthermore, there does not appear to be any significant source of objectionable odors in close proximity that may adversely impact the Project site when it is in operation. Additionally, the Project emissions estimates indicate that it would not be expected to adversely impact surrounding receptors. As such, the proposed Project would not be a source of any odorous compounds nor would it likely be impacted by any odorous source (Trinity, 2022a, p. 4-11). Impacts would be less than significant.

4.2.5 CUMULATIVE IMPACT ANALYSIS

By its very nature, air pollution has a cumulative impact. The SJVAB's nonattainment status is a result of past and present development within the SJVAB. Furthermore, attainment of ambient air quality standards can be jeopardized by increasing emissions-generating activities in the region. No single project would be sufficient in size, by itself, to result in nonattainment of the regional air quality standards. Instead, a project's emissions may be cumulatively considerable to air quality within the SJVAB. When assessing whether there is a new significant cumulative effect, the Lead Agency shall consider whether the incremental effects of the project are cumulatively considerable. Per CEQA Guidelines §15064(h)(3) a Lead Agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program, including, but not limited to an air quality attainment or maintenance plan that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located (Trinity, 2022a, p. 5-1).

Attachment A of Kern County's *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* states that, "The following threshold are defined for purposes of determining cumulative effects as the baseline for 'considerable.' Projects in the San Joaquin Valley Air Pollution Control District...will be subject to the following significance thresholds." The thresholds outlined in the guidelines mirror the individual project significance thresholds of 15 tons per year for PM₁₀ and 10 tons per year for NO_x and ROG. Therefore, owing to the inherently cumulative nature of air quality impacts, the threshold for whether a project would make a cumulatively-considerable contribution to a significant cumulative impact is simply whether the project would exceed project-level thresholds. Based on the analysis conducted for this Project, the Project would result in less-than-significant impacts on an individual basis. The analysis herein, however, also considered impacts of the proposed Project in conjunction with the impacts of other projects previously proposed in the area. The following cumulative impacts were considered (Trinity, 2022a, p. 5-1):

- Cumulative O₃ Impacts (ROG and NO_x) from numerous sources within the region including transport from outside the region. O₃ is formed through chemical reactions of ROG and NO_x in the presence of sunlight.
- Cumulative CO Impacts produced primarily by vehicular emissions.
- Cumulative PM₁₀ impacts from within the region and locally from the various projects. Such projects may cumulatively produce a significant amount of PM₁₀ if several projects conduct grading or earthmoving activities at the same time.
- Hazardous Air Pollutant (HAP) Impacts on sensitive receptors.

A. Cumulatively-Considerable Impacts due to Conflict with the AQAP

As indicated under the analysis of Threshold a., prior to mitigation the Project would generate operational emissions of ROG and NO_x that exceed the SJVAPCD's thresholds, and as such the proposed Project would be inconsistent with the AQAP prior to mitigation. As other cumulative developments within the SJVAB also have a potential to conflict with the AQAP, Project impacts would be cumulatively considerable prior to mitigation.

B. Cumulative Regional Air Quality Impacts

The most recent, certified SJVAB Emission Inventory data available from the SJVAPCD is based on data gathered for the 2020 annual inventory. This data is used to assist the SJVAPCD in demonstrating attainment of Federal 1-hour O₃ Standards. Table 4.2-15, *Comparative Analysis Based on SJV Air Basin 2020 Inventory (Tons per Year)*, provides a comparative look at the impacts proposed by the proposed Project to the SJVAB Emissions Inventory. It should be noted that the values presented in Table 4.2-15 reflect the Project's emission levels after the implementation of the mitigation measures identified in Subsection 4.2.7 (Trinity, 2022a, p. 5-1).

Table 4.2-15 Comparative Analysis Based on SJV Air Basin 2020 Inventory (Tons per Year)

	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Kern County - 2020	21,535.0	15,877.5	27,338.5	511.0	13,651.0	3,723.0
SJVAB - 2020	108,113.0	74,204.5	162,425.0	2,847.0	96,652.0	21,535.0
Proposed Project	9.50	9.50	40.57	0.19	13.09	3.75
Proposed Project's % of Kern	0.044%	0.060%	0.148%	0.037%	0.096%	0.101%
Proposed Project's % of SJVAB	0.009%	0.013%	0.025%	0.007%	0.014%	0.017%
Note: This is the latest inventory available as of December 2021 Source: CARB 2021b						

(Trinity, 2022a, Table 5-1)

As shown in Table 4.2-15 the proposed Project does not pose a substantial increase to basin emissions, as such basin emissions would be essentially the same if the Project is approved (Trinity, 2022a, p. 5-2).

Table 4.2-16, *Emission Inventory SJVAB 2025 Projection (Tons per Year)*, Table 4.2-17, *Emission Inventory SJVAB - Kern County Portion 2025 Projection (Tons per Year)*, and Table 4.2-18, *2025 Emissions Projections - Proposed Project, Kern County, and SJVAB*, provide CARB Emissions Inventory projections for the year 2025 for both the SJVAB and the Kern County portion of the air basin. Looking at the SJVAB Emissions predicted by the CARB year 2025 emissions inventory, the Kern County portion of the air basin is a moderate source of the emissions. The proposed Project produces a small portion of the total emissions in both Kern County and the entire SJVAB (Trinity, 2022a, p. 5-2).

As shown in Table 4.2-16 through Table 4.2-18, the proposed Project would pose an inconsequential impact on regional O₃ and PM₁₀ formation. The regional contribution to these cumulative impacts would be negligible and additionally, with mitigation the Project would not exceed cumulatively-considerable thresholds since the Project would be less than thresholds outlined in Kern County's Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports. However, because the Project would require mitigation to reduce potential ROG and NO_x emissions to below the thresholds of significant, the Project's cumulatively-considerable impacts to regional air quality due to emissions of O₃ and PM₁₀ would be cumulatively considerable prior to mitigation (Trinity, 2022a, p. 5-1).

C. Cumulative Local Air Quality Impacts

SJVAPCD uses a single threshold for determination of significance for both project-specific and cumulative impacts. Air quality in SJVAB has improved over the past decades as previously discussed in subsection 4.2.1.E, which indicates that the single threshold is sufficient for assessing cumulative impacts. Prior to mitigation, the proposed Project would generate emissions of ROG and NO_x that exceed the SJVAPCD thresholds of significance as previously shown on Table 4.2-10. Accordingly, the Project's impacts to local air quality would be significant and cumulatively considerable prior to mitigation (Trinity, 2022a, p. 5-3).

Table 4.2-16 Emission Inventory SJVAB 2025 Projection (Tons per Year)

	ROG	NOx	CO	SOx	PM10	PM2.5
Total Emissions	107,346.5	52,450.5	145,963.5	2,920.0	95,922.0	21,279.5
Percent Stationary Sources	32.78%	19.28%	6.93%	85.00%	5.97%	15.44%
Percent Area-Wide Sources	52.70%	5.15%	13.30%	3.75%	89.38%	71.87%
Percent Mobile Sources	14.52%	75.57%	79.77%	11.25%	4.68%	12.86%
Total Stationary Source Emissions	35,186.0	10,110.5	10,110.5	2,482.0	5,730.5	3,285.0
Total Area-Wide Source Emissions	56,575.0	2,701.0	19,418.0	109.5	85,738.5	15,293.5
Total Mobile Source Emissions	15,585.5	39,639.0	116,435.0	328.5	4,489.5	2,737.5

(Trinity, 2022a, Table 5-2)

Table 4.2-17 Emission Inventory SJVAB - Kern County Portion 2025 Projection (Tons per Year)

	ROG	NOx	CO	SOx	PM10	PM2.5
Total Emissions	21,352.5	10,804.0	24,674.0	474.5	13,651.0	3,686.5
Percent Stationary Sources	53.50%	25.68%	15.83%	84.62%	11.76%	31.68%
Percent Area-Wide Sources	34.70%	4.05%	7.69%	0.00%	82.62%	56.44%
Percent Mobile Sources	11.97%	70.27%	76.33%	15.38%	5.61%	10.89%
Total Stationary Source Emissions	11,424.5	2,774.0	3,905.5	401.5	1,606.0	1,168.0
Total Area-Wide Source Emissions	7,409.5	438.0	1,898.0	0.0	11,278.5	2,080.5
Total Mobile Source Emissions	2,555.0	7,592.0	18,834.0	73.0	766.5	401.5

(Trinity, 2022a, Table 5-3)

Table 4.2-18 2025 Emissions Projections - Proposed Project, Kern County, and SJVAB

	ROG	NOx	PM10
Proposed Project	9.50	9.50	13.09
Kern County	21,353	10,804	13,651
SJVAB	107,347	52,451	95,922
Proposed Project Percent of Kern County	0.044%	0.088%	0.096%
Proposed Project Percent of SJVAB	0.009%	0.018%	0.014%
Kern County Percent of SJVAB	19.89%	20.60%	14.23%
Source: CARB 2021b			

(Trinity, 2022a, Table 5-4)

As also discussed under the analysis of Threshold c., because the Project's PM₁₀ emissions increase is predicted to be less than the PSD threshold levels, the Project would have a less-than-significant cumulatively-considerable impact to visibility. Although the Project has the potential to expose construction workers to fugitive dust containing suspended Valley Fever spores, impacts associated with such spores would be limited to the Project site and future on-site construction workers and visitors. As such, cumulatively-considerable impacts would not occur. Similarly, potential impacts associated with naturally-occurring asbestos would be less than significant on a cumulatively-considerable basis because the Project site is not located in an area where naturally occurring asbestos is likely to be present.

With respect to CO “hot spots,” and as also discussed under the analysis of Threshold c., the SJVAPCD’s GAMAQI has identified CO impacts from impacted traffic intersections and roadway segments as being potentially cumulatively considerable. Traffic increases and added congestion caused by a project can combine to cause a violation of the SJVAPCD’s CO standard also known as a “Hotspot”. There are two criteria established by the GAMAQI by which CO “Hot Spot” modeling is required (Trinity, 2022a, p. 5-3):

- A traffic study for the project indicates that the Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to LOS E or F; or
- A traffic study indicates that the project will substantially worsen an already existing LOS F on one or more streets or at one or more intersections in the project vicinity.

As also previously discussed, a traffic generation assessment impact study was prepared for the Project (refer to EIR *Technical Appendix J*). Due to the location and traffic increase anticipated from this Project, impacted intersections and roadway segments are anticipated to operate at a LOS of C or better. Therefore, CO “hot spot” Modeling was not conducted for this Project and no concentrated excessive CO emissions are expected to be caused once the proposed Project is completed (Trinity, 2022a, p. 4-8). Accordingly, Project impacts due to CO “hot spots” would be less than significant on a cumulatively-considerable basis.

D. Cumulative Hazardous Air Pollutants

The GAMAQI also states that when evaluating potential impacts related to HAPs, “impacts of local pollutants (CO, HAPs) are cumulatively significant when modeling shows that the combined emissions from the project and other existing and planned projects will exceed air quality standards.” Because the Project would not be a significant source of HAPS (as previously indicated in Table 4.2-14), the proposed Project would also not result in a significant cumulatively-considerable CO or HAPs impact (Trinity, 2022a, p. 5-3).

E. Cumulatively-Considerable Odor Impacts

As previously indicated under the analysis of Threshold d., because the Project includes only warehouse and shopping center land uses, and because the anticipated activities for the Project site are not listed in Table 4.2-6 as a source that would create objectionable odors, the Project is not expected to be a source of objectionable odors (Trinity, 2022a, p. 4-11). As such, cumulatively-considerable impacts due to odors would be less than significant.

4.2.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Significant Direct and Cumulatively-Considerable Impact. Prior to mitigation the Project would generate operational emissions of ROG and NO_x that exceed the SJVAPCD’s thresholds, and as such the proposed Project would be inconsistent with the AQAP prior to mitigation.

Threshold b: Significant Direct and Cumulatively-Considerable Impact. Project construction emissions would not exceed any of the SJVAPCD significance thresholds. However, prior to mitigation the Project's operational emissions of ROG and NO_x would exceed the SJVAPCD significance thresholds for these pollutants. Because the SJVAB is designated as "nonattainment" for ozone, and because both ROG and NO_x are precursors to ozone, Project-related operational emissions would result in a cumulatively-considerable net increase of criteria pollutants for which the Project region is non-attainment (i.e., ozone). Operational air quality impacts would be significant on both a direct and cumulatively-considerable basis prior to mitigation.

Threshold c: Significant Direct Impact. The Project would not result in air quality emissions that would result in carcinogenic risk or non-cancer risk exceeding the identified thresholds of significance of one in 20 million and 1.0, respectively, and Project cancer and non-cancer risks would therefore be less than significant. The Project also would result in less-than-significant impacts due to visibility to nearby areas, CO "hot spots," and naturally-occurring asbestos. However, prior to mitigation the Project has the potential to result in significant localized impacts due to suspended Valley Fever spores that may be generated during Project construction activities and that could result in adverse health effects to Project construction workers. This is a significant impact on a direct basis prior to mitigation.

Threshold d: Less-than-Significant Impact. Based on the provisions of the SJVAPCD's Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI), the proposed Project would not exceed any screening trigger levels to be considered a source of objectionable odors or odorous compounds. Furthermore, there does not appear to be any significant source of objectionable odors in close proximity that may adversely impact the Project site when it is in operation. Additionally, the Project emissions estimates indicate that it would not be expected to adversely impact surrounding receptors. As such, the proposed Project would not be a source of any odorous compounds nor would it likely be impacted by any odorous source. Impacts would be less than significant.

4.2.7 MITIGATION

AIR MM-1 Prior to the issuance of occupancy permits, the Project Applicant shall enter into a Voluntary Emission Reduction Agreement (VERA) with the SJVAPCD. The VERA is an air quality mitigation measure by which a developer can voluntarily enter into a contractual agreement with the SJVAPCD to mitigate a development project's impact on air quality. Under the agreement, the developer provides funds to the SJVAPCD to administer the implementation of the VERA. The SJVAPCD then identifies emissions reductions projects, funds those projects, and verifies that the specified emission reductions have been successfully achieved. The SJVAPCD considers implementation of a VERA to be a feasible mitigation measure under CEQA, effectively achieving emission reductions necessary to reduce impacts to a less than significant level. The VERA requirements shall include specific terms to reduce the Project's emissions of operational ROG and NO_x to less-than-significant levels, consistent with the assumptions that were relied upon in the Project's Air Quality Impact Analysis to

conclude that Project emissions of ROG and NO_x would be less than significant with mitigation.

AIR MM-2 The Project's construction contractors shall provide training and personal protective respiratory equipment to construction workers and provide information to all construction personnel and visitors to the construction site about Valley Fever. Project construction contractors shall be required by their contracts to provide the training and protective gear, and permit periodic inspection of the construction site by City of Bakersfield staff or its designee to confirm compliance. A note that requires these items is required on all grading plans approved by the City of Bakersfield.

AIR MM-3 Construction equipment staging areas for equipment over 150 horsepower shall be not be located within 1,000 feet of South H Street. The construction equipment staging area location(s) shall be shown on all grading plans and building plans approved by the City of Bakersfield.

4.2.8 DESIGN FEATURES AND REGULATORY REQUIREMENTS

The City of Bakersfield is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Air Quality, which include the following:

AIR RR-4 During construction, all construction contractors shall be subject to compliance with SJVAPCD Regulation VIII (Fugitive PM₁₀ Prohibitions), including the following requirements. Project construction contractors shall be required by their contracts to comply with SJVAPCD Regulation VII, and permit periodic inspection of the construction site by City of Bakersfield staff or its designee to confirm compliance. A note that requires these items is required on all grading plans approved by the City of Bakersfield.

- a) Water previously exposed surfaces (soil) whenever visible dust is capable of drifting from the site or approaches 20% opacity.
- b) Water all unpaved haul roads a minimum of three-times/day or whenever visible dust from such roads is capable of drifting from the site or approaches 20% opacity.
- c) Reduce speed on unpaved roads to less than 15 miles per hour.
- d) Install and maintain a track out control device that meets the specifications of SJVAPCD Rule 8041 if the site exceeds 150 vehicle trips per day or more than 20 vehicle trips per day by vehicles with three or more axles.
- e) Stabilize all disturbed areas, including storage piles, which are not being actively utilized for production purposes using water, chemical stabilizers or by covering with a tarp or other suitable cover.

- f) Control fugitive dust emissions during land clearing, grubbing, scraping, excavation, leveling, grading, or cut and fill operations with application of water or by presoaking.
- g) When transporting materials offsite, maintain a freeboard limit of at least 6 inches and cover or effectively wet to limit visible dust emissions.
- h) Limit and remove the accumulation of mud and/or dirt from adjacent public roadways at the end of each workday. (Use of dry rotary brushes is prohibited except when preceded or accompanied by sufficient wetting to limit visible dust emissions and use of blowers is expressly forbidden).
- i) Stabilize the surface of storage piles following the addition or removal of materials using water or chemical stabilizer/suppressants.
- j) Remove visible track-out from the site at the end of each workday.
- k) Cease grading or other activities that cause excessive (greater than 20% opacity) dust formation during periods of high winds (greater than 20 mph over a one-hour period).

AIR RR-5 Construction contractors and painters shall comply with the provisions of SJVAPCD Rule 4601 (Architectural Coatings), during the construction of all buildings and facilities. Construction contractors shall be required by their contracts to comply with Rule 4601, and permit periodic inspection of the construction site by City of Bakersfield staff or its designee to confirm compliance. A note that requires compliance is required on all building plans approved by the City of Bakersfield.

AIR RR-6 All buildings shall be constructed in compliance with Title 24 of the Uniform Building Code to minimize total consumption of energy. The City of Bakersfield shall confirm Title 24 compliance prior to the issuance of building permits.

AIR RR-7 Construction contractors shall comply with the provisions of SJVAPCD Rule 4641 during the construction and pavement of all roads and parking areas. Construction contractors shall be required by their contracts to comply with Rule 4641, and the City of Bakersfield shall confirm Rule 4641 compliance prior to the issuance of permits and approval for paved surfaces. The following are prohibited:

- a) Rapid cure cutback asphalt;
- b) Medium cure cutback asphalt;
- c) Slow cure cutback asphalt (as specified in SJVAPCD Rule 4641, Section 5.1.3); or Emulsified asphalt (as specified in SJVAPCD Rule 4641, Section 5.1.4).

AIR RR-8 In compliance with SJVAPCD Rule 9510 (Indirect Source Review (ISR)), the Project Applicant or its successor in interest shall submit an Air Impact Assessment (AIA)

application to the SJVAPCD, which will identify emission reduction measures for emissions of NO_x and PM₁₀. The performance measures listed below can be met through any combination of on-site emission reduction measures or off-site fees.

- a) Related to construction-related emissions, the exhaust emissions for construction equipment greater than fifty (50) horsepower used or associated with the project shall be reduced by the following amounts from the statewide average as estimated by the ARB: 20% of the total NO_x emissions, and 45% of the total PM₁₀ exhausts emissions. Construction emissions can be reduced by using less polluting construction equipment, which can be achieved by utilizing add-on controls, cleaner fuels, or newer lower emitting equipment.
- b) Related to operational emissions, NO_x Emissions shall be reduced by 33.3% of the project's operational baseline NO_x emissions over a period of ten years as quantified in the approved AIA. PM₁₀ emissions shall be reduced by 50% of the project's operational baseline PM₁₀ emissions over a period of ten years as quantified in the approved AIA.

AIR RR-9 If any building user occupying the Project site introduces equipment subject to regulation under SJVAPCD Rule 2010 (Permits Required), the owners of such equipment that emits, reduces, or controls air contaminants, except those specifically exempted by the SJVAPCD, are required to apply for an Authority to Construct and Permit to Operate from the SJVAPCD.

AIR RR-10 If any building user occupying the Project site introduces equipment subject to JVAPCD Rule 2201 (New and Modified Stationary Source Review Rule), the owners of such equipment are required to requires the review of new and modified Stationary Sources of air pollution and the provision of mechanisms including emission trade-offs by which apply for an Authority to Construct, demonstrating that the stationary source of air pollutants would not interfere with the attainment or maintenance of Ambient Air Quality Standards. Rule 2201 also requires that there shall be no net increase in emissions above specified thresholds from new and modified Stationary Sources of all nonattainment pollutants and their precursors.

4.2.9 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a: Less-than-Significant Impact with Mitigation Incorporated. As previously shown in Table 4.2-10, with implementation of Mitigation Measure AIR MM-1, and with mandatory compliance with standard regulatory requirements, including SJVAPCD Rule 9510 (ISR), Project operational emissions of ROG and NO_x would be reduced to below the SJVAPCD's thresholds of significance. Accordingly, with mitigation, the Project would not conflict with the AQAP and impacts would be reduced to less-than-significant levels.

Threshold b: Less-than-Significant Impact with Mitigation Incorporated. As previously shown in Table 4.2-10, with implementation of Mitigation Measure AIR MM-1, and with mandatory compliance with standard regulatory requirements, including SJVAPCD Rule 9510 (ISR), Project operational emissions of ROG and NO_x would be reduced to below the SJVAPCD's thresholds of significance. Accordingly, with mitigation the Project would not result in a cumulatively considerable net increase of criteria pollutants (i.e., O₃, PM₁₀, and PM_{2.5}) for which the Project region is non-attainment under an applicable federal or State ambient air quality standard, and impacts would be reduced to less-than-significant levels.

Threshold c: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure AIR MM-22 would ensure that future construction workers and site visitors associated with the Project are provided training/education regarding Valley Fever, and would ensure that all construction workers are provided with protective respiratory equipment for use during ground-disturbing activities that could generate particulate matter. Implementation of the required mitigation would reduce Project localized impacts due to Valley Fever to less-than-significant levels.

4.3 BIOLOGICAL RESOURCES

The information and analysis in this Subsection 4.3 is based primarily on a technical study titled, “Biological Resources Evaluation,” dated August 2021, prepared by McCormick Biological, Inc. (herein, “MBI”), and included as EIR *Technical Appendix C* to this EIR (MBI, 2021). Also included in *Technical Appendix C* are two supporting letters from McCormick Biological, Inc.: 1) a letter dated May 5, 2022 indicating that the biological conditions observed during the April 2021 site visit were reflective of the existing conditions at the time the EIR’s NOP was published in March of 2022, (MBI, 2022a) and 2) a letter dated May 5, 2022 indicating that McCormick Biological conducted a second site visit on May 5, 2022 to assess the proposed Project’s off-site improvements areas and it was determined that no additional biological resources are present beyond those disclosed in the August 2021 Biological Resources Evaluation (MBI, 2022b). Refer to Section 7.0, *References*, for a complete list of reference sources used in this analysis.

4.3.1 EXISTING CONDITIONS

Much like the surrounding area, the Project site was formerly in agricultural use. From 1932 to 1954, the Project site was in use for agricultural purposes and had two residences or farm structures on the northeast corner of the property. By 1956, these structures had been demolished, but the property continued to be used for agriculture. From 1968 to 2006, a residential/farm structure was located on the southern portion of the property and the property remained in active agricultural use. By 2009, the property was vacant with unpaved roads, no structures were present, and the property no longer was in agricultural use (Nova Group, 2021, p. 17). The undeveloped lands outside of the Project site have been previously disturbed by agriculture, with recovering annual grassland that has been periodically disturbed by off-road vehicle trespass, and more recently, fires (MBI, 2021, p. 6).

Based on field surveys conducted by McCormick Biological, Inc. (MBI), the Project site is undeveloped with disturbed annual grassland and ruderal vegetation where vegetation is present. No undisturbed, natural lands are present on or in the vicinity of the Project site (MBI, 2021, p. 19).

A. Special-status Biological Resources

The Project site is within the range of listed plant taxa, including Bakersfield cactus. In addition, the Project site is located within the geographic range of several threatened and/or endangered wildlife species. Listed plant and animal species are protected primarily through the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). Each of these laws, among other provisions, prohibits take of listed threatened and endangered species. Although the definition of take under each law varies somewhat, in general, injuring or killing listed species without a permit issued from the United States Fish and Wildlife Service (USFWS) and/or the California Department of Fish and Wildlife (CDFW) is unlawful. Under FESA, harassment and/or harm are also considered take for which the USFWS requires a permit (MBI, 2021, p. 4).

Consideration of potential impacts to plant and animal species is required under the FESA, the CESA and the CEQA of 1970; however, the Project site is within the Metropolitan Bakersfield Habitat

Conservation Plan (MBHCP) CESA Incidental Take Permit (ITP) Number (No.) 2081-2013-025-04 boundaries. Potential impacts to species covered by the ITP would be fully mitigated by participation in the MBHCP. (MBI, 2021, pp. 4-5)

Twenty-two special-status plants and 41 wildlife taxa were identified through database queries as potentially occurring on or in the vicinity of the Project site. Special-status plant and animal species identified with at least a low potential to occur on the site are discussed below. Evidence of San Joaquin kit fox occupation was observed on the Project site. A high potential for burrowing owl was concluded and Swainson's hawk, white-tailed kite, and American badger were found to have a low potential to occur on the Project site. (MBI, 2021, pp. 19, 26)

1. *Special-status Plant Species*

Twenty-two special-status plants were evaluated as a result of MBI's literature review. Only five of these plant taxa are state and/or federally listed. CEQA requires consideration of impacts to locally significant plant species and those that meet the criteria for listing but which may not be officially listed under CESA or FESA. No listed or other special-status plant species were observed during field surveys conducted on the Project site and in the Project's off-site disturbance areas and no listed or other special-status plant species were recorded as occurring in any areas that would be physically impacted by the Project. All special-status plant species were eliminated from further consideration because the Project site does not provide suitable habitat or the Project site is out of the range of each taxon. In addition, surveys were conducted by MBI during the potential blooming period for most of the special-status plants identified that occur within the vicinity of the Project site, and none were detected. (MBI, 2021, p. 26)

2. *Special-status Wildlife Species*

Appendix A of *Technical Appendix C* contains a discussion of the potential for each species to occur on the Project site and whether there is a potential for impacts. Special-status wildlife that were determined to have at least a low potential for occurrence in areas that would be physically disturbed by the Project, based on the evaluation contained in Appendix A of *Technical Appendix C* are summarized below and discussed in more detail in *Technical Appendix C*. (MBI, 2021, p. 26)

Burrowing Owl

The burrowing owl (BUOW) is a California species of special concern. It has no federal listing but is protected by the Migratory Bird Treaty Act (MBTA). Based on initial survey results which identified potentially suitable burrows, additional surveys were conducted by MBI. The initial survey was conducted on April 2, 2021, with follow-up surveys on April 28, 2021 and May 27, 2021. No direct or indirect evidence of occupation by burrowing owl was noted during any of the focused surveys conducted on the Project site. (MBI, 2021, pp. 26, 28)

Swainson's hawk

Swainson's hawk are state listed as a threatened species. No potential nest trees are present in areas that would be physically disturbed by the Project. One eucalyptus tree was observed adjacent to SR-99 near the northwest corner of the Project site and a few additional eucalyptus were present along both the east and west sides of SR-99 north of the Project site. A few remnant cottonwood trees were observed north-northeast of the Project site, beginning approximately 0.1 miles on the east side of South H Street. In 2019, an active nest was reported in a eucalyptus tree approximately 1.25 miles south of the Project site on the east side of SR-99 (MBI, 2021, pp. 28, 30).

The Project site is approximately 1.3 miles from the nearest agricultural lands that would provide foraging opportunities for nesting Swainson's hawk, and the highly disturbed nature of the grassland onsite is likely to support a marginal level of prey for this species. Where there are potential nest trees adjacent to and near the Project site, the distance to high quality foraging habitat and marginal quality of the site itself, reduce the potential for foraging by this species should it nest in the vicinity. (MBI, 2021, p. 30)

White-tailed Kite

The white-tailed kite is fully protected in California. No suitable nesting habitat was present on the Project site but marginally suitable foraging habitat is present. Given the high degree of disturbance of the Project site, it is unlikely that the Project site supports the level of prey typical of foraging habitat for this species (MBI, 2021, pp. 30-31).

American Badger

The American badger is a California species of concern. California ground squirrel burrows and both known and potential San Joaquin kit fox (SJKF) dens were observed but none of these burrows/dens had sign of badger presence or evidence of foraging. Although badgers can be tolerant of human disturbance, the intensity and frequency of disturbance on the Project site reduces the potential for occurrence of this species (MBI, 2021, p. 31).

San Joaquin Kit Fox

The San Joaquin (SJKF) is currently federal-listed as endangered and State-listed as threatened. Sixteen dens were identified and evaluated by MBI for possible use by SJKF. Of these, eight were determined to be "known dens" per the definition of USFWS guidelines. This determination was based on the presence of SJKF scat and prey remains, indicating prior or current use by SJKF. The remaining eight dens were classified as potential dens, lacking any sign of use by the SJKF. No other direct or indirect evidence of special-status species occupation was noted during surveys conducted on the Project site (MBI, 2021, p. 32).

B. Riparian Habitat, Wetlands, and Other Waters

A search of the USFWS National Wetlands Inventory resulted in no wetlands mapped on the Project site. These results are consistent with the observed conditions within the survey area. No wetlands, riparian habitat, potential waters of the U.S., or potential waters of the State were observed (MBI, 2021, p. 33).

C. Critical Habitat

There is no USFWS-designated Critical Habitat within a 10-mile radius of the Project site (MBI, 2021, p. 33).

D. Wildlife Corridors and Wildlife Nurseries

Wildlife corridors can be defined as connections between wildlife blocks that meet specific habitat needs for species movement generally during migratory periods, but seasonally as well. Wildlife corridors generally contain habitat dissimilar to the surrounding vicinity and include examples such as riparian areas along rivers and streams, washes, canyons, or otherwise undisturbed areas within urbanization. Corridor width requirements can vary based on the needs of the species utilizing them. The Project site is an isolated and relatively small parcel of disturbed annual grassland that lacks migratory wildlife linkages and there are no native wildlife nurseries on or adjacent to the site (MBI, 2021, p. 37).

4.3.2 REGULATORY SETTING

A. Federal Regulations

1. Endangered Species Act (ESA)

The purpose of the federal Endangered Species Act (ESA) is to protect and recover imperiled species and the ecosystems upon which they depend. It is administered by the U.S. Fish and Wildlife Service (USFWS) and the Commerce Department's National Marine Fisheries Service (NMFS). The USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NMFS are mainly marine wildlife such as whales and anadromous fish such as salmon. Under the ESA, species may be listed as either endangered or threatened. "Endangered" means a species is in danger of extinction throughout all or a significant portion of its range. "Threatened" means a species is likely to become endangered within the foreseeable future. All species of plants and animals, except pest insects, are eligible for listing as endangered or threatened (USFWS, 2017).

The ESA makes it unlawful for a person to take a listed animal without a permit. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." Through regulations, the term "harm" is defined as "an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering." Listed plants are not protected from take, although it is illegal to

collect or maliciously harm them on federal land. Protection from commercial trade and the effects of federal actions do apply for plants (USFWS, 2017).

Section 7 of the ESA requires federal agencies to use their legal authorities to promote the conservation purposes of the ESA and to consult with the USFWS and NMFS, as appropriate, to ensure that effects of actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of listed species. During consultation, the “action” agency receives a “biological opinion” or concurrence letter addressing the proposed action. In the relatively few cases in which the USFWS or NMFS makes a jeopardy determination, the agency offers “reasonable and prudent alternatives” about how the proposed action could be modified to avoid jeopardy. It is extremely rare that a project ends up being withdrawn or terminated because of jeopardy to a listed species (USFWS, 2017).

Section 10 of the ESA may be used by landowners including private citizens, corporations, tribes, states, and counties who want to develop property inhabited by listed species. Landowners may receive a permit to take such species incidental to otherwise legal activities, provided they have developed an approved habitat conservation plan (HCP). HCPs include an assessment of the likely impacts on the species from the proposed action, the steps that the permit holder will take to avoid, minimize, and mitigate the impacts, and the funding available to carry out the steps. HCPs may benefit not only landowners but also species by securing and managing important habitat and by addressing economic development with a focus on species conservation (USFWS, 2017).

2. Migratory Bird Treaty Act (16 USC Section 703-712)

The Migratory Bird Treaty Act (MBTA) makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to federal regulations. The migratory bird species protected by the MBTA are listed in 50 CFR 10.13. The USFWS has statutory authority and responsibility for enforcing the MBTA (16 U.S.C. 703-712). The MBTA implements Conventions between the United States and four countries (Canada, Mexico, Japan, and Russia) for the protection of migratory birds (USFWS, 2020a).

B. State Regulations

1. California Endangered Species Act (CESA)

The California Endangered Species Act (CESA) states that all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved. The California Department of Fish and Wildlife (CDFW) works with interested persons, agencies, and organizations to protect and preserve such sensitive resources and their habitats. CESA prohibits the take of any species of wildlife designated by the California Fish and Game Commission as endangered, threatened, or candidate species. CDFW may authorize the take of any such species if certain conditions are met (CDFW, n.d.).

Section 2081 subdivision (b) of the California Fish and Game Code (CFGC) allows CDFW to authorize take of species listed as endangered, threatened, candidate, or a rare plant, if that take is incidental to otherwise lawful activities and if certain conditions are met. These authorizations are commonly referred to as incidental take permits (ITPs) (CDFW, n.d.).

If a species is listed by both the federal ESA and CESA, CFGC Section 2080.1 allows an applicant who has obtained a federal incidental take statement (federal Section 7 consultation) or a federal incidental take permit (federal Section 10(a)(1)(B)) to request that the Director of CDFW find the federal documents consistent with CESA. If the federal documents are found to be consistent with CESA, a consistency determination (CD) is issued and no further authorization or approval is necessary under CESA (CDFW, n.d.).

A Safe Harbor Agreement (SHA) authorizes incidental take of a species listed as endangered, threatened, candidate, or a rare plant, if implementation of the agreement is reasonably expected to provide a net conservation benefit to the species, among other provisions. SHAs are intended to encourage landowners to voluntarily manage their lands to benefit CESA-listed species. California SHAs are analogous to the federal safe harbor agreement program and CDFW has the authority to issue a consistency determination based on a federal safe harbor agreement (CDFW, n.d.).

2. California Fish and Game Code, Section 1580, et seq.

The following paragraphs summarize several sections of the CFGC that are applicable to the proposed Project (MBI, 2021, p. 10).

Section 1580

This section declares the policy of the State is to protect threatened or endangered native plants; wildlife; aquatic organisms or specialized habitat types; both terrestrial and non-marine aquatic, or large, heterogeneous natural gene pools for the future use of mankind through the establishment of ecological reserves (MBI, 2021, p. 10).

Sections 1600–1616

This portion of the CFGC requires notification to the CDFW if any of the following may occur within a river, stream, or lake in the state of California: substantial diversion or obstruction of the natural flow; substantially changing or using any material from the bed, channel, or bank; or depositing or disposing of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. This notification may result in a Streambed Alteration Agreement between a Project applicant and the CDFW. Activities in intermittent streams and canals may require Streambed Alteration Agreements. (MBI, 2021, p. 10).

Section 1900, et seq.

This portion of the CFGC is known as the California Native Plant Protection Act of 1977 (2021). The purpose of this chapter is to preserve, protect and enhance endangered or rare native plants of California. Many species and subspecies of native plants are endangered because their habitats are threatened with destruction, drastic modification, or severe curtailment. Commercial exploitation, disease, and other factors also represent threats to species and subspecies of native plants. This portion of the code designates rare, threatened, and endangered plant taxa of California (MBI, 2021, p. 10).

Section 1930–1933

These sections established the Significant Natural Areas Program and administered by the CDFW. The CDFW is responsible for obtaining access to the most recent information with respect to natural resources by maintaining, expanding, and keeping a current data management system (California Natural Diversity Database (CNDDDB)), designed to document information on these resources. Among other things, the code also requires that the CDFW coordinate services to federal, state, local and private interests wishing to aid in the maintenance and perpetuation of significant natural areas (MBI, 2021, p. 10).

Section 3503

This section prohibits taking, possessing, or needlessly destroying the nest or eggs or any bird. Birds of prey are included in Section 3503.5 (MBI, 2021, p. 10).

Section 3513

California's migratory birds are protected under this section by making it unlawful to take or possess any migratory, non-game bird (or any part of such bird) as designated in the MBTA (MBI, 2021, p. 10).

Section 3511, 4700, 5050, and 5515

These sections prohibit take of animals that are classified as fully protected in California. Take of fully protected species is specifically prohibited, even if other sections of the CFGC provide for incidental take of the species (MBI, 2021, p. 10).

3. *Porter-Cologne Water Quality Control Act (Clean Water Act Section 401 Certification or Waiver)*

The state of California regulates water quality related to discharge of fill material into waters of the state pursuant to Section 401 of the Clean Water Act (CWA) of 1972 (2021). Section 401 compliance is a federal mandate implemented by the state. The local Regional Water Quality Control Board (RWQCB) has jurisdiction over all those areas defined as jurisdictional under Section 404 of the CWA and regulates water quality for all waters of the State. The U.S. Army Corps of Engineers (ACOE), under Section 404 of the Clean Water Act (CWA), regulates discharges of dredged or fill material in waters of the U.S. If waters are determined to be under the jurisdiction of the ACOE, the RWQCB

would be the state-permitting authority. At the discretion of the ACOE, impacts to these areas could require a permit, depending on the type and size of the activity within ACOE jurisdiction (MBI, 2021, p. 11).

C. Local Plans, Policies, and Regulations

1. Metropolitan Bakersfield Habitat Conservation Plan (including CESA ITP 2081-2013-025-04)

The Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) was developed to obtain permits that meet both federal and state environmental regulations regarding incidental “take” of listed species set forth in the ESA and CESA. In turn, urban development outlined in the Metropolitan Bakersfield 2010 General Plan can proceed while the goal of the MBHCP is to acquire, preserve, and enhance native habitats that support endangered and sensitive species. Since development on open lands in Metropolitan Bakersfield could potentially result in the incidental “take” of habitat and/or sensitive species, permits acquired under the MBHCP include Section 10(a)(1)(B) of the ESA and Section 2081 of the CESA. The MBHCP is funded through the collection of mitigation fees associated with all urban development occurring within the HCP permit area. The fee is paid to the City or County at the time of grading permit approval, grading plan approval, or issuance of building permit, whichever occurs first. Upon payment, and provided that all applicable measures required in the HCP have been implemented, the applicant will become a sub-permittee and would be allowed the incidental take of species in accordance with federal and state endangered species laws (MBI, 2021, p. 22).

San Joaquin kit fox, Tipton kangaroo rat, and Bakersfield cactus are covered under the MBHCP, but species such as the American badger, burrowing owl, white-tailed kite, Swainson’s hawk, and Bakersfield legless lizard, along with other species, are not covered under the MBHCP’s incidental take permit; therefore, the take permit does not cover the loss of habitat or incidental take of these special-status species.

The current MBHCP expires on June 1, 2023. To ensure take of covered species does not occur after the expiration date, mitigation fees must be paid no later than January 1, 2023 and all covered activities must be completed by the MBHCP expiration date of June 1, 2023 (Bakersfield, 2022b).

4.3.3 BASIS FOR DETERMINING SIGNIFICANCE

Section IV of Appendix G to the CEQA Guidelines addresses typical adverse effects to biological resources, and includes the following threshold questions to evaluate the Project’s impacts to biological resources (OPR, 2019):

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

- b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service;*
- 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;*
- 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;*
- e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;*
- 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.*

4.3.4 IMPACT ANALYSIS

Threshold 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 Game or U.S. Fish and Wildlife Service?*

A. Special-status Plant Species

The CNDDDB, USFWS, and CNPS Rare and Endangered Plant Inventory queries returned a total of 22 special-status plants that have been documented as potentially occurring in the vicinity of the Project site. Based on MBI's habitat suitability analysis, none of the special-status plant species had the potential to occur within the proposed Project site (See Appendix A, Table A-1 of *Technical Appendix C*). During MBI's field survey of the Project site, a total of 14 plant species were observed, 9 of which are non-native species. No listed or California Rare Plant Rank (CRPR) species were identified on the Project site during the field survey and the site does not represent suitable habitat for any of the special-status plants evaluated. Therefore, there is no potential for direct and indirect impacts to special-status plant species within the Project site. As described in Subsection 4.3.1, the Project site has undergone frequent disturbance, was previously used for intensive agriculture, and is surrounded by roads, urban development, and former agricultural lands (MBI, 2021, p. 35).

Because no special-status plant species have the potential to occur on the Project site, the Project's potential to have a substantial adverse effect, either directly or through habitat modifications, on any Special-status plant species would be less than significant and no mitigation is required.

B. Special-status Wildlife Species

Burrowing Owl

Although no burrowing owls or sign of species presence was observed during focused surveys conducted on the Project site, California ground squirrel burrows, which are frequently used by burrowing owls for nesting and shelter, along with potential and known SJKF dens, were observed during field surveys. Therefore, the site is likely to support small mammals that are potential prey items in the diet of burrowing owl. Thus, the Project's construction activities could remove potential foraging and potential nesting habitat for burrowing owl (MBI, 2021, p. 35). The potential presence of burrowing owl is considered a significant direct and cumulatively considerable impact because the species is migratory and could be present on the Project site at the time the Project's construction activities commence. Because burrowing owl is not a covered species under the MBHCP, impacts would be significant if the species migrates onto the site, and mitigation is required.

Swainson's hawk and White-tailed kite

No nesting opportunities for Swainson's hawk or white-tailed kite are present on the Project site. Although annual grassland is generally considered suitable foraging habitat, the Project site has been disturbed frequently in the past by disking, fire, illegal trash dumping, and off-road vehicle trespass. Although noise, dust, and general disturbance from construction activities could indirectly affect foraging raptors such as Swainson's hawk and white-tailed kite, these species are highly mobile and able to access other higher quality foraging opportunities in the vicinity of the Project site. Given the low quality of the grassland present on the site, the loss of this marginal foraging habitat for these species would not be significant. In addition, no direct impacts to individuals are anticipated (MBI, 2021, p. 35).

San Joaquin Kit Fox and American Badger

The Project site provides suitable denning habitat for SJKF. Several suitably sized holes were observed during the survey effort and eight known dens were found by MIB biologists. Individual kit fox could use any of the dens identified on the site. If the site is occupied by SJKF at the time Project construction activities commence, there is a potential that Project activities could result in harm or injury to SJKF that would constitute a significant impact (MBI, 2021, p. 36). Therefore, potential direct impacts to SJKF would be significant and mitigation is required.

Measures described in Subsection 4.3.7, are intended to avoid, minimize, and reduce the potential for these effects to occur, reducing the potential to less than significant. Implementation of measures required per the MBHCP to protect SJKF will additionally result in minimizing effects to burrowing owls due to overlapping habitat requirements and American badger due to the overlap in badger burrows and SJKF den size. Neither burrowing owl nor American badger are covered species under the MBHCP; however, both species will benefit from measures implemented to avoid direct and indirect "take" of SJKF (MBI, 2021, p. 36).

Nesting and Migratory Birds

The Project site contains remnant trees and minimal shrubs which can be used by nesting birds. The annual grassland present is suitable for ground nesting birds, but frequent disturbance reduces that

suitability. Birds nesting on or in the immediate vicinity of the Project site could be disturbed if the Project's construction activities occur during the nesting season when active nests are present. If these nests are disturbed to the extent that eggs are destroyed, young are injured or killed, or adults abandon the nests, a violation of the MBTA and California Fish and Game Code could result (MBI, 2021, p. 36). Therefore, potential direct impacts to nesting and migratory birds would be significant and mitigation is required.

Threshold b: Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

Because no riparian habitat or other sensitive natural community is present on the Project site, implementation of the proposed Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. Therefore, no impact would occur as a result of implementation of the proposed Project and no mitigation is required.

Threshold c: Would the Project have 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?

Because no wetlands or potential waters of the U.S., or potential waters of the State are present on the Project site; the proposed Project has no potential to have a substantial adverse effect on State or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. Therefore, no impact would occur as a result of implementation of the proposed Project and no mitigation is required.

Threshold 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?

The Project site is surrounded by roads, urban development, and parcels formerly in agricultural use. Due to surrounding development, the Project site does not serve as part of a wildlife corridor. Because the Project site is an isolated and relatively small parcel of disturbed annual grassland habitat, the site is not conducive to serve as, interfere substantially with or impede, established native resident or migratory wildlife corridors, or native wildlife nursery sites (MBI, 2021, p. 37). Therefore, no impact would occur as a result of implementation of the Project and no mitigation is required.

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

Other than the potential for SJKF, which are addressed under the MBHCP, there are no biological resources on the Project site which are separately protected by local policies. Therefore, no impact would occur as a result of implementation of the Project and no mitigation is required.

Threshold 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?

Due to the presence of potential and known SJKF dens on the Project site, specific procedures for den activity monitoring are required by the MBHCP prior to initial ground disturbance near dens. If the species is present on the Project site at the time that Project grading activities commence, significant impacts would occur. This EIR recommends mitigation to ensure Project consistency with the MBHCP. With mitigation through participation in the MBHCP, the Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.3.5 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis for biological resources considers development of the Project site in conjunction with other development projects in the vicinity of the Project site as well as full General Plan buildout in the City of Bakersfield and other jurisdictions in the region within the boundaries of the MBHCP.

Candidate, Sensitive, or Special- status Species

Because the Project site does not contain any special-status plant species and lacks suitable, natural habitat, there is no potential for the Project site to support special-status plant species. Therefore, there is no potential for implementation of the Project to contribute to a substantial adverse cumulatively-considerable impact on any special-status plant species.

Although the burrowing owl was not observed within the Project survey area during field surveys conducted in 2021, there is the potential for this species to migrate onto the site and occupy the property prior to the initiation of construction activities. The burrowing owl is commonly found within the Project vicinity; as such, it is reasonable to conclude that impacts to the burrowing owl habitat would occur in conjunction with development of other properties throughout Metropolitan Bakersfield. The burrowing owl is not yet adequately conserved under the MBHCP; thus, the Project has the potential to contribute to a cumulatively-considerable impact to the burrowing owl.

The Project site provides suitable denning habitat for SJKF and known dens were found on the Project site by MIB biologists. The SJKF is protected by the MBHCP. The Project – like all other development activities in the cumulative study area – would be required to comply with the MBHCP to preclude

impacts to SJKF. Therefore, the Project's potential impact to SJKF would be cumulatively-considerable absent compliance to State and federal regulations.

The Project site, although heavily disturbed, would result in the removal of vegetation that has the potential to support nesting birds protected by federal and State regulations. A wide range of habitat and vegetation types have the potential to support nesting birds; therefore, it is likely that other development projects within the cumulative study area also may impact nesting birds. However, the Project – like all other development activities in the cumulative study area – would be required to comply with State and federal law to preclude impacts to nesting birds. Therefore, the Project's potential impact to nesting birds would be cumulatively-considerable absent compliance to State and federal regulations.

Riparian Habitat or Other Sensitive Natural Community

Because the Project site does not contain any riparian habitat or other sensitive natural community, there is no potential for implementation of the Project to contribute to a substantial adverse cumulatively-considerable impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.

State or Federally Protected Wetlands

Because no wetlands or potential waters of the U.S., or potential waters of the State are present on the Project site; there is no potential for implementation of the Project to contribute to a substantial adverse cumulatively-considerable impact 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.

Movement of any Native Resident or Migratory Fish or wildlife, Wildlife Corridors, or Native Wildlife Nursery Sites

Because the Project site is surrounded on all sides by roads and urban development, is a relatively small parcel of disturbed annual grassland that lacks migratory wildlife linkages, and there are no native wildlife nurseries on or adjacent to the site, there is no potential for implementation of the Project to contribute to a cumulatively-considerable impact to 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

Any Local Policies or Ordinances Protecting Biological Resources

Because there are no biological resources on the Project site which are separately protected by local policies, there is no potential for implementation of the Project to contribute to a cumulatively-considerable impact to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Other development projects in the cumulative study area also would be required to comply with applicable local policies and/or ordinances related to the protection of biological resources as a standard condition of review/approval. Because the Project and

cumulative development would be prohibited from violating applicable, local policies or ordinances related to the protection of biological resources, a cumulatively-considerable impact would not occur.

Adopted Habitat Conservation Plan

The proposed Project is subject to the MBHCP and its requirements of the SJKF. The Project site provides suitable denning habitat for SJKF and known dens were found on the Project site by MIB biologists. The SJKF is protected by the MBHCP. The Project – like all other development activities in the cumulative study area – would be required to comply with the MBHCP to preclude impacts to SJKF. Therefore, the Project’s potential impact to conflict with an HCP would be cumulatively-considerable absent compliance with the MBHCP.

4.3.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Significant Direct and Cumulatively Considerable Impact. The Project contains suitable habitat for burrowing owl. In the event that burrowing owl is present on the Project site at the time Project construction activities commence, implementation of the Project has the potential to take burrowing owl individuals not protected by the Metro Bakersfield Habitat Conservation Plan (MBHCP). The Project site provides suitable denning habitat for San Joaquin kit fox (SJKF). In the event that SJKF is present on the Project site at the time that Project construction activities commence, implementation of the Project has the potential to have an adverse effect on SJKF, which is protected by the MBHCP. The Project has the potential to impact nesting migratory birds protected by the Migratory Bird Treaty Act (MBTA) and the CDFW.

Threshold b: No Impact. There is no potential for the Project to 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 CDFG or USFWS.

Threshold c: No Impact. There is no potential for the Project to 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.

Threshold d: No Impact. There is no potential for the Project to 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.

Threshold e: No Impact. There is no potential for the Project to conflict with any local policies or ordinance protecting biological resources.

Threshold f: Significant Direct and Cumulatively Considerable Impact. The Project is subject to the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) and its requirements for San Joaquin kit fox (SJKF). If SJKF is present on the Project site at the time that Project grading activities commence, significant impacts would occur.

4.3.7 MITIGATION

- BIO MM-1 Prior to the issuance of a grading permit or any permit that authorizes ground disturbance, a biological clearance survey shall be conducted on all areas that would be physically disturbed by a CDFW-approved biologist for San Joaquin kit fox (SJKF) in accordance with the requirements of the MBHCP and CESA ITP. If known, active, or natal SJKF dens are identified during the survey, minimization measures identified in the CESA ITP for den avoidance must be demonstrated (MBHSCP CESA ITP Condition of Approval 7.5). If dens cannot be avoided, monitoring and den exaction as described in MBHCP CESA ITP Condition of Approval 7.6 shall be adhered to.
- BIO MM-2 Surveys to detect burrowing owls shall be conducted by a CDFW-approved biologist no more than 30 days prior to any ground disturbance activities on the Project site and can be conducted concurrently with the pre-activity survey required per the MBHCP. Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist verifies through non-invasive methods that either: (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival. If burrowing owls are observed using burrows during the surveys, owls shall be excluded from all active burrows through the use of exclusion devices placed in occupied burrows in accordance with CDFG protocols, *Staff Report on Burrowing Owl Mitigation*, shall be implemented. In such case, exclusion devices shall not be placed until the young have fledged and are no longer dependent upon the burrow, as determined by a qualified biologist. Specifically, exclusion devices, utilizing one-way doors, shall be installed in the entrance of all active burrows. The devices shall be left in the burrows for at least 48 hours to ensure that all owls have been excluded from the burrows. Each of the burrows shall then be excavated by hand and refilled to prevent reoccupation. Exclusion shall continue until the owls have been successfully excluded from the site, as determined by a qualified biologist.
- BIO MM-3 If vegetation clearing or initial ground-disturbing construction activity occurs during the migratory bird nesting season (February 1 to August 31) a qualified avian biologist shall conduct a nesting bird survey to identify any active nests present within the proposed work area. If active nests are found, initial ground disturbance shall be postponed or halted within a buffer area, established by the qualified avian biologist, that is suitable to the particular bird species and location of the nest, until juveniles have fledged or the nest has been abandoned, as determined by the biologist. The construction avoidance area shall be clearly demarcated in the field with highly visible construction fencing or flagging, and construction personnel shall be instructed on the sensitivity of nest areas.
- BIO MM-4 The Project Applicant shall assure that the Project's construction contractors adhere to the following best management practices. Construction contractors shall be required by their contracts to comply with these best practices, and permit periodic inspection

of the construction site by City of Bakersfield staff or its designee to confirm compliance. A note that requires compliance is required on all grading and building plans approved by the City of Bakersfield.

- a) All construction personnel involved in ground-disturbing construction activities should attend a worker orientation program. The worker orientation program should present measures required to avoid, minimize, and mitigate impacts to biological resources and should include, at a minimum, the following subjects: A summary of the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP), Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), and the Migratory Bird Treaty Act (MBTA); biological survey results for the current construction area; life history information for the species of concern; biological resource avoidance, minimization, and mitigation requirements; consequences for failure to successfully implement requirements; and procedures to be followed if dead or injured wildlife are located during Project activities. Upon completion of the orientation, employees should sign a form stating that they attended the program and understand all biological resource mitigation measures. Forms verifying worker attendance should be filed at the Project Applicant's office and be accessible to the City of Bakersfield, USFWS and CDFW staff. No untrained personnel should be allowed to work onsite with the exception of delivery trucks that are only onsite for 1 day or less and are under the supervision of a trained employee.
- b) All equipment storage and parking during construction activities should be confined to the designated construction area or to previously disturbed offsite areas that are not habitat for listed species.
- c) Project construction activities involving initial surface disturbance should occur during daylight hours.
- d) Trenches should be inspected for entrapped wildlife each morning prior to the onset of construction. Before such holes or trenches are filled, they should be thoroughly inspected for entrapped animals. Any wildlife so discovered should be allowed to escape voluntarily, without harassment, before construction activities resume. A qualified biologist may remove wildlife from a trench, hole or other entrapment out of harm's way if the immediate welfare of the individual is in jeopardy. State or federal listed species may not be handled. Should any State or federal listed species become entrapped, CDFW and USFWS should be contacted as appropriate.
- e) All food-related trash items such as wrappers, cans, bottles and food scraps generated by Project construction activities should be disposed of in closed

containers and removed at least once each week from the site. Deliberate feeding of wildlife should be prohibited.

- f) To prevent harassment of special-status species, construction personnel should not be allowed to have firearms or pets on the Project site.
- g) All equipment and work-related materials should be contained in closed containers either in the work area or on vehicles. Loose items (e.g., rags, hose, etc.) should be stored within closed containers or enclosed in vehicles when on the work site.
- h) Use of rodenticides and herbicides on the Project site should be prohibited unless approved by the USFWS and the CDFW. This is necessary to prevent primary or secondary poisoning of special-status species using adjacent habitats, and to avoid the depletion of prey upon which they depend. If rodent control must be conducted, zinc phosphide should be used because of its proven lower risk to SJKF.
- i) Any employee who inadvertently kills or injures a listed species, or who finds any such wildlife dead, injured, or entrapped on the Project site, should be required to report the incident immediately to a designated site representative (e.g., foreman, project manager, environmental inspector, etc.).
- j) In the case of entrapped wildlife that are listed species, escape ramps or structures should be installed immediately, if possible, to allow the subject wildlife to escape unimpeded.
- k) In the case of injured special-status wildlife, the CDFW should be notified immediately. During business hours Monday through Friday, the phone number is (559) 243-4017. For non-business hours, report to (800) 952-5400. Notification should include the date, time, location, and circumstances of the incident. Instructions provided by the CDFW for the care of the injured animal should be followed by the contractor onsite.
- l) In the case of dead wildlife that are listed as threatened or endangered, the USFWS and the CDFW should be immediately (within 24 hours) notified by phone or in person, and should document the initial notification in writing within 2 working days of the findings of any such wildlife. Notification should include the date, time, location, and circumstances of the incident.
- m) Material and equipment inspections shall be conducted according to the MBHCP CESA ITP. All exposed pipes, culverts, and other similar structures with a diameter 3 inches or greater shall be properly capped in order to prevent entry by San Joaquin kit fox or other wildlife. Any of these materials or structures that are

left overnight and are not capped shall be inspected prior to being moved, buried, or closed in order to ensure that San Joaquin kit fox or other wildlife are not present. If a listed species is found within pipe, culverts or similar structures, the animal will be allowed to escape that section of its own accord prior to moving or utilizing that segment.

- n) If any previously unidentified protected species or any previously unreported protected species is found to be present during Project-related construction activities, occupied areas shall be avoided and the construction contractor shall be required by its contract to call a CDFW-approved biologist to the site to identify the species. If the species is protected, the qualified biologist shall notify the USFWS and CDFW of any previously unreported protected species. Any take of protected wildlife shall be reported immediately to USFWS and CDFW.

4.3.8 DESIGN FEATURES AND REGULATORY REQUIREMENTS

The City of Bakersfield is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Biological Resources, which include the following regulatory requirement for MBHCP fee payment and design features (best practices)

- BIO RR-5 Prior to the issuance of a grading permit or any permit that authorizes ground disturbance, the Project Applicant shall pay fees pursuant to the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) and Incidental Take Permit, which includes coverage for the San Joaquin kit fox (SJKF). The payment of development impact fees is considered adequate mitigation under the MBHCP and Incidental Take Permit to minimize impacts on special-status species. The fees are placed in an account for habitat acquisition and management to be used by the Metropolitan Bakersfield Habitat Conservation Plan Trust Group. Upon the payment of this fee as specified by the City of Bakersfield, the Project Applicant will become a sub-permittee and will be allowed the incidental take of the species in accordance with State and federal endangered species laws and mitigation requirements of all parties, including State, federal, and local (City of Bakersfield and Kern County 1994, Incidental Take Permit No. 2081-2013-058-04).

4.3.9 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a: Less than Significant Impact with Mitigation Incorporated. With implementation of 4.3.7BIO MM-1, BIO MM-2, BIO MM-3, BIO MM-4, and BIO RR-5, the Project's potential to impact San Joaquin kit fox (SJKF) and burrowing owl would be reduced to less than significant.

Threshold f: Less than Significant Impact with Mitigation Incorporated. With implementation of 4.3.7BIO MM-1 and BIO RR-5 and the required compliance with the Metropolitan Bakersfield Habitat

Conservation Plan (MBHCP), the Project's potential to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, would be reduced to less than significant.

4.4 CULTURAL RESOURCES

The analysis and information in this Subsection 4.4 are based primarily on two technical studies. Jones & Stokes Associates completed a cultural resources study of the Project site in 2007 for a previous project. The technical study, titled “Cultural Resources Report for the Woodmont-SR-99/Hosking Commercial Center Project,” dated October 2007, was prepared by Jones & Stokes Associates and is included as *Technical Appendix D2* to this EIR (J&S, 2007).

Due to the age of the Jones & Stokes study, PaleoWest was retained by the Project Applicant to prepare an updated assessment to verify if the previous cultural resource results remain valid. The updated technical study is titled “Updated Cultural Resources Study for the Majestic Hosking Project, Kern County, California,” dated July 27, 2021, prepared by PaleoWest, and included as *Technical Appendix D1* to this EIR (PaleoWest, 2021). Refer to Section 7.0, *References*, for a complete list of reference sources used in this analysis.

Confidential information was redacted from *Technical Appendix D1 and D2* for purposes of public review. In addition, much of the written and oral communication between Native American tribes, the City of Bakersfield, Jones & Stokes Associates, and PaleoWest is considered confidential in respect to places that may have traditional tribal cultural significance (Government Code Section 65352.4), and although relied upon in part to inform the preparation of this EIR Subsection, those communications are treated as confidential and are not available for public review. Under existing law, environmental documents must not include information about the location of archeological sites or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records Act (California Code Regulations Section 15120(d)).

4.4.1 EXISTING CONDITIONS

A. Cultural Setting

A general overview of prehistoric, ethnographic, and historical periods in southern California deserts is presented below, and are summarized in *Technical Appendix D2* (J&S, 2007, pp. 7 - 8).

1. *Prehistory and Archaeology*

- **Early Man Period.** The Early Man Period has relative dates ranging from 12,000 years ago to as far back as 50,000 years ago. Several sites in California have been tentatively assigned to the Early Man Period but none of these sites have withstood scientific scrutiny. It is likely that humans first arrived in California between 11,000 and 13,000 years ago.
- **Paleo-Indian Period.** Paleo-Indians are the earliest humans to occupy North America and were highly mobile hunters and gatherers. This period in the southern San Joaquin Valley is characterized by two traditions: the Western Fluted Point Tradition and the Western Pluvial Lakes Tradition. The Western Fluted Point Tradition is characterized by the thirteen complete and seventeen fragmentary fluted and stemmed Clovis-like points that were collected from the southern shore of Lake Tulare and from similar points found near

Bakersfield and on the Tejon Ranch. These artifacts have dated to 11,000 to 12,000 before present (B.P.). Stone artifacts found on the southwestern shore of Buena Vista Lake, approximately 13 miles southwest of the Project area, have been associated with the Western Pluvial Lakes Tradition. These artifacts have dated from approximately 8,000 B.P.

- **Early Horizon.** Early Horizon sites are associated with the margins of pluvial lakes and with now-extinct springs. The most distinctive artifact type from this horizon is Pinto-series projectile points and crudely made stemmed or basally notched dart points. Other artifacts found at Early Horizon sites include large, leaf-shaped knives, thick, split cobble choppers and scrapers, scraper-planes, and small milling slabs and manos. This horizon was characterized as a cold, dry period with low inland population densities. The small surface deposits of lithic artifacts suggest temporary and perhaps seasonal occupation by small groups of people.
- **Middle Horizon.** The Middle Horizon, between 4,000 and 1,200 B.P., was when the Penutian-speaking Yokuts may have entered the southern San Joaquin Valley. This was a time of cultural intensification. Occupation sites were large and most commonly found adjacent to permanent water sources. Artifacts included rectangular-based knives, flake scrapers, T-shaped drills, milling slabs and manos, as well as core/cobble tool assemblages such as scraper planes, large choppers, and hammerstones. Both the bow and arrow and the mortar and pestle were introduced in this horizon. Diagnostic projectile points, shaft smoothers, incised slate and sandstone tablets and pendants, bone awls, shell beads and ornaments are also associated with this time period.
- **Middle-Late Horizon Transition.** In the southern San Joaquin Valley, the Middle-Late Horizon Transition period coincides with the Medieval Climatic Anomaly, which was a period of increased temperatures and accompanying droughts. This climatic instability resulted in decreased water availability, a reduction in harvestable natural resources, and demographics stress. Evidence of transition period sites is minimal and many of California's interior sites may have been abandoned at this time.
- **Late Horizon.** The Late Horizon was a period of recovery from the Medieval Climatic Anomaly. During this horizon, between 1,200 and 800 B.P., it is believed that the precursors for historic Yokut lifeways developed.

2. *Ethnographic Background*

Ethnography is the study of human cultures, and the ethnographic background of the Project site area is described in *Technical Appendix D2* (J&S, 2007, pp. 8-9). Yokuts, along with other Penutian-speaking peoples, entered the southern San Joaquin Valley between 4000–1200 B.P., and the precursors of historic Yokut life ways developed between 1200 and 800 B.P. At least 15 Yokut tribelets are known to have existed after A.D. 800. Each spoke a separate Penutian dialect. Estimations of population size are difficult to determine because of the extent of destruction caused by the introduction

of European diseases and subsequent Euro-American colonization. Estimates have been 350 individuals per Yokut tribelet, bringing the total population of the 15 Southern San Joaquin Valley tribelets to 5,250 people. Nineteenth century Spanish expeditions calculated a much higher number, as many as 15,700 inhabitants. Yokut subsistence consisted of fishing, hunting waterfowl, and collecting shellfish, roots, and seeds. Fish were caught using nets and stick pens. Waterfowl were caught using nets and snares. Terrestrial mammals and birds made up a minimal portion of the diet and were caught using snares, unbacked bows, and wooden-tip arrows. The Southern Yokuts built domestic structures, granaries, and sweathouses.

3. *Historic Background*

The historic background of the San Joaquin Valley and Project site area is described in Technical Appendix D2 and is summarized below (J&S, 2007, p. 9).

- **Early Exploration.** The founding of Mission San Diego de Alcalá in 1769 was the beginning of European settlement in California, with Spanish explorers and missionaries following soon after. In 1772, on his way to San Luis Obispo, Pedro Fages led a group of soldiers through the Tejon pass and to a village on the shore of Buena Vista Lake. Garces, a Spanish explorer, followed Fages in 1776. Although unsuccessful in gaining a foothold, the Franciscans led several incursions into the San Joaquin Valley between 1806 and 1814. While no missions were established in the Southern San Joaquin Valley, the area was infiltrated by runaway Indian converts who took refuge in the Valley.
- **Mexican California.** Between 1822 and 1846, after Mexico won independence from Spain in 1821, no ranchos were established in the San Joaquin Valley and direct Mexican influence over the area was minimal. An estimated 75 percent of the Southern Yokut population perished during a severe malaria outbreak in 1833.
- **American Period.** The first major wave of Euro-Americans into the San Joaquin Valley was brought on by the acquisition of California at the end of the Mexican-American War in 1848 and the discovery of gold in 1850. The southern Valley Yokuts were removed from by the U.S. Government in 1851 and relocated to the Tejon Reservation at the base of the Tehachapis and to the Fresno Reservation outside of Madera, California.
- **City of Bakersfield.** In 1866, the first homestead claim was filed in Bakersfield for a parcel named “Baker’s Field” after Colonel Thomas Baker. In 1869, the City was formally laid out and between 1869 and 1873, a telegraph office, two stores, a newspaper, two boarding houses, a doctor’s office, a school, and a saloon were established. The City was disincorporated in 1876 and reincorporated in 1898. The San Francisco and San Joaquin Valley Railroad also began providing service to and from the City in 1898. Agriculture and oil played vital roles in early Bakersfield and remain central to the city’s economy. In 1927, one of the nation’s largest and oldest farming co-ops, the California Cotton Cooperative Association (CalCot), was founded in Bakersfield. Crops harvested in the area include

carrots, alfalfa, cotton, grapes, almonds, pistachios, citrus fruits, wheat, garlic, and potatoes. Oil was discovered in 1877. In 1899, the Kern River Oil Field was tapped and the discovery of oil brought an influx of people and technology

B. Cultural Resources Study Methods/Project Background

As noted above, Jones & Stokes Associates completed a cultural resources study of the Project area in 2007 for a previous project. The study consisted of a records search at the Southern San Joaquin Archaeological Information Center (SSJVIC), a search of the Sacred Lands File (SLF) by the Native American Heritage Commission (NAHC), and a pedestrian survey of the site. The results of the SSJVIC record search found that a large portion of the Project area had been previously surveyed in the 1990s. The 1992 survey recorded two isolated fragments of historic-era bottle glass and a historic-era glass bead. A search of the SLF by the NAHC found that there were no sensitive Native American resources reported in the Project vicinity. The pedestrian survey by Jones & Stokes Associates failed to re-identify any of the previously recorded archaeological resources in the Project area, indicating that they were no longer present or detectable. The field investigation documented a historic period single-family residence along the north side of Hosking Avenue within the southern extent of the Project area. However, the historic period property, which contained an extant residential building, outbuildings, and associated structures, was not considered part of the proposed Project footprint and would be evaluated by a separate California Department of Transportation (Caltrans) project in 2008. No other cultural resources were identified in the Project area during the field survey.

As discussed above, the purpose of the current study, conducted by PaleoWest was to confirm that the findings of the previous cultural resources study remain valid and that no additional cultural resources management is required for the proposed Project. To accomplish this task, PaleoWest employed the following methods.

1. Archaeological Records Search

PaleoWest requested an updated cultural resource record search from the SSJVIC to identify any prehistoric and historical cultural resources that may have been documented within 0.5-mile of the Project area since 2007. The SSJVIC search was undertaken on July 12, 2021. In addition, as part of the literature review, PaleoWest staff examined historical maps and aerial images to characterize the developmental history of the Project site and surrounding area. PaleoWest also contacted the NAHC and requested a SLF search. The objective of the SLF search was to determine if the NAHC had any knowledge of Native American cultural resources (e.g., traditional use or gathering area, place of religious or sacred activity, etc.) within the immediate vicinity of the Project area that had been reported since 2007.

2. Pedestrian Survey

PaleoWest conducted an intensive pedestrian survey of the Project site on July 8 and 9, 2021. The pedestrian survey consisted of a series of east-west oriented transects spaced at approximately 10- to 15-meter intervals to examine all exposed ground surfaces. All areas likely to contain sensitive cultural

resources were carefully inspected to ensure discovery and documentation of any visible potentially significant cultural resources located within the Project area.

C. Results

1. Results of the Records Review

Over a 25-year period from 1992 to 2019, there have been no fewer than 24 previous studies conducted within a 0.5-mile radius of the Project area. See Table 1 in *Technical Appendix D1* for a description of each prior study. The three studies that include portions of the Project area are listed below (Paleo West, 2021, n.p.) :

- ❑ KE-00412. Garcia (1992) completed an archaeological assessment of approximately 120 acres of land located east of SR 99 and west of South H Street in the early 1990s. A survey resulted in the identification of three historic period isolated artifacts. Two of the artifacts consisted of single fragments of historic-era bottle glass (P-15-009205 and P-15-009207). The third artifact was a historic period aqua-colored glass bead (P-15-009206). None of the identified resources qualified for listing on the California Register of Historical Resources (CRHR) or the National Register of Historic Places (NRHP).
- ❑ KE-03625. Jones & Stokes Associates completed a Phase 1 cultural resources assessment for the proposed Woodmont – SR 99/Hosking Commercial Center Project in 2007 (*Technical Appendix D2*). The record search completed for the study identified the three previously recorded resources that had been identified by Garcia in 1992 (KE-00412). Although none of the isolated occurrences were relocated during the pedestrian survey, portions of an extant historic-era single-family residence located on the north side of Hosking Avenue were found to extend into the survey area. It was noted that the historic period property is not considered part of the Project footprint and would be evaluated for a separate Caltrans project. No other cultural resources were identified during the Jones & Stokes Associates survey.
- ❑ KE-03682. The Caltrans' study was completed in 2008 for the Hosking Avenue/State Route 99—New Connection Project. It consisted of a records search and a survey of the Project Area Limits (PAL), which included some areas immediately south and west of the current Project area. Fourteen properties were identified in the PAL, including the historic-era single-family residence located north of Hosking Avenue, Caltrans determined that none of the 14 properties contained resources that warranted consideration for CRHP or NRHP eligibility.

In total, six cultural resources, all of which date to the historic period, have been identified within 0.5-mile of the Project area. See Table 2 in *Technical Appendix D1*. The three previously documented

cultural resources listed below are isolated occurrences located in the Project area that were no longer found to exist during the 2007 cultural resources survey of the site.

- ❑ P-15-0009205. Age: Historic Type: Isolate. Description: Fragment of blue bottle glass (not re-identified in 2007 by Jones and Stokes).
- ❑ P-15-009206. Age: Historic Type: Isolate. Description: Aqua-colored glass bead (not re-identified in 2007 by Jones & Stokes).
- ❑ P-15-009207. Age: Historic Type: Isolate. Description: Fragment of purple bottle glass (not re-identified in 2007 by Jones & Stokes).

2. *Results of the Historical Map and Aerial Photograph Review*

A review of historical maps and aerial images indicates that two dwelling-size structures were present near the northeast corner and the east-central portion of the Project area at least as early as 1912. By the early 1950s, most of the Project site and surrounding vicinity were under cultivation. A single-family residence was constructed north of Hosking Avenue within the southern extent of the Project area between 1952 and 1956. At this time, the two existing dwellings located within the eastern portion of the Project site were demolished. A reservoir or drainage basin was constructed in the central portion of the site between 1981 and 1994. The single-family residence in the southern edge of the Project area was demolished between 2005 and 2009 with the new SR 99/Hosking Avenue interchange built between 2014 and 2016 (PaleoWest, 2021, n.p.).

3. *Results of the NAHC SLF File Search*

PaleoWest also requested a records search of the SLF by the NAHC, which was negative for the presence of Native American cultural resources within the area. The NAHC also provided a list of contacts from six Native American groups, including Big Pine Paiute Tribe of the Owens Valley; Chumash Council of Bakersfield; Kern Valley Indian Community; Kitanemuk & Yowlumne Tejon Indians; Tejon Indian Tribe; and the Tule River Indian Tribe (PaleoWest, 2021, n.p.).

4. *Significance Evaluation*

PaleoWest conducted a pedestrian survey of the Project area on July 8 and 9, 2021. The entirety of the Project site was inspected by walking a series of parallel transects. Remnants of the historic period single-family residence are present in the southern portion of the site, along with an abandoned reservoir or drainage basin and well. The remains of the historical residence primarily consisted of concrete building and wall foundations. A review of aerial images indicates that the property was demolished between 2005 and 2009 prior to the construction of the Hosking Avenue/State Route 99 Interchange – New Connection Project. As previously discussed, Caltrans had determined that the historic-era single-family residence did not warrant consideration for either CRHP or NRHP eligibility.

The abandoned reservoir or drainage basin is rectangular in size and lies in the central portion of the Project site. The structure measures approximately 180 feet (west-east) by 110 feet (north-south) with depths ranging from 10 to 15 feet. A dirt road has been constructed at the southwestern corner of the water control structure. Aerial images indicate that the structure was constructed sometime after 1981. As such, it does not meet the Office of Historic Preservation's (OHP) guidelines for being considered historically significant. The abandoned well lies in the north-central portion of the Project area. The well consists of a 15-inch diameter metal pipe extending above the ground surface by approximately 20 inches; the lid of the well appears to be welded shut. The age of the well cannot be ascertained as the metal pipe and lid contain no temporally diagnostic characteristics or markings (PaleoWest, 2021, n.p.).

In summary, the results of the current cultural resources assessment conducted of the Project area by PaleoWest confirm the earlier findings obtained by Jones & Stokes Associates. PaleoWest identified no significant prehistoric or historic period cultural resources in the Project area.

Although the remnants of a historic period single-family residence were noted in the Project area, this resource was previously determined ineligible for listing on the CRHR and NRHP. Other identified structural remains, including an abandoned reservoir or drainage basin and well, are either modern or their age cannot be ascertained. As such, these cultural resources do not meet OHP guidelines to be considered historically significant (PaleoWest, 2021, n.p.).

4.4.2 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the federal and State environmental laws and related regulations governing the protection of cultural resources.

A. Federal Regulations

1. National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA) was passed primarily to acknowledge the importance of protecting our nation's heritage. While Congress recognized that national goals for historic preservation could best be achieved by supporting the drive, enthusiasm, and wishes of local citizens and communities, it understood that the federal government must set an example through enlightened policies and practices. In the words of the Act, the federal government's role would be to "provide leadership" for preservation, "contribute to" and "give maximum encouragement" to preservation, and "foster conditions under which our modern society and our prehistoric and historic resources can exist in productive harmony" (NPS, 2021a).

Section 106 of NHPA granted legal status to historic preservation in federal planning, decision-making, and project execution. Section 106 requires all federal agencies to take into account the effects of their actions on historic properties, and provide ACHP with a reasonable opportunity to comment on those actions and the manner in which federal agencies are taking historic properties into account in their decisions (NPS, 2021a).

2. *National Register of Historic Places (NRHP)*

The National Register of Historic Places is the official list of the Nation's historic places worthy of preservation. Authorized by the NHPA of 1966, the NPS's National Register of Historic Places (NRHP) is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archaeological resources (NPS, 2020a).

To be considered eligible, a property must meet the National Register Criteria for Evaluation. This involves examining the property's age, integrity, and significance, as follows:

- **Age and Integrity.** Is the property old enough to be considered historic (generally at least 50 years old) and does it still look much the way it did in the past?
- **Significance.** Is the property associated with events, activities, or developments that were important in the past? With the lives of people who were important in the past? With significant architectural history, landscape history, or engineering achievements? Does it have the potential to yield information through archaeological investigation about our past? (NPS, 2020a)

Listing in the NRHP provides formal recognition of a property's historical, architectural, or archaeological significance based on national standards used by every state. Under federal law, the listing of a property in the National Register places no restrictions on what a non-federal owner may do with their property up to and including destruction, unless the property is involved in a project that receives Federal assistance, usually funding or licensing/permitting. National Register listing does not lead to public acquisition or require public access (NPS, 2020a).

3. *Native American Graves Protection and Repatriation Act (NAGPRA)*

The Native American Graves Protection and Repatriation Act (NAGPRA; Public Law 101-601; 25 U.S.C. 3001-3013) describes the rights of Native American lineal descendants, Indian tribes, and Native Hawaiian organizations with respect to the treatment, repatriation, and disposition of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony, referred to collectively in the statute as cultural items, with which they can show a relationship of lineal descent or cultural affiliation (NPS, 2021c).

B. State Plans, Policies, and Regulations

1. *California Administrative Code, Title 14, Section 4308*

Section 4308, *Archaeological Features*, of Title 14 of the California Administrative Code provides that: "No person shall remove, injure, disfigure, deface, or destroy any object of archaeological, or historical interest or value" (NPS, n.d.).

2. *California Code of Regulations Title 14, Section 1427*

California Code of Regulations Title 14, Section 1427 provides that: “No person shall collect or remove any object or thing of archaeological or historical interest or value, nor shall any person injure, disfigure, deface or destroy the physical site, location or context in which the object or thing of archaeological or historical interest or value is found” (NAHC, n.d.).

3. *California Register of Historic Resources*

The State Historical Resources Commission has designed this program for use by state and local agencies, private groups, and citizens to identify, evaluate, register, and protect California's historical resources. The Register is the authoritative guide to the state's significant historical and archaeological resources. The California Register program encourages public recognition and protection of resources of architectural, historical, archaeological, and cultural significance; identifies historical resources for state and local planning purposes; determines eligibility for state historic preservation grant funding; and affords certain protections under CEQA (OHP, n.d.).

In order for a resource to be included on the Register of Historic Resources, the resources must meet one of the following criteria:

- Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States (Criterion 1).
- Associated with the lives of persons important to local, California or national history (Criterion 2).
- Embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values (Criterion 3).
- Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation (Criterion 4).

For resources included on the Register of Historic Resources, environmental review may be required under CEQA if property is threatened by a project. Additionally, local building inspectors must grant code alternatives provided under State Historical Building Code. Further, the local assessor may enter into contract with property owner for property tax reduction pursuant to the Mills Act. A property owner also may place his or her own plaque or marker at the site of the resource (OHP, n.d.).

Consent of owner is not required, but a resource cannot be listed over an owner’s objections. The State Historical Resources Commission (SHRC) can, however, formally determine a property eligible for the California Register if the resource owner objects (OHP, n.d.).

4. *Traditional Tribal Cultural Places Act (Senate Bill 18, (SB 18))*

Senate Bill 18 (SB 18) requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places (“cultural places”) through local land use planning. SB 18 also requires the Governor’s Office of Planning and Research (OPR) to

include in the General Plan Guidelines advice to local governments for how to conduct these consultations.

The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level land use decisions are made by a local government.

SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code § 65300 et seq.) and specific plans (defined in Government Code § 65450 et seq.). Although SB 18 does not specifically mention consultation or notice requirements for adoption or amendment of specific plans, existing State planning law requires local governments to use the same processes for adoption and amendment of specific plans as for general plans (see Government Code § 65453). Therefore, where SB 18 requires consultation and/or notice for a general plan adoption or amendment, the requirement extends also to a specific plan adoption or amendment (OPR, 2005).

5. *Assembly Bill 52 (AB 52)*

California Assembly Bill 52 (AB 52) (2014) Chapter 532 amended Section 5097.94 of, and added Sections 21073, 21074, 21080.3.1, 21080.3.2, 21802.3, 21083.09, 21084.2, and 21084.3 to the California Public Resources Code relating to Native Americans. AB 52 was approved on September 25, 2014. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process (OPR, 2017).

The Public Resources Code now establishes that “[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.” (Public Resources Code § 21084.2.) To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project (Public Resources Code § 21080.3.1.).

If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Public Resources Code § 21084.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources. These rules apply to projects that have a notice of

preparation for an environmental impact report or negative declaration or mitigated negative declaration filed on or after July 1, 2015.

Section 21074 of the Public Resources Code defines “tribal cultural resources.” In brief, in order to be considered a “tribal cultural resource,” a resource must be either:

- (1) listed, or determined to be eligible for listing, on the national, State, or local register of historic resources, or
- (2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource.

In the latter instance, the lead agency must determine that the resource meets the criteria for listing in the California Register of Historic Resources. In applying those criteria, a lead agency must consider the value of the resource to the tribe (OPR, 2017).

6. *State Health and Safety Code*

California Health and Safety Code (HSC) § 7050.5(b) requires that excavation and disturbance activities must cease “In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery...” until the coroner can determine regarding the circumstances, manner, and cause of any death. The coroner is then required to make recommendations concerning the treatment and disposition of the human remains. Further, this section of the code makes it a misdemeanor to intentionally disturb, mutilate or remove interred human remains. § 7051 specifies that the removal of human remains from “internment or a place of storage while awaiting internment” with the intent to sell them or to dissect them with “malice or wantonness” is a public offense punishable by imprisonment in a state prison. Lastly, HSC §§ 8010-8011 establish the California Native American Graves Protection and Repatriation Act consistent with the federal law addressing the same. The Act stresses that “all California Indian human remains and cultural items are to be treated with dignity and respect.” It encourages voluntary disclosure and return of remains and cultural items by publicly funded agencies and museums in California. It also outlines the need for aiding California Indian tribes, including non-federally recognized tribes, in filing repatriation claims (CA Legislative Info, n.d.).

7. *California Code of Regulations Section 15064.5 (CEQA Guidelines)*

The California Code of Regulations, Title 14, Chapter 3, Section 15064.5 (the State CEQA Guidelines) establishes the procedure for determining the significance of impacts to archaeological and historical resources, as well as classifying the type of resource. Cultural resources are aspects of the environment that require identification and assessment for potential significance. The evaluation of cultural resources under CEQA is based upon the definitions of resources provided in CEQA Guidelines § 15064.5, as follows (CRNA, 2019):

- A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4850 et seq.).
- A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4852) including the following:
 - Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - Is associated with the lives of persons important in our past;
 - Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
 - Has yielded, or may be likely to yield, information important in prehistory or history.
- The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

4.4.3 BASIS FOR DETERMINING SIGNIFICANCE

Section V of Appendix G to the CEQA Guidelines addresses typical adverse effects to cultural resources, and includes the following threshold questions to evaluate the Project's impacts on cultural resources (OPR, 2019):

- a. Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5;*

- b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5;*
- c. Disturb any human remains, including those interred outside of formal cemeteries.*

4.4.4 IMPACT ANALYSIS

Threshold a: Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5

As discussed in Subsection 4.4.1, although the remnants of a historic period single-family residence were noted in the Project area, this resource was previously determined ineligible for listing on the CRHR and NRHP. Other identified structural remains, including an abandoned reservoir or drainage basin and well, are either modern or their age cannot be ascertained (PaleoWest, 2021, n.p.). As such, these resources do not meet OHP guidelines to be considered historically significant. Therefore, because no historic resources exist on the Project site, implementation of the Project has no potential to result in a substantial adverse change in the significance of a historical resource as defined by CEQA Guidelines Section 15064.5. Thus, no impact would occur and no mitigation is required.

Threshold b: Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Based on the cultural records search and pedestrian survey of the Project site, no known archaeological resources are present on the Project site. The three previously documented cultural resources located in the Project area in 1992 were no longer found to exist during the 2007 cultural resources survey of the site or the 2021 survey of the site.

Because no archaeological resources are known to exist on the Project site, implementation of the proposed Project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5. However, it is possible (although unlikely due to the disturbed nature of the site) that previously undiscovered archaeological resources may be present beneath the site's subsurface, and may be impacted by ground-disturbing activities associated with Project construction. If any prehistoric cultural resources are unearthed during Project construction that meet the definition of an archaeological resource pursuant to CEQA Guidelines Section 15064.5 and are disturbed/damaged by Project construction activities, impacts to those prehistoric cultural resources would be significant.

Threshold c: Would the Project disturb any human remains, including those interred outside of formal cemeteries?

The Project site does not contain a cemetery and no known formal cemeteries are located within the immediate vicinity of the site. A field survey conducted on the Project site did not identify the presence of any human remains and no human remains are known to exist beneath the surface of the site (PaleoWest, 2021, n.p.). Nevertheless, the remote potential exists that human remains may be unearthed during grading and excavation activities associated with Project construction.

If human remains are unearthed during Project construction, the construction contractor would be required by law to comply with California Health and Safety Code Section 7050.5 “Disturbance of Human Remains.” According to Section 7050.5(b) and (c), if human remains are discovered, the County Coroner must be contacted and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner is required to contact the Native American Heritage Commission (NAHC) by telephone within 24 hours. Pursuant to California Public Resources Code Section 5097.98, whenever the NAHC receives notification of a discovery of Native American human remains from a county coroner, the NAHC is required to immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. According to Public Resources Code Section 5097.94(k), the NAHC is authorized to mediate disputes arising between landowners and known descendants relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials. Notwithstanding the requirements of California Health and Safety Code § 7050.5 and California Public Resources Code § 5097.98, due to the potential to discover buried human remains during Project construction activities (i.e., grading), a potentially significant impact would occur and mitigation would be required.

4.4.5 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis for cultural resources considers development of the Project site in conjunction with other development projects in the vicinity of the Project site as well as full General Plan buildout in the City of Bakersfield and other jurisdictions in the region.

Significance of a Historical Resource Pursuant to § 15064.5

As noted above, no resources were identified on or off-site that meet the CEQA or CRHR definitions. As such, the Project would not result in any cumulatively-considerable impacts to known historical resources.

Significance of an Archaeological Resource Pursuant to § 15064.5

The potential for Project construction to result in cumulatively-considerable impacts to prehistoric archaeological resources was analyzed in conjunction with other projects located in the traditional use areas of Native American tribes that are affiliated to the Project site. Implementation of the Project would not impact any known prehistoric cultural resources and the likelihood of uncovering previously unknown prehistoric cultural resources during Project construction are low due to the severity of ground disturbance that has occurred on and adjacent to the site. Nonetheless, the potential exists for subsurface prehistoric cultural resource that meet the CEQA Guidelines § 15064.5 definition of a significant archaeological resource to be discovered during Project construction and during

construction of other local development projects. Accordingly, the Project has the potential to contribute to a significant cumulative impact to an archaeological resource pursuant to § 15064.5.

Disturbance of Human Remains

As discussed under Threshold c), although the Project would be subject to compliance with the provisions of California Health and Safety Code § 7050.5 as well as Public Resources Code § 5097 et. seq., there is a potential that buried human remains could be uncovered during construction of the proposed Project. Other cumulative developments similarly would have the potential to uncover buried human remains. Accordingly, the Project's potential impacts to human remains would be cumulatively considerable prior to mitigation.

4.4.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: No Impact. The Project would not impact significant historical resources.

Threshold b: Significant Direct and Cumulatively Considerable Impact. The Project would not impact any known archaeological sites and would not cause a substantial adverse change in the significance of any known archaeological resources pursuant to California Code of Regulation, Section 15064.5. However, there is a possibility that previously-undiscovered subsurface archaeological resources may be impacted by development of the Project as proposed. Therefore, Project impacts to previously-undiscovered archaeological resources that may occur in the impact areas of the proposed Project would be significant prior to mitigation.

Threshold c: Significant Direct and Cumulatively Considerable Impact. The Project site does not contain a cemetery and no known cemeteries are located within the immediate site vicinity. Although the Project Applicant would be required to comply with the applicable provisions of California Health and Safety Code § 7050.5 and California Public Resources Code § 5097 et. seq., the Project's potential impacts to buried human remains would be significant on a direct and cumulatively-considerable basis prior to mitigation.

4.4.7 MITIGATION

- | | |
|---------|--|
| CR MM-1 | Prior to construction and as needed throughout the construction period involving ground-disturbing construction activities, a construction worker cultural awareness training program shall be provided to all new construction workers within one week of employment at the project site. The training shall be prepared and conducted by a qualified cultural resources specialist. Workers attending the training shall sign a form that shall be kept by the Project Applicant and made available to the City of Bakersfield upon request. |
| CR MM-2 | If suspected cultural resources are encountered during ground disturbance activities, all work within 100 feet of the find shall immediately cease and the area cordoned off until a qualified cultural resource specialist that meets the Secretary of the Interior's Professional Qualification Standards can evaluate the find and make recommendations. |

If the specialist determines that the discovery represents a potentially significant cultural resource, additional investigations may be required. If cultural resources are discovered that may have relevance to Native Americans, the specialist or Project Applicant must provide written notice to the City of Bakersfield, Tejon Indian Tribe, Native American Heritage Commission, and any other appropriate individuals, agencies, and/or groups as determined by the specialist in consultation with the City of Bakersfield to receive input regarding treatment and disposition of the resource, which may include avoidance, testing, and/or excavation to prevent destruction of the resource and/or to allow documentation of the resource for research potential. All reports, correspondence, and determinations regarding the discovery shall be submitted to the California Historical Resources Information System's Southern San Joaquin Valley Information Center at California State University Bakersfield.

- CR MM-3 During construction, if human remains are discovered, further ground disturbance shall be prohibited pursuant to California Health and Safety Code Section 7050.5. The specific protocol, guidelines, and channels of communication outlined by the Native American Heritage Commission, in accordance with Health and Safety Code Section 7050.5, Public Resources Code 5097.97, and Senate Bill 447 shall be followed. In the event of the discovery of human remains, at the direction of the county coroner, Health and Safety Code Section 7050.5(c) shall guide Native American consultation. Unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The coroner, pursuant to the specific exemption set forth in California Government Code Section 6254 (r), parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code Section 6254 (r).

4.4.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold b: Less than Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measures (MMs) CR MM-1 and CR-MM-2 would ensure the proper identification and subsequent treatment of any significant archaeological resources that may be encountered during ground-disturbing activities associated with Project construction. With implementation of the required mitigation, the Project's potential impacts to important archaeological resources would be reduced to less than significant. Cumulatively-considerable impacts would likewise be reduced to less than significant.

Threshold c: Less-than-Significant Impact with Mitigation Incorporated. In the event that human remains are discovered during construction activities, Mitigation Measure CR MM-3 would require compliance with the applicable provisions of California Health and Safety Code § 7050.5 and California Public Resources Code § 5097 et. seq. Mandatory compliance with Mitigation Measure CR

MM-3, State law, and applicable regulatory requirements would reduce the Project's potential impacts to buried human remains to less-than-significant levels.

4.5 ENERGY

The analysis in this Subsection 4.5 is based primarily on a technical study titled, “Energy Consumption & Efficiency Analysis,” dated May 2022, prepared by Trinity Consultants and included as *Technical Appendix E*. Refer to Section 7.0, *References*, for a complete list of reference sources used in this analysis.

4.5.1 EXISTING CONDITIONS

Under existing conditions, the Project site is vacant and undeveloped with remnants of past use scattered throughout the site. Therefore, no energy is consumed on the Project site under existing conditions.

A. *California Energy Trends*

In 2019, Californians consumed an average of 198 million British thermal units (Btus) per capita and was ranked 50 out of 51 states (including the 50 states and the District of Columbia) for its low rate of energy usage (USEIA, 2022). In 2020, 70 percent of California electricity came from in-state sources, with 15.1 percent imported from the northwest and 14.8 percent imported from the southwest. In 2020, California generated a total of 190,913 gigawatt hours (GWh) of electricity and imported a total of 81,663 GWh of electricity. Thirty-three percent (33%) of electricity from California power plants came from renewable sources such as biomass, geothermal, small hydro, solar, and wind. Thirty-two percent (32%) of electricity from Pacific Northwest power plants came from renewable sources. Thirty-three percent (33%) of electricity from Southwest power plants came from renewable sources. In total, approximately thirty-three percent (33%) of the total in-state electricity demand for 2020 came from renewable sources (Trinity, 2022b, p. 2-7).

Table 4.5-1, *2020 Electricity Use in Kern County (GWh)*, shows the amount of electricity and gas consumed in 2020 by residential and non-residential entities in Kern County. In 2020, Kern County used approximately 14,966 GWh of electricity and 2,224 million therms of gas per year; non-residential activities consumed 12,328 GWh (85%) of electricity and 2,123 million therms (95%) of gas. Pacific Gas and Electric Company (PG&E) and Southern California Edison (SCE) supply the County’s electricity and PG&E and Southern California Gas Company (SoCalGas) supply natural gas.

Table 4.5-1 2020 Electricity Use in Kern County (GWh)

Sector	Electricity (GWh)	Gas (Million Therms)
Residential	2,638	101
Non-Residential	12,328	2,123
Total	14,966	2,224

(Trinity, 2022b, Table 2-1)

4.5.2 REGULATORY SETTING

A. Federal Plans, Policies, and Regulations

Federal and state agencies regulate energy use and consumption through various regulations and programs. On the federal level, the United States Department of Transportation (U.S. DOT), United States Department of Energy (U.S. DOE), and United States Environmental Protection Agency (U.S. EPA) are three agencies with substantial influence over energy policies and programs. Generally, federal agencies influence transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, funding of energy-related research and development projects, and funding for transportation infrastructure projects (Trinity, 2022b p. 2-1).

1. Intermodal Surface Transportation Efficiency Act (ISTEA)

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions. The applicable MPO for the City of Bakersfield is the Kern County Association of Governments (Kern COG). Kern COG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is the applicable planning document for the area (FHWA, 2020).

2. Corporate Average Fuel Standards

First enacted by the U.S. Congress in 1975, the Corporate Average Fuel Economy (CAFE) standards reduce energy consumption by increasing the fuel economy of cars and light trucks. The National Highway Traffic Safety Administration (NHTSA) and United States Environmental Protection Agency (USEPA) jointly administer the CAFE standards. The U.S. Congress has specified that CAFE standards must be set at the "maximum feasible level" with consideration given for: 1) technological feasibility; 2) economic practicality; 3) effect of other standards on fuel economy; and 4) need for the nation to conserve energy (Trinity, 2022b p. 2-1).

Fuel efficiency standards for medium- and heavy-duty trucks have been jointly developed by USEPA and NHTSA. The Phase 1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles for model years 2014 through 2018, and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending on the vehicle type. USEPA and NHTSA have also adopted the Phase 2 heavy-duty truck standards, which cover model years 2021 through 2027 and require the phase-in of a 5 to 25 percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type (USEPA and NHTSA, 2016) (Trinity, 2022b p. 2-1).

3. *Energy Policy and Conservation Act*

The Energy Policy and Conservation Act (EPCA) of 1975 was enacted for the purpose of serving the nation's energy demands and promoting conservation methods when feasibly obtainable. Since being enacted on December 22, 1975, EPCA has been amended to do such things as grant specific authority to the President to fulfill obligations of the United States under the international energy program; provide for the creation of a Strategic Petroleum Reserve capable of reducing the impact of severe energy supply interruptions; conserve energy supplies through energy conservation programs and the regulation of certain energy uses; provide for improved energy efficiency of motor vehicles, major appliances, and certain other consumer products; provide a means for verification of energy data to assure the reliability of energy data; and, conserve water by improving the water efficiency of certain plumbing products and appliances (Trinity, 2022b p. 2-2).

4. *National Energy Act of 1978*

The National Energy Act of 1978 includes the following statutes: Public Utilities Regulatory Policies Act of 1978 (PURPA; Public Law 95-617), Energy Tax Act, National Energy Conservation Policy Act (NECPA), Power Plant and Industrial Fuel Use Act, and the National Gas Policy Act. The Power Plant and Industrial Fuel Use Act restricted the fuel used in power plants; however, these restrictions were lifted in 1987. The Energy Tax Act was superseded by the Energy Policy Acts of 1992 (EPACT92) and 2005. The National Gas Policy Act gave the Federal Energy Regulatory Commission authority over natural gas production and established pricing guidelines. NECPA set minimum energy performance standards, which replaced those in EPCA and the federal standards preempted those set by the state. NECPA was amended by the EPCA Amendments of 1985. Due to its relevance to electricity considerations, PURPA is discussed in more depth below (Trinity, 2022b, p. 2-2).

5. *Public Utilities Regulatory Policies Act of 1978 (PURPA)*

PURPA was established in response to the unstable energy climate of the late 1970s. PURPA sought to promote conservation of electric energy. Additionally, PURPA created a new class of non-utility generators, small power producers, from which, along with qualified co-generators, utilities are required to buy power (Trinity, 2022b, p. 2-2).

PURPA was in part intended to augment electric utility generation with more efficiently produced electricity and to provide equitable rates to electric consumers. Utility companies are required to buy all electricity from a qualifying facility (QF). PURPA expanded participation of non-utility generators in the electricity market and demonstrated that electricity from non-utility generators could successfully be integrated with a utility's own supply. PURPA requires utilities to buy whatever power is produced by QFs (usually cogeneration or renewable energy). The Fuel Use Act of 1978 (FUA) (repealed in 1987) also helped QFs become established. Under the FUA, utilities were not allowed to use natural gas to fuel new generating technologies, but QFs, which were by definition not utilities, were able to take advantage of abundant natural gas and abundant new technologies (such as combined-cycle) (Trinity, 2022b, p. 2-2).

6. *Public Utilities Regulatory Policies Act of 1978 (EPACT92)*

EPACT92 is comprised of 27 titles. It was passed by Congress and set goals, created mandates, and amended utility laws to increase clean energy use and improve overall energy efficiency in the United States. EPACT92 was amended as part of the Energy Conservation and Reauthorization Act of 1998 (Trinity, 2022b, p. 2-2).

7. *Energy Policy Act of 2005*

The Energy Policy Act of 2005 addresses energy efficiency; renewable energy requirements; oil, natural gas and coal; alternative-fuel use; tribal energy, nuclear security; vehicles and vehicle fuels; hydropower and geothermal energy; and climate change technology. The act provides revised annual energy reduction goals (two percent per year beginning in 2006), revised renewable energy purchase goals, federal procurement of Energy Star or Federal Energy Management Program designated products, federal green building standards, and fuel cell vehicle and hydrogen energy system research and demonstration (Trinity, 2022b, p. 2-3).

8. *Energy Independence and Security Act of 2007 (EISA)*

EISA was signed into law on December 19, 2007. The objectives for EISA are to move the United States toward greater energy independence and security, increase the production of clean renewable fuels, protect consumers, increase product, building and vehicle efficiency, promote greenhouse gas (GHG) research, improve the energy efficiency of the federal government, and improve vehicle fuel economy. The renewable fuel standard in EISA established appliance energy efficiency standards for boilers, dehumidifiers, dishwashers, clothes washers, external power supplies, commercial walk-in coolers and freezers, and federal buildings; it also established lighting energy efficiency standards for general service incandescent lighting in 2012 and standards for industrial electric motor efficiency (Trinity, 2022b, p. 2-3).

B. State Plans, Policies, and Regulations

On the state level, the California Public Utilities Commission (CPUC) and California Energy Commission (CEC) are two agencies with authority over different aspects of energy. The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. The CEC collects and analyzes energy-related data; forecasts future energy needs; promotes energy efficiency and conservation by setting appliance and building energy efficiency standards; supports energy research; develops renewable energy resources, promotes alternative and renewable transportation fuels and technologies; certifies thermal power plants 50 megawatts (MW) and larger; and plans for and directs state response to energy emergencies. Some of the more relevant federal and state energy-related laws and plans are discussed below (Trinity, 2022b, p. 2-1).

1. *Integrated Energy Policy Report*

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the California Energy Commission (CEC) to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing California's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the State's economy; and protect public health and safety (Public Resources Code § 25301a). The CEC prepares these assessments and associated policy recommendations every two years, with updates on alternate years, as part of the Integrated Energy Policy Report (IEPR) (CEC, n.d.).

The 2019 IEPR focuses on changes in its energy system to address climate change and improve air quality in order to ensure that all Californians share in the benefit of the state's clean energy future. The report provides an analysis of electricity sector trends, building decarbonization and energy efficiency, zero-emission vehicles, energy equity, climate change adaptation, electricity reliability in Southern California, natural gas technologies, and electricity, natural gas, and transportation energy demand forecasts. In response to SB 100, which calls for California's electricity system to become 100 percent zero-carbon by 2045, the CEC, California Public Utilities Commission (CPUC) and the California Air Resources Board (CARB) are leading the way to identify pathways to remove carbon from the state's electricity system. The goal is to utilize the clean electricity system to eliminate the carbon from other portions of California's energy system (CEC, n.d.).

2. *California Code Title 24, Part 6, Energy Efficiency Standards*

California Code Title 24, Part 6 (also referred to as the California Energy Code) was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption. To these ends, the California Energy Code provides energy efficiency standards for residential and nonresidential buildings. California's building efficiency standards are updated on an approximately three-year cycle. The 2019 Standards for building construction, which went into effect on January 1, 2020, improved upon the former 2016 Standards for residential and nonresidential buildings. The CEC anticipates that single-family homes built with the 2019 standards will use approximately 7% less energy compared to the residential homes built under the 2016 standards. Additionally, after implementation of solar PV systems, homes built under the 2019 standards will use approximately 53% less energy than homes built under the 2016 standards. Nonresidential buildings will use approximately 30% less energy due to lighting upgrades compared to the prior code (CEC, n.d.).

3. *California Solar Rights and Solar Shade Control Act*

The Solar Rights Act sets parameters for establishing solar easements, prohibits ordinances and private covenants which restrict solar systems, and requires communities to consider passive solar and natural heating and cooling opportunities in new construction (CA Legislative Info, 1978). This Act is applicable to all California cities and counties. California's solar access laws appear in the State's Civil, Government, Health and Safety, and Public Resources Codes. California Pub Res Code § 25980

sets forth the Solar Shade Control Act, which encourages the use of trees and other natural shading except in cases where the shading may interfere with the use of active and passive solar systems.

4. *California Renewable Portfolio Standards (RPS)*

The California Energy Commission (CEC) implements and administers portions of California's Renewables Portfolio Standard (RPS). Under the RPS, 25% of retail sales were originally required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 raises California's RPS requirement to 50% renewable resources target by December 31, 2026, and to a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA), the Department of Food and Agriculture (CDFA), and California Air Resources Board (CARB) to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal (CEC, n.d.).

5. *Pavley Fuel Efficiency Standards (AB 1493)*

AB 1493 required the California Air Resources Board (CARB) to adopt the nation's first GHG emission standards for automobiles. On September 24, 2009, CARB adopted amendments to the "Pavley" regulations that reduced GHG emissions in new passenger vehicles from model year 2009 through 2016. The U.S. EPA granted California the authority to implement GHG emission reduction standards for new passenger cars, pickup trucks, and sport utility vehicles on June 30, 2009. It is expected that the Pavley regulations reduced GHG emissions from California passenger vehicles by about 22 percent in 2012 and about 30 percent in 2016, all while improving fuel efficiency and reducing motorists' costs. CARB has since adopted a new approach to cars and light trucks by combining the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California (CARB, n.d.).

6. *Advanced Clean Cars Program*

In 2012, the CARB adopted a set of regulations to control emissions from passenger vehicle model years 2017 through 2025, collectively called Advanced Clean Cars. Advanced Clean Cars, developed in coordination with the U.S. EPA and National Highway Traffic Safety Administration (NHTSA), combined the control of smog-causing (criteria) pollutants and GHG emissions into a single coordinated package of regulations: the Low-Emission Vehicle III Regulation for criteria (LEV III Criteria) and GHG (LEV III GHG) emissions, and a technology-forcing mandate for zero-emission vehicles (ZEV). The goal of the program is to guide the development of environmentally advanced

cars that would continue to deliver the performance, utility, and safety, car owners have come to expect. Advanced Clean Cars includes the following elements (CARB, n.d.):

- LEV III Criteria: Reducing Smog-Forming Pollution. CARB adopted new emission standards to reduce smog-forming emissions (also known as “criteria pollutants”) beginning with 2015 model year vehicles. The goal of this regulation is to have cars emit 75 percent less smog-forming pollution than the average car sold in 2012 by 2025.
- LEV III GHG: Reducing GHG Emissions. California’s GHG regulations are projected to reduce GHG emissions from new vehicles by approximately 40 percent (from 2012 model vehicles) in 2025.
- ZEV Regulation: Promoting the Cleanest Cars. The ZEV regulation is designed to achieve the State’s long-term emission reduction goals by requiring auto manufacturers to offer for sale specific numbers of the very cleanest cars available. These vehicle technologies include full battery-electric, hydrogen fuel cell, and plug-in hybrid-electric vehicles. Updated estimates using publicly available information show about 8 percent of California new vehicle sales in 2025 will be ZEVs and plug-in hybrids.

7. *Advanced Clean Trucks Program*

In June, 2020, CARB adopted a new rule requiring truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California will be required to be zero-emission. Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines would be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales. CARB reports that as of 2020, most commercially-available models of zero-emission vans, trucks and buses operate less than 100 miles per day. Commercial availability of electric-powered long-haul trucks is very limited. However, as technology advances over the next 20 years, zero-emission trucks will become suitable for more applications, and several truck manufacturers have announced plans to introduce market ready zero-emission trucks in the future. When commercial availability of electric-powered long-haul trucks is more readily available, implementation of the Advanced Clean Trucks Regulation is anticipated to significantly reduce GHG emissions and energy usage statewide (CARB, 2021).

8. *California Renewable Portfolio Standard (SB 1078)*

SB 1078 required electricity retailers to increase the amount of energy obtained from eligible renewable energy resources to 20% by 2010 and 33% by 2020. Additionally, former Governor Edmund G. Brown, Jr. signed into law Senate Bill 350 in October 2015, which requires retail sellers and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030. The CEC and the CPUC work collaboratively to implement the renewable portfolio standards (RPS). The CPUC implements and administers RPS compliance rules for California’s retail sellers of electricity, which include investor-owned utilities (IOU), publicly owned utilities (POUs),

electric service providers (ESP) and community choice aggregators (CCA). The CEC is responsible for the certification of electrical generation facilities as eligible renewable energy resources, and adopting regulations for the enforcement of RPS procurement requirements of POUs. In 2017, California's three large IOU's (Pacific Gas and Electric, Southern California Edison, and San Diego Gas and Electric) collectively served 36% of their retail electricity sales with renewable power. The IOU's utilize a mix of RPS resources such as a wind, solar photovoltaics (PV), solar thermal, hydroelectricity, geothermal, and bioenergy to meet their renewable procurement targets (CA Legislative Info, 2002).

9. *Senate Bill 350 (SB 350) – Clean Energy and Pollution Reduction Act of 2015*

In October 2015, the legislature approved, and the Governor signed, SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Specifically, SB 350 requires the following to reduce statewide GHG emissions (CA Legislative Info, n.d.):

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 25 percent by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the CEC, and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

10. *Assembly Bill 1575 (AB 1575)*

In 1975, largely in response to the oil crisis of the 1970s, the California State Legislature adopted Assembly Bill (AB) 1575, which created the California Energy Commission (CEC). The statutory mission of the CEC is to forecast future energy needs, license thermal power plants of 50 megawatts or larger, develop energy technologies and renewable energy resources, plan for and direct state responses to energy emergencies, and, perhaps most importantly, promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code Section 21100(b)(3) to require Environmental Impact Reports (EIRs) to consider the wasteful, inefficient, and unnecessary consumption of energy resources caused by a project (Trinity, 2022b, p. 2-1).

11. *California Solar Initiative*

On January 12, 2006, the CPUC approved the California Solar Initiative (CSI), which provides \$2.9 billion in energy-related incentives between 2007 and 2017. CSI is part of the Go Solar California campaign, and builds on ten years of state solar rebates offered to areas services by California's

investor-owned utilities (IOU): Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and San Diego Gas and Electric (SDG&E.) The CSI is overseen by the CPUC and includes a \$2.5 billion program for commercial and existing residential customers, funded through revenues and collected from gas and electric utility distribution rates. Furthermore, the CEC will manage \$350 million targeted for new residential building construction, utilizing funds already allocated to the CEC to foster renewable projects between 2007 and 2011 (Trinity, 2022b, p. 2-4).

Current incentives provide an upfront, capacity-based payment for a new system. In its August 24, 2006 decision, the CPUC shifted the program from volume-based to performance-based incentives and clarified many elements of the program's design and administration. These changes were enacted in 2007 (Trinity, 2022b, p. 2-4).

12. AB 2514 – Energy Storage Systems

AB 2514 requires the CPUC to adopt an energy storage system procurement target, if determined to be appropriate, to be achieved by each load-serving entity by December 31, 2015 and a second target to be achieved by December 31, 2020. The bill would require the governing board of a local publicly owned electric utility to adopt an energy storage system procurement target, if determined to be appropriate, to be achieved by that utility by December 31, 2016; second target by December 31, 2021. The bill would require each load-serving entity and local publicly owned electric utility to report certain information to the CPUC (load-serving entity) or to the Energy Commission (local publicly owned electric utility) (Trinity, 2022b, p. 2-4).

13. SB 350

SB 350 was approved on October 7, 2015. SB 350 to: (1) increase the standards of the California RPS program by requiring that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased to 50 percent by December 31, 2030; (2) require the State Energy Resources Conservation and Development Commission to establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas final end uses of retail customers by January 1, 2030; (3) provide for the evolution of the Independent System Operator into a regional organization; and (4) require the state to reimburse local agencies and school districts for certain costs mandated by the state through procedures established by statutory provisions. Among other objectives, the Legislature intends to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation (Trinity, 2022b, p. 2-5).

14. Executive Order (EO) B-18 -12

EO B-18-12 was signed on April 25, 2012 and directed state agencies to reduce their grid- based energy purchases by at least 20 percent by 2018, as compared to a 2003 baseline. Pursuant to EO B-18-12, all new state buildings and major renovations beginning design after 2025 shall be constructed as Zero Net Energy facilities with an interim target for 50% of new facilities beginning design after 2020 to be Zero Net Energy. State agencies shall also take measures toward achieving Zero Net Energy for 50

percent of the square footage of existing state-owned building area by 2025 and reduce water usage by 20 percent by 2020 (Trinity, 2022b, p. 2-5).

15. *Executive Order (EO) N-79-20*

On September 23, 2020, California Governor Gavin Newsom issued Executive Order N-79-20 that set new statewide goals for phasing out gasoline-powered cars and trucks in California. Under Order N-79-20, 100% of in-state sales of new passenger cars and trucks are to be zero-emission by 2035; 100% of in-state sales of medium- and heavy-duty trucks and busses are to be zero-emission by 2045, but only where feasible; and 100% of off-road vehicles and equipment sales are to be zero-emission by 2035 where feasible. The Governor also directed CARB and other state agencies to develop regulations or take other steps within existing authority to achieve these goals.

C. Local Plans, Policies, and Regulations

The City of Bakersfield currently does not have any adopted plans or policies regarding energy conservation and efficiency that apply to private development projects other than building code requirements. The City of Bakersfield does not have an adopted Climate Action Plan and the Metropolitan Bakersfield General Plan does not have an Energy Element.

4.5.3 METHODOLOGY FOR CALCULATING PROJECT ENERGY DEMANDS

Energy usage for Project-related construction and operations were developed using the California Emissions Estimator Model (CalEEMod) output files relied upon for the air quality and greenhouse gas emissions analyses (*Technical Appendix B*). These estimates include: 1) diesel fuel use for construction off-road equipment; 2) diesel and gasoline fuel use for construction on-road vehicles; 3) diesel and gasoline fuel use from vehicle trips generated by the Project operations; 4) operational natural gas estimates; and 5) operational electricity estimates. Some reduction in diesel and gasoline vehicles is anticipated due to Executive Order N-79-20, which sets a goal of 100% of all in-state sales of new passenger cars and trucks be zero emissions by 2035. This analysis does not include that reduction and is therefore a conservative estimation of the impacts from diesel and gasoline fuel usage from vehicle trips (Trinity, 2022b, p. 3-1).

The *Energy Consumption & Efficiency Analysis (Technical Appendix E)* prepared by Trinity Consultants assess the proposed Project in two phases. Phase 1 consists of the warehouse component of the Project, which is anticipated to be fully operational in year 2024. Phase 2 consists of the commercial component of the project, which is anticipated to be fully operational by approximately 2029.

4.5.4 BASIS FOR DETERMINING SIGNIFICANCE

According to Section I of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact associated with energy if the Project or any Project-related component would (OPR, 2019):

- a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation;*
- b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.*

Regarding the determination of significance under Threshold a., if energy consumed by the Project's construction and/or operation cannot be accommodated with existing available resources and energy delivery systems, and/or the Project requires and/or consumes more energy than industrial uses in California of similar scale and intensity, the Project would result in wasteful, inefficient, or unnecessary consumption of energy. There is no adopted quantitative threshold applicable to the Project for determining a significant energy impact. *Technical Appendix E* evaluated an increase in electricity or gas demand of more than 1% of the regional demand as being significant, and found the Project to be less than significant, although this is not an adopted threshold for the City of Bakersfield.

4.5.5 IMPACT ANALYSIS

Threshold 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?

The Project entails the proposed development of ±90.59 gross acres (±84.67 net acres) located east of SR-99, west of South H Street, north of Hosking Avenue and south of Berkshire Road with retail commercial uses and one warehouse distribution facility. The warehouse distribution facility is proposed to provide up to 1,012,185 s.f. of building space and its approval by Site Plan Review No. 21-0185 is being considered concurrent with the Project's entitlements. Zoning for the commercial component of the Project is being considered but the proposed Exclusive PCD zoning will require the Applicant to obtain approval of a final commercial development plan by the City Council at a future date. A concept plan showing a reasonably foreseeable layout for the commercial component of the project includes 12 buildings all together providing up to 187,500 s.f. of building space. Although no renewable energy features are incorporated into the Project's proposed entitlements, the warehouse building's roof will be solar-ready. Solar panels are not proposed at this time because the building user and the user's power needs are not currently known. The Project Applicant has indicated that it will consider the installation of solar power generation systems with battery storage and potential installation of fuel cells suitable for generating electricity from natural gas supply at a later date. The building's electrical room would be sized to allow space for future solar gear (Cornerstone, 2022f).

A discussion of the Project's expected energy demands during construction and operation is provided below.

A. Energy Use During Construction

Based on vehicle miles traveled estimates produced by CalEEMod, Table 4.5-2, *Phase 1 Construction Fuel Usage Estimates* presents the construction-related fuel usage estimates for Phase 1, the warehouse component of the Project.

Based on vehicle miles traveled estimates produced by CalEEMod, Table 4.5-3, *Phase 2 Construction Fuel Usage Estimates* presents the construction-related fuel usage estimates for Phase 2, the commercial component of the Project.

Table 4.5-2 Phase 1 Construction Fuel Usage Estimates

Construction Phase	Number of Days	Daily Off Road Equipment Hours	Daily VMT		Fuel Usage (gal)			
			Worker	Vendor	Daily Diesel ¹	Daily Gasoline ²	Total Diesel	Total Gasoline
Site Preparation	20	80	9	0	160	5	3,200	97
Grading	80	104	14	0	208	8	16,640	605
Building Construction	231	61	394	10	131	213	30,290	49,148
Paving	30	128	6	0	256	3	7,680	97
Architectural Coating	30	6	79	0	12	43	360	1,280
Total Fuel Usage							58,170	51,227

¹ Off-road equipment are conservatively estimated to use 2 gallons per hour operating in place and medium diesel trucks are conservatively estimated to use \pm 8 gallons per mile.

² Light-duty trucks are conservatively estimated to use 20 miles per gallon.
(Trinity, 2022b, Table 3-3)

Table 4.5-3 Phase 2 Construction Fuel Usage Estimates

Construction Phase	Number of Days	Daily Off Road Equipment Hours	Daily VMT		Fuel Usage (gal)			
			Worker	Vendor	Daily Diesel ¹	Daily Gasoline ²	Total Diesel	Total Gasoline
Site Preparation	45	20	9	0	40	5	1,800	219
Grading	101	50	14	0	100	8	10,100	764
Building Construction	986	36	394	10	81	213	79,989	209,781
Paving	78	24	6	0	48	3	3,744	253
Architectural Coating	78	3	79	0	6	43	468	3,327
Total Fuel Usage							96,101	214,344

¹ Off-road equipment are conservatively estimated to use 2 gallons per hour operating in place and medium diesel trucks are conservatively estimated to use \pm 8 gallons per mile.

² Light-duty trucks are conservatively estimated to use 20 miles per gallon.
(Trinity, 2022b, Table 3-6)

B. Energy Use During Project Operations

Based on vehicle miles traveled estimates produced by CalEEMod, Table 4.5-4, *Phase 1 Annual Operational Fuel Usage Estimates*, presents the operations-related fuel usage estimates of Phase 1.

Based on the land use assumptions and the default energy consumption factors for operations included in CalEEMod, Table 4.5-5, *Phase 1 Annual Operational Energy Consumption Estimates* presents the estimated annual operational electricity and natural gas consumption for Phase 1 (Trinity, 2022b, p. 3-2).

Table 4.5-4 Phase 1 Annual Operational Fuel Usage Estimates

Land Use	Annual Vehicle Miles Travelled (VMT)	Annual Diesel Consumption (gal)	Annual Gasoline Consumption (gal)
Non-Asphalt Surfaces	0	0	0
Parking lot	0	0	0
Refrigerated Warehouse	901,493	29,052	35,339
Unrefrigerated Warehouse (Distribution Center)	15,231,719	1,514,290	403,469
Totals	16,133,212	1,543,342	438,807

Notes: Fuel usage provided is a sum of the passenger vehicles and trucks fuel usage. Fuel usage for passenger vehicles was estimated assuming 88% of vehicles use gasoline at a conservative 20 miles per gal efficiency and 12% use diesel at a conservative 17.5 miles per gal efficiency. Fuel usage for trucks was estimated assuming 12% of trucks use gasoline at a conservative 10 miles per gal efficiency and 88% use diesel at a conservative 5 miles per gal efficiency.
(Trinity, 2022b, Table 3-4)

Table 4.5-5 Phase 1 Annual Operational Energy Consumption Estimates

Land Use	Units	Operational Natural Gas (kBtu/year)	Operational Electricity (kWh/yr)
Non-Asphalt Surfaces	26.8 acres	0	0
Parking Lot	1250 spaces*	0	175,840
Refrigerated Warehouse	101,218.5 sf	15,183	469,654
Unrefrigerated Warehouse (Distribution Center)	910,966.5 sf	16,315,400	4,955,660
Total		16,330,583	5,601,154

Notes: sf - square feet, *Equivalent parking spaces of truck and passenger vehicles combined.
(Trinity, 2022b, Table 3-5)

Based on vehicle miles traveled estimates produced by CalEEMod, Table 4.5-6, *Phase 2 Annual Operational Fuel Usage Estimates* presents the operations-related fuel usage estimates of Phase 2. Based on the land use assumptions and the default energy consumption factors for operations included in CalEEMod, Table 4.5-7, *Phase 2 Annual Operational Energy Consumption Estimates*, presents the estimated annual operational electricity and natural gas consumption for Phase 2 (Trinity, 2022b, p. 3-3).

Table 4.5-6 Phase 2 Annual Operational Fuel Usage Estimates

Land Use	Annual Vehicle Miles Travelled (VMT)	Annual Diesel Consumption (gal)	Annual Gasoline Consumption (gal)
Non-Asphalt Surfaces	0	0	0
Parking Lot	0	0	0
Regional Shopping Center	15,989,973	239,850	703,559
Totals	15,989,973	239,850	703,559

Notes: Fuel usage was estimated using 88% of vehicles use gasoline as a conservative per gallon efficiency and 12% use diesel at a conservative 8 miles per gallon efficiency.
(Trinity, 2022b, Table 3-7)

Table 4.5-7 Phase 2 Annual Operational Energy Consumption Estimates

Land Use	Units	Operational Natural Gas (kBtu/year)	Operational Electricity (kWh/yr)
Non-Asphalt Surfaces	13.83 acres	0	0
Parking Lot	1,236 spaces	0	173,040
Regional Shopping Center	187,500 sf	1,989,380	1,485,000
Total		1,989,380	1,658,040

(Trinity, 2022b, Table 3-8)

C. Summary of Project's Operational Energy Consumption

Based on the gas and electricity consumption estimates summarized above in Table 4.5-5 and Table 4.5-7, Table 4.5-8, *Summary of Project's Operational Energy Consumption*, summarizes relative Project energy impacts compared to Kern County 2020 usage.

Table 4.5-8 Summary of Project's Operational Energy Consumption

Development Scenario	Operational Natural Gas (million BTU/year) (unmitigated)	Operational Electricity (GWh/yr)
Phase 1	16,331	6
Phase 2	1,989	2
Total Project	18,320	7
2020 Total Regional Demand -	222,346,846	14,966
Percent of Regional Demand	0.008%	0.049%

(Trinity, 2022b, Table 3-9)

The State of California's CEC recently prepared 2022 California Building Energy Efficiency Standards to reduce reliance on fossil fuels as well as GHG emissions from energy usage. The standards encourage efficient electric heat pumps, establish electric-ready requirements for new buildings, expand solar photovoltaic and battery storage standards, strengthen ventilation standards, and more for new construction. The developer(s) of the Project would be required to comply with the 2022 Standards or later and likely more stringent Standards in effect at the time of building permit issuance. Thus, it is expected that all or most of the following design features to reduce energy and power consumption

would be installed in buildings on the Project site: low energy air conditioning/heating systems; integrated lighting systems; LED lighting technology; high efficiency solar power technologies; energy efficient windows; and drought-tolerant landscaping. The warehouse component of the Project is designed to include high efficiency lighting and energy efficient appliances (Trinity, 2022b, p. 3-6).

Based on the foregoing analysis, energy use associated with the proposed Project would be consumed in the form of fuel (diesel and gasoline), electricity and natural gas. During construction there would be a temporary consumption of energy resources required for the movement of equipment and materials. Compliance with local, state, and federal regulations would reduce short-term energy demand during the Project's construction to the extent feasible, and Project construction would not result in a wasteful or inefficient use of energy. As summarized in Table 4.5-2 and Table 4.5-3 above, energy use during Project construction would be primarily in the form of fuel consumption to operate heavy equipment, vehicles, machinery, and generators. Temporary power may also be provided to construction trailers or electric construction equipment; however, minimal electricity used during Project construction is expected to be de minimis (Trinity, 2022b, p. 4-1).

Once constructed, the proposed Project would also use energy resources for the operation of the warehouse and commercial buildings (electricity and natural gas), and for on-road vehicle trips (gasoline and diesel fuel). As shown in Table 4.5-4 and Table 4.5-6, compared to the CEC's Retail Fuel Outlet Annual Reporting (CEC-A15) Results, the Project's estimated increase in fuel consumption would constitute an approximate 0.006% increase in total annual fuel energy consumption within Kern County. Similarly, as shown in Table 4.5-8, compared to the CEC's 2020 County-wide data set, the Project's estimated increase in electricity and natural gas consumption would constitute approximately 0.049% and 0.008% increase, respectively, in total annual consumption within the County. As such, Project activities would have a minimal effect on the local and regional fuel energy supplies and availability (Trinity, 2022b, p. 4-1).

Therefore, and for the reasons presented above, the proposed Project would not result in a potential impact due to wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be less than significant with no mitigation required.

Threshold b: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

At this time, other than the generalized policies found within the Metropolitan Bakersfield General Plan, for which Project consistency is presented in Subsection 4.10, *Land Use and Planning*, the City has not adopted local programs or policies that support energy efficiency and/or sustainability that would apply to the Project.

The Project's mobile equipment and vehicles would comply with federal, state, and regional requirements where applicable. Specifically, the USEPA and the NHTSA have adopted fuel efficiency standards for medium- and heavy-duty trucks which apply to truck fleet operators. CARB has also adopted cleaner technology and fuel standards pursuant to AB 1493. While regulations published by

both the USEPA/NHTSA and CARB primarily apply to manufacturers of on-road vehicles and not the end user, engines purchased by the Project operator and off-site vendors would be certified in accordance with the appropriate state and federal regulations. This ensures that efficiency of mobile equipment and vehicles would continue to improve over time through compliance with increasingly stringent standards adopted by applicable regulatory agencies. The energy modeling for trucks does not take into account specific fuel reductions from these regulations, as they would apply to fleets as they incorporate newer trucks meeting the regulatory standards; however, these regulations would have an overall beneficial effect on reducing fuel consumption from trucks over time as older trucks are replaced with newer models that meet the standards (Trinity, 2022b, 4-1, 4-2).

The State of California's Energy Efficiency Strategic Plan (adopted 2008, updated January 2011) outlines specific goals and strategies to help promote energy efficiency in California's industrial sector in three (3) areas: 1) support industry adoption of energy efficiency by integrating energy efficiency savings with achievement of GHG goals; 2) build market value of and demand for energy efficiency; and 3) provide technical and public policy guidance for resource efficiency. The Energy Efficiency Strategic Plan promotes reductions in energy consumption through compliance with GHG emission reductions, water conservation, and proper waste disposal. As applicable, the Project would utilize the best available equipment to improve diesel fuel efficiency, and equipment that uses energy would implement modern design and technology to maximize efficiency improvements (Trinity, 2022b, 4-2).

Lastly, the Project is expected to have a de minimis effect on local population growth. As discussed above, the Project would continue implementing existing rules and conform with fleet turnover, further reducing the Project's fuel energy consumption over time (Trinity, 2022b, 4-2).

In summary, the Project construction and operations activities would not result in significant increase in energy consumption over the existing environmental baseline and would not conflict with or obstruct an applicable state or local plan for renewable energy or energy efficiency. Therefore, impacts would be less than significant (Trinity, 2022b, 4-2).

4.5.6 CUMULATIVE IMPACT ANALYSIS

The proposed Project and other development projects would be required to comply with the same applicable federal, State, and local regulatory measures aimed at reducing fossil fuel consumption and the conservation of energy. Accordingly, the Project would not cause or contribute to a significant cumulatively-considerable impact related to conflicts with a State or local plan for renewable energy or energy efficiency.

4.5.7 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less than Significant Impact. The amount of energy and fuel consumed by construction and operation of the Project would not be inefficient, wasteful, or unnecessary. Furthermore, the Project would not cause or result in the need for additional energy facilities or energy delivery systems.

Threshold b: Less than Significant Impact. The Project would not cause or result in the need for additional energy production or transmission facilities. The Project would not conflict with or obstruct the achievement of energy conservation goals within the State of California identified in State and local plans for renewable energy and energy efficiency.

4.5.8 MITIGATION

Impacts would be less than significant; therefore, no mitigation is required.

4.6 GEOLOGY AND SOILS

The information and analysis in this Subsection 4.6 is based primarily on information contained in a technical report prepared by Krazan & Associates, Inc. (hereinafter “Krazan”). The technical study, titled “Geotechnical Engineering Investigation, Proposed Commercial/Retail Development, NEC of Hosking Avenue and Highway 99, Bakersfield, California,” dated September 9, 2021, is included as *Technical Appendix F* to this EIR (Krazan, 2021). Refer to Section 7.0, *References*, for a complete list of reference sources used in this analysis.

4.6.1 EXISTING CONDITIONS

A. Regional and Local Geologic Setting

Geologically, the Project site is situated near the south end of the Great Valley Geomorphic Province. This province is a large northwesterly trending structural trough between the Coast Range mountains and the Sierra Nevada Mountains. Erosion from both of these mountain systems has resulted in the deposition of immense thickness of sediments in the Valley floor. Heavily-laden streams from the Sierra Nevada have built very prominent alluvial fans along the margins of the San Joaquin Valley. This has resulted in a rather flat topography in the vicinity of the Project site (Krazan, 2021, p. 3).

The south end of the San Joaquin Valley is surrounded on all sides, excluding the north, by active fault systems (San Andreas, White Wolf-Breckenridge-Kem Canyon and Garlock Faults). Numerous smaller faults exist within the valley floor. There is on-going seismic activity in the Kern County area, with the most noticeable earthquake being the July 21, 1952, 7.7 magnitude Kern County Earthquake (Krazan, 2021, p. 3).

B. Seismic Hazards

The Project site is not located within a mapped Earthquake Fault Zone (special studies zone). The closest known faults to the Project site are subsurface faults located at the Fruitvale Oil Field, which are not thought to be active in the last two million years. No evidence was observed by Krazan during their field reconnaissance of the Project site that indicated surface faulting has occurred across the property during the Holocene time (approximately 11,700 years ago to present-day) (Krazan, 2021, pp. 3-4).

The Project site is located in an area of southern California that is subject to strong ground motions due to seismic events (i.e., earthquakes). The geologic structure of southern California is dominated mainly by northwest-trending faults associated with the San Andreas system. The nearest *active* fault to the Project site is the Edison Fault, located approximately 11.5 miles northeast of the Project site (CGS, 2015). An active fault is defined by the California Geological Survey as a fault that has experienced surface displacement within the Holocene Epoch. Secondary hazards associated with seismic events include surface rupture, ground failure, unstable soils and slopes. Each of these hazards is briefly described below.

1. *Fault Rupture*

Fault rupture can occur along pre-existing, known active fault traces; however, fault rupture also can splay from known active faults or rupture along unidentified fault traces. There are no active or potentially active faults occurring on the Project site and no known faults are mapped trending through or toward the site (CGS, 2015).

2. *Liquefaction*

Liquefaction is a phenomenon in which loose, saturated, relatively cohesion-less soil deposits lose shear strength during strong ground motions, which causes the soil to behave as a viscous liquid. Liquefaction is generally limited to the upper 50 feet of subsurface soils. Research and historical data indicate that loose granular soils of Holocene to late Pleistocene age below a near-surface groundwater table are most susceptible to liquefaction, while the stability of most clayey material is not adversely affected by vibratory motion (SCEC, 1999, pp. 5-6). According to the Metropolitan Bakersfield General Plan, the Project site is not located in an area of high ground water and the Project site is not considered conducive to liquefaction; therefore, the potential for liquefaction at the site is low (Bakersfield, 2007, Figure VIII-2).

3. *Unstable Soils and Slopes*

The Project site is generally flat under existing conditions and does not contain, nor is it adjacent to any, steep natural or manufactured slopes and there is no evidence of historical landslides or rockfalls on the site (Google Earth, 2022). As such, the site in its present condition is not susceptible to seismically-induced landslides and rockfalls.

C. Soils

Based on soils mapping from the Natural Resources Conservation Service (NRCS), the Project site has two types of soils. The majority of the Project site is composed of Kimberlina fine sandy loam, 0 to 2 percent slopes. The northeastern corner of the Project site is composed of Kimberlina fine sandy loam, saline-sodic, 0 to 2 percent slopes (NRCS, 2022).

According to soil field investigations and soil borings conducted by Krazan, soils found on the Project site are typical of those found within the geologic region. The upper soils of the Project site are composed of approximately 6 to 12 inches of very loose silty sand or sandy silt that is disturbed, has low strength characteristics, and are highly compressible when saturated. Under the upper soils, approximately 2.5 to 12.5 feet of predominantly sandy silt fill material was found, with the deepest fill material being located on the eastern portion of the Project site. Approximately 3 to 4.5 feet of loose to dense silty sand, sandy silt, silty sand/sand, or sand was identified beneath the loose surface soils and fill material. These soils were determined to be moderately strong and slightly to moderately compressible. Alternating layers of loose to very dense silty sand, silty sand/sandy silt, sandy silt, silty sand/sand, or sand that was moderately strong and slightly compressible was identified below 4 to 5.5 feet (Krazan, 2021, p. 4 - 5).

D. Groundwater

Krazan did not observe any groundwater during and immediately following the test borings work conducted on the Project site. Historically, it has been noted by the Department of Water Resources that groundwater in the vicinity of the Project site has been deeper than 100 feet (Krazan, 2021, p. 5).

E. Slope and Instability Hazards

1. Soil Erosion

Erosion is the process by which the upper layers of the ground surface (such as soils) are worn and removed by the movement of water or wind. Soils with characteristics such as low permeability and/or low cohesive strength are more susceptible to erosion than those soils having higher permeability and cohesive strength. Additionally, the slope gradient on which a given soil is located also contributes to the soil's resistance to erosive forces. Because water is able to flow faster down steeper gradients, the steeper the slope on which a given soil is located, the more readily it will erode. According to the Metropolitan Bakersfield General Plan EIR, the Project site is located in an area with low to moderate soil erodibility (Bakersfield, 2002, Exhibit 4.7-5).

Wind erosion can damage land and natural vegetation by removing soil from one place and depositing it in another. It mostly affects dry, sandy soils in flat, bare areas, but wind erosion may occur wherever soil is loose, dry, and finely granulated. According to NRCS, soils on the Project site have a moderately high susceptibility to wind erosion (NRCS, 2022). Because under existing conditions, the Project site is undeveloped with little or no vegetative cover and loose and dry topsoil conditions, it has the potential to contribute windblown soil and sand.

2. Settlement Potential

Settlement refers to unequal compression of a soil foundation, shrinkage, or undue loads being applied to a building after its initial construction that affect the soil foundation. According to Krazan, the soils present on the Project site have settlement potential (Krazan, 2021, p. 12 - 13).

3. Shrinkage and Subsidence Potential

Subsidence is a gradual settling or sudden sinking of the ground surface (i.e., loss of elevation). The principal causes of subsidence are aquifer-system compaction, drainage of organic soils, underground mining, and natural compaction. Shrinkage is the reduction in volume in soil as the water content of the soil drops (i.e., loss of volume). According to NRCS, soils on the Project site have a low subsidence potential (NRCS, 2022).

4. Soil Expansion Potential

Expansive soils are soils that exhibit cyclic shrink and swell patterns in response to variations in moisture content. On-site soils contain trace amounts of clay and therefore have low to moderate expansion potential (Krazan, 2021, p. 5).

5. *Landslide Potential*

The Project site and immediately surrounding properties are generally flat and contain no steep natural or manufactured slopes (Google Earth, 2022); thus, there is no potential for landslides to occur on or immediately adjacent to the site.

F. *Paleontological Setting*

According to the Metropolitan Bakersfield General Plan EIR, the City of Bakersfield is underlain by sediments and rocks of Quaternary age, during which several lakes occupied the southern portion of the San Joaquin Valley. Remnants of these lakes are reflected in the existing Buena Vista Lake, Kem Lake, and Tulare Lake. These lakes were areas where numerous species of animals would assemble, based on the remains that have been found around these areas (Bakersfield, 2002, p. 4.10-4).

According to the Metropolitan Bakersfield General Plan EIR, geological records indicate that the Project area is underlain by recent alluvial deposits to all depths likely to be reached by excavations associated with development. However, the Project area has a low potential for containing important fossil remains because the area is underlain by alluvial deposits that are too young to contain significant fossil remains. Regardless, the possibility exists in the area that older fossiliferous alluvium may be present six feet below the surface since the remains of Pleistocene (ice age) land animals have been collected from older alluvial deposits in Kern County. There is a “low to moderate potential” for the discovery of fossils below six feet in depth (Bakersfield, 2002, p. 4.10-6 and 4.10-7).

4.6.2 REGULATORY SETTING

The following is a brief description of the federal, state, and local environmental laws and related regulations governing issues related to geology and soils.

A. *Federal Plans, Policies, and Regulations*

1. *Clean Water Act*

The Clean Water Act (CWA) relates to soil erosion in that it establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry, and also has set water quality standards for all contaminants in surface waters (EPA, 2021a).

B. *State Plans, Policies, and Regulations*

1. *Alquist-Priolo Earthquake Fault Zoning Act (A-P Act)*

The Alquist-Priolo Earthquake Fault Zoning Act (A-P Act) was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The A-P Act’s main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The A-P Act

only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards (CA Legislative Info, n.d.).

The A-P Act requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps. ["Earthquake Fault Zones" were called "Special Studies Zones" prior to January 1, 1994.] The maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. Local agencies must regulate most development projects within the zones. Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings will not be constructed across active faults. An evaluation and written report of a specific site must be prepared by a licensed geologist. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (CA Legislative Info, n.d.).

2. *Seismic Hazards Mapping Act*

The Seismic Hazards Mapping Act (SHMA) of 1990 (Public Resources Code, Chapter 7.8, § 2690-2699.6) directs the Department of Conservation, California Geological Survey to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. The purpose of the SHMA is to minimize loss of life and property through the identification, evaluation, and mitigation of seismic hazards. Staff geologists in the Seismic Hazards Program gather existing geological, geophysical, and geotechnical data from numerous sources to produce the Seismic Hazard Zone Maps. They integrate and interpret these data regionally in order to evaluate the severity of the seismic hazards and designate as Zones of Required Investigation (ZORI) those areas prone to liquefaction and earthquake-induced landslides. Cities and counties are then required to use the Seismic Hazard Zone Maps in their land use planning and building permit processes. The SHMA requires site-specific geotechnical investigations be conducted within the ZORI to identify and evaluate seismic hazards and formulate mitigation measures prior to permitting most developments designed for human occupancy (CDC, n.d.).

3. *Natural Hazards Disclosure Act*

The Natural Hazards Disclosure Act, effective June 1, 1998 (as amended June 9, 1998), requires that sellers of real property and their agents provide prospective buyers with a "Natural Hazard Disclosure Statement" when the property being sold lies within one or more state-mapped hazard areas, including a Seismic Hazard Zone. The law requires the State Geologist to establish regulatory zones (Zones of Required Investigation) and to issue appropriate maps (Seismic Hazard Zone maps). These maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling construction and development. Before a development permit can be issued or a subdivision approved, cities and counties must require a site-specific investigation to determine whether a significant hazard exists at the site and, if so, recommend measures to reduce the risk to an acceptable level. The investigation must be performed by state-licensed engineering geologists and/or civil engineers (CA Legislative Info, n.d.).

4. *Essentials Services Building Seismic Safety Act*

In 1986, the California Legislature determined that buildings providing essential services should be capable of providing those services to the public after a disaster. Their intent in this regard was defined in legislation known as the Essential Services Buildings Seismic Safety Act of 1986 and includes requirements that such buildings shall be "...designed and constructed to minimize fire hazards and to resist...the forces generated by earthquakes, gravity, and winds." This enabling legislation can be found in the California Health and Safety Code, Chapter 2, § 16000 through 16022. In addition, the California Building Code defines how the intent of the act is to be implemented in Title 24, Part 1 of the California Building Standards Administrative Code, Chapter 4, Articles 1 through 3 (CAB, n.d.).

5. *California Building Standards Code (Title 24)*

California Code of Regulations (CCR) Title 24 is reserved for state regulations that govern the design and construction of buildings, associated facilities, and equipment. CCR Title 24 is also known as the California Building Standards Code (CBSC), and seismic standards are included. Cities and counties are required by state law to enforce CCR Title 24 (reference Health and Safety Code §§ 17958, 17960, 18938(b), and 18948). Cities and counties may adopt ordinances making more restrictive requirements than provided by CCR Title 24, because of local climatic, geological, or topographical conditions. Such adoptions and a finding of need statement must be filed with the California Building Standards Commission (Reference Health and Safety Code §§ 17958.7 and 18941.5) (CBSC, 2019, p. 1).

C. *Local Plans, Policies and Regulations*

1. *Metropolitan Bakersfield General Plan*

The Metropolitan Bakersfield General Plan provides information about natural and human-made hazards in Bakersfield and establishes goals, objectives, and policies to prepare and protect the community from such risks. The goal of the Safety Element is to develop sustainable communities to preserve life, protect property, the environment, and the economy from natural hazards, including seismic hazards (Bakersfield, 2007, p. VIII-1).

2. *City of Bakersfield Municipal Code*

The City of Bakersfield Municipal Code Chapter 15.05, adopts by reference the California Building Code. The Building Code regulates the construction, alteration, repair, moving, demolition, conversion, occupancy, use, and maintenance of all buildings and structures in the City of Bakersfield (Bakersfield, 2022).

4.6.3 BASIS FOR DETERMINING SIGNIFICANCE

Section VI of Appendix G to the CEQA Guidelines addresses typical adverse effects due to geological conditions, and includes the following threshold questions to evaluate the Project's impacts resulting from geologic or soil conditions (OPR, 2019):

- a. *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*
 - i. *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*
 - ii. *Strong seismic ground shaking*
 - iii. *Seismic-related ground failure, including liquefaction*
 - iv. *Landslides*
- b. *Result in substantial soil erosion or the loss of topsoil;*
- 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;*
- 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;*
- 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;*
- f. *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;*

4.6.4 IMPACT ANALYSIS

Threshold 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; ii) strong seismic ground shaking; iii) seismic-related ground failure including liquefaction; or iv) landslides?*

A. Rupture of Known Earthquake Fault

There are no known active or potentially active faults on or trending toward the Project site and the Project site is not located within a mapped Alquist-Priolo Earthquake Fault Zone (CGS, 2015). Because there are no known faults located on or trending towards the Project site, the Project would not directly or indirectly expose people or structures to substantial adverse effects related to ground rupture. Therefore, impacts would be less than significant and no mitigation is required.

B. Strong Seismic Ground Shaking

The Project site is located in a seismically active area of southern California and is expected to experience moderate to severe ground shaking during the lifetime of the Project. This risk is not

considered substantially different than that of other similar properties in the southern California area. As a mandatory condition of Project approval, the Project Applicant would be required to construct the proposed building(s) in accordance with the California Building Code, which provides standards that must be met to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures, and have been specifically tailored for California earthquake conditions. In addition, the California Building Code requires development projects to prepare geologic engineering reports to identify site-specific geologic and seismic conditions and implement the site-specific recommendations contained therein to preclude adverse effects involving unstable soils and strong seismic ground-shaking, including, but not limited to, recommendations related to ground stabilization, selection of appropriate foundation type and depths, and selection of appropriate structural systems. The Project Applicant retained a professional geotechnical firm, Krazan & Associates, to prepare a geotechnical report for the Project site, which is included as *Technical Appendix F* to this EIR. This geotechnical report complies with the requirements of the California Building Code. With mandatory compliance with building code standards and site-specific design and construction measures, implementation of the Project would not directly or indirectly expose people or structures to substantial adverse effects, including loss, injury or death, involving seismic ground shaking. Therefore, impacts would be less than significant and no mitigation is required.

C. Seismic-Related Ground Failure

Due to the observed soil characteristics on the Project site and the lack of shallow groundwater beneath the site, liquefaction potential is considered to be low (Bakersfield, 2007, Figure VIII-2). Regardless, as noted above, the City of Bakersfield would require the Project site be developed in accordance with the latest applicable seismic safety guidelines, including the standard requirements of the California Building Code to minimize potential liquefaction hazards. In addition, the Project would be required by the City of Bakersfield to comply with the grading and construction recommendations contained within the geotechnical report for the Project site (see *Technical Appendix F*) to further reduce the risk of seismic-related ground failure due to liquefaction. Therefore, implementation of the Project would not directly or indirectly expose people or structures to substantial hazards associated with seismic-related ground failure and/or liquefaction hazards. Therefore, impacts would be less than significant and no mitigation is required.

D. Landslides

The Project site is relatively flat, as is the immediately surrounding area. There are no hillsides or steep slopes on the Project site or in the immediate vicinity of the site (Google Earth, 2022). Mandatory compliance with the recommendations contained within the Project site's geotechnical report would ensure that the Project is engineered and constructed to maximize stability and preclude safety hazards to on-site and abutting off-site areas. With mandatory compliance with the recommendations contained within the geotechnical report (*Technical Appendix F*), the Project would not be exposed to substantial landslide risks, and implementation of the Project would not pose a substantial direct or indirect landslide risk to surrounding properties. Therefore, impacts would be less than significant and no mitigation is required.

Threshold b: Would the Project result in substantial soil erosion or the loss of topsoil?

A. Construction-Related Erosion Impacts

Under existing conditions, the Project site is vacant, has no or little vegetative cover, and contains loose and dry topsoil conditions, and thus, has the potential to contribute windblown soil and sand under existing conditions. Development of the Project would result in grading and construction activities which would further disturb soils on the property. Disturbed soils would be subject to potential erosion during rainfall events or high winds due to the removal of stabilizing vegetation and exposure of these erodible materials to wind and water.

Pursuant to the requirements of the State Water Resources Control Board, the Project Applicant would be required to obtain coverage under the State's General Construction Storm Water Permit for construction activities (NPDES permit). The NPDES permit is required for all development projects that include construction activities, such as clearing, grading, and/or excavation, that disturb at least one (1) acre of total land area. Compliance with the NPDES permit involves the preparation and implementation of a SWPPP for construction-related activities. The SWPPP will specify the Best Management Practices (BMPs) that the Project Applicant will be required to implement during construction activities to ensure that waterborne pollution – including erosion/sedimentation – is prevented, minimized, and/or otherwise appropriately treated prior to surface runoff being discharged from the subject property. Examples of BMPs that may be utilized during construction include, but are not limited to, sandbag barriers, geotextiles, storm drain inlet protection, sediment traps, rip rap soil stabilizers, and hydro-seeding. Mandatory compliance with the SWPPP would ensure that the Project's implementation does not violate any water quality standards or waste discharge requirements during construction activities. Therefore, water quality impacts associated with construction-related erosion would be less than significant and no mitigation is required.

B. Post-Development Erosion Impacts

Upon Project build-out, the Project site would be covered by buildings, landscaping, and impervious surfaces. Stormwater runoff from the Project site would be captured, treated to reduce waterborne pollutants (including sediment), and be filtered into the ground by the proposed on-site retention basin. Accordingly, the amount of erosion that occurs on the Project site would be minimized upon build out of the Project and would be reduced relative to existing conditions. Because the Project would be required to utilize erosion and sediment control measures to preclude substantial, long-term soil erosion and loss of topsoil, impacts related to post-development soil erosion would be less than significant and no mitigation is required.

Threshold 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?

The Project site is relatively flat and no substantial natural or man-made slopes are located on or adjacent to the Project site (Google Earth, 2022). Because the Project would be engineered for long-

term stability and constructed in accordance with the site-specific recommendations contained within the Project's geotechnical report (*Technical Appendix F*), impacts associated with landslide hazards would be less than significant and no mitigation is required.

According to NRCS, soils on the Project site have a low subsidence potential (NRCS, 2022). The geotechnical report prepared for the Project site indicated that the settlement potential can be attenuated through the excavation of fill soils so that native soils can be properly prepared (Krazan, 2021, p. 6). The City will condition implementing development to comply with the site-specific ground preparation and construction recommendations contained in the Project's geotechnical report. With mandatory compliance with the Project's geotechnical report (*Technical Appendix F*), impacts related to soil shrinkage/subsidence and collapse would be less than significant and no mitigation is required.

Lateral spreading is primarily associated with liquefaction hazards. As noted above under the discussion of Threshold a., based on the Project site's lack of shallow groundwater, liquefaction on the Project site is considered to be low. Thus, the potential for lateral spreading is low. Accordingly, impacts associated with lateral spreading would be less than significant and no mitigation is required.

Threshold d: Would the Project 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?

Expansion index tests were performed by Krazan on the upper soils of the Project site to determine the expansive characteristics and to provide any necessary recommendations for reinforcement of the slabs-on-grade and the foundations. The upper soils at the site are low (Expansion Index = 21-50) in expansion potential (Krazan, 2021, Appendix A). As such, the Project would not be located on expansive soil and would not create substantial risks to life or property; therefore, impacts would be less than significant and no mitigation is required.

Threshold 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?

Wastewater service for the Project site is provided by the Bakersfield Department of Public Works (BDPW), Wastewater Division and no septic tanks or alternative waste water disposal systems are proposed as part of the Project. Therefore, no impact would occur.

Threshold f: Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The Project site does not contain any known unique geologic features. As discussed in Subsection 4.6.1, the Project area has a very low for containing important fossil remains because the area is underlain by alluvial deposits that are too young to contain significant fossil remains. However, the possibility exists in the area that older fossiliferous alluvium may be present six feet below the surface

since the remains of Pleistocene (ice age) land animals have been collected from older alluvial deposits in Kern County. If excavations penetrate below six (6) feet, there is a “low to moderate potential” for the discovery of fossils. A “low to moderate potential” indicates that grading operations may expose fossils during development. These activities could destroy any fossils present. The destruction of such fossils could adversely impact the region’s paleontological resources. (Bakersfield, 2002, p. 4.10-6 and 4.10-7) Therefore, if any unique paleontological resource or site or unique geologic feature are unearthed during the Project’s construction activities and are disturbed/damaged by Project construction activities, impacts would be significant.

4.6.5 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis for geology and soils considers development of the Project site in conjunction with other development projects in the vicinity of the Project site as well as full General Plan buildout in the City of Bakersfield and other jurisdictions in the region.

Rupture of a Known Earthquake Fault, Strong Seismic Ground Shaking; and Seismic-related Ground Failure

Potential hazardous effects related to rupture of a known earthquake fault, strong seismic ground shaking, and seismic-related ground failure are unique to the Project site, and inherently restricted to the specific property proposed for development. That is, issues including fault rupture, seismic ground shaking, liquefaction, and landslides would involve effects to (and not from) a proposed development project, are specific to conditions on the subject property, and are not influenced or exacerbated by the geologic and/or soils hazards that may occur on other, off-site properties. Because of the site-specific nature of these potential hazards and the measures to address them, there would be no direct or indirect connection to similar potential issues or cumulative effects to or from other properties.

Soil Erosion or the Loss of Topsoil

Regulatory requirements mandate that the Project incorporate design measures during construction and long-term operation to ensure that significant erosion impacts do not occur. Other development projects in the vicinity of the Project site would be required to comply with the same regulatory requirements as the Project to preclude substantial adverse water and wind erosion impacts. Because the Project and other projects within the cumulative study area would be subject to similar mandatory regulatory requirements to control erosion hazards during construction and long-term operation, cumulative impacts associated with wind and water erosion hazards would be less than significant.

Geologic Unit or Soil That is Unstable

Potential hazardous effects related to 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 is unique to the Project site and inherently restricted to the specific property proposed for development. Related issues would involve effects to (and not from) a proposed development project, are specific to conditions on the subject property, and are not influenced or exacerbated by the geologic and/or soils hazard that may occur on other, off-site properties. Because

of the site-specific nature of the potential hazard and the measures to address it, there would be no direct or indirect connection to similar potential issues or cumulative effects to or from other properties.

Expansive Soil

Potential hazardous effects related to expansive soil is unique to the Project site and inherently restricted to the specific property proposed for development. Related issues would involve effects to (and not from) a proposed development project, are specific to conditions on the subject property, and are not influenced or exacerbated by the geologic and/or soil hazards that may occur on other, off-site properties. Because of the site-specific nature of the potential hazard and the measures to address it, there would be no direct or indirect connection to similar potential issues or cumulative effects to or from other properties.

Septic Tanks or Alternative Waste Water Disposal Systems

Potential hazardous effects related to 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 is unique to the Project site and inherently restricted to the specific property proposed for development. Related issues would involve effects to (and not from) a proposed development project, are specific to conditions on the subject property, and are not influenced or exacerbated by the geologic and/or soil hazards that may occur on other, off-site properties. Because of the site-specific nature of the potential hazard and the measures to address it, there would be no direct or indirect connection to similar potential issues or cumulative effects to or from other properties.

Unique Paleontological Resources or Geologic Features

The Project's potential to result in cumulative impacts to paleontological resources is similar to that of other projects located in the region that are underlain by Quaternary alluvial soils. The Quaternary alluvial soils present in the Project area are underlain by Quaternary age alluvial deposits that have very low potential for containing significant fossil remains. In addition, if excavations penetrate below six (6) feet in the Project area, there is a "low to moderate potential" for the discovery of fossils. Such activities could destroy any fossils present. The destruction of such fossils could adversely impact the region's paleontological resources. Therefore, impacts to paleontological resources is a cumulatively-considerable impact for which mitigation is required.

4.6.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less than Significant Impact. Implementation of the Project would not expose people or structures to substantial direct or indirect adverse effects related to liquefaction or fault rupture. The Project site is subject to seismic ground shaking associated with earthquakes; however, mandatory compliance with local and State regulatory requirements and building codes would ensure that the Project minimizes potential hazards related to seismic ground shaking to less than significant levels.

Threshold b: Less than Significant Impact. Implementation of the Project would not result in substantial soil erosion or loss of topsoil. The Project Applicant would be required to obtain a National

Pollutant Discharge Elimination System (NPDES) permit for construction activities minimizing impacts to less than significant.

Threshold c: Less than Significant Impact. There is no potential for the Project's construction or operation to cause, or be impacted by, on- or off-site landslides or lateral spreading. Potential hazards associated with unstable soils would be precluded through mandatory adherence to the recommendations contained in the site-specific geotechnical report during Project construction.

Threshold d: Less than Significant Impact. The Project site contains soils with low susceptibility to expansion; therefore, the Project would not create substantial direct or indirect risks to life or property associated with the presence of expansive soils. Impacts would be less than significant.

Threshold e: No Impact. No septic tanks or alternative wastewater disposal systems are proposed to be installed on the Project site. Accordingly, no impact would occur associated with soil compatibility for wastewater disposal systems.

Threshold f: Significant Direct and Cumulatively Considerable Impact. The Project would not impact any known paleontological resource or unique geological feature. However, construction activities on the Project site have the potential to unearth and adversely impact an unknown unique paleontological resource or site or unique geologic feature that may be buried beneath the ground surface.

4.6.7 MITIGATION

The following mitigation measure addresses the potential for Project construction activities to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

- GEO MM-1 Prior to construction and as needed throughout the construction period involving ground-disturbing construction activities, a construction worker paleontological resource awareness training program shall be provided to all new construction workers within one week of employment at the project site, if their work will involve ground-disturbing construction activities greater than six feet in depth in Pleistocene older alluvium soils. The training shall be prepared and conducted by a qualified professional paleontologist. Workers attending the training shall sign a form that shall be kept by the Project Applicant and made available to the City of Bakersfield upon request.
- GEO MM-2 If paleontological resources are encountered, all work within 100 feet of the find shall halt until a qualified paleontologist can be called to the site to evaluate the find and make recommendations. Paleontological resource materials may include fossils, plant impressions, or animal tracks that have been preserved in rock. If the qualified paleontologist determines that the discovery represents a potentially significant paleontological resource, additional investigations and fossil recovery may be required to mitigate adverse impacts to less than significant levels. Construction within 100 feet

of the find shall not resume until the appropriate mitigation measures are implemented or the materials are determined to be to be less than significant by the paleontologist.

- GEO MM-3 Recovered specimens, if any, shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storages shall be required for discoveries of significance as determined by the paleontologist.
- GEO MM-4 A final monitoring and mitigation report of findings and significance shall be prepared, including lists of all fossils recovered, if any, and necessary maps and graphics to accurately record the original location of the specimens. The report shall be submitted to the City of Bakersfield prior to final building inspection.

4.6.8 DESIGN FEATURES AND REGULATORY REQUIREMENTS

The City of Bakersfield is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Geology and Soils.

- GEO RR-5 In compliance with City of Bakersfield Municipal Code Chapter 15.05, *California Building Code*, construction of the Project is required to adhere to the California Building Standards Code and its requirement to prepare and adhere to site-specific recommendations contained in a geotechnical report prepared for the Project site. As such, compliance with the recommendations provided in the Project's geotechnical study prepared by Krazan & Associates, Inc. and dated September 9, 2021 (contained as *Technical Appendix F* to this EIR) is required.
- GEO RR-6 To address wind erosion, the Project construction activities are required to comply with the provisions of Chapter 15 Section 104.12 of the Bakersfield Municipal Code to ensure that dust abatement measures comply with the current standards set for by the San Joaquin Valley Air Pollution Control District (SJAPCD).
- GEO RR-7 The Project Applicant is required, pursuant to the State Water Resources Control Board, to obtain coverage under the State's General Construction Storm Water Permit for construction activities (NPDES permit). Compliance with the NPDES permit involves the preparation and implementation of a SWPPP for construction-related activities. The SWPPP will specify the Best Management Practices (BMPs) that construction contractors will be required to implement during construction activities to ensure that waterborne pollution – including erosion/sedimentation – is prevented, minimized, and/or otherwise appropriately treated prior to surface runoff being discharged from the subject property. Examples of BMPs that may be utilized during

construction include, but are not limited to, sandbag barriers, geotextiles, storm drain inlet protection, sediment traps, rip rap soil stabilizers, and hydro-seeding.

4.6.9 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold f: Less than Significant Impact with Mitigation Incorporated. Mitigation Measures (MMs) GEO MM-1, GEO MM-2, GEO MM-3, and GEO MM-4, would ensure the proper identification and subsequent treatment of any paleontological resources that may be encountered during ground-disturbing activities associated with implementation of the proposed Project. Therefore, with implementation of GEO MM-1, GEO MM-2, GEO MM-3, and GEO MM-4, the Project's potential direct and cumulatively considerable impacts to a unique paleontological resource or site or unique geologic feature would be reduced to less than significant.

4.7 GREENHOUSE GAS EMISSIONS

The analysis in this Subsection 4.7 is based on a technical study prepared by Trinity Consultants (herein, “Trinity”), entitled, “Air Quality Impact Analysis, Majestic Gateway, Bakersfield, CA” (herein, “AQIA”). The AQIA is dated July 2022, and is included as *Technical Appendix B* to this EIR. The AQIA includes an evaluation of potential impacts due to greenhouse gases (GHGs) (Trinity, 2022a).

4.7.1 EXISTING CONDITIONS

Provided below is a discussion of existing conditions related to GHGs. Refer also to EIR Subsection 4.2, *Air Quality*, which includes additional background information regarding air quality.

A. Global Climate Change

“Global climate change (GCC)” refers to change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms, lasting for decades or longer. The term “global climate change” is often used interchangeably with the term “global warming,” but “global climate change” is preferred by some scientists and policy makers to “global warming” because it helps convey the notion that in addition to rising temperatures, other changes in global climate may occur. Climate change may result from the following influences (Trinity, 2022a, p. 3-14):

- Natural factors, such as changes in the sun’s intensity or slow changes in the Earth’s orbit around the sun;
- Natural processes within the climate system (e.g., changes in ocean circulation); and/or
- Human activities that change the atmosphere’s composition (e.g., through burning fossil fuels) and the land surface (e.g., deforestation, reforestation, urbanization, and desertification).

As determined from worldwide meteorological measurements between 1990 and 2005, the primary observed effect of global climate change has been a rise in the average global tropospheric temperature of 0.36-degree Fahrenheit (°F) per decade. Climate change modeling shows that further warming could occur, which could induce additional changes in the global climate system during the current century. Changes to the global climate system, ecosystems, and the environment of California could include higher sea levels, drier or wetter weather, changes in ocean salinity, changes in wind patterns or more energetic aspects of extreme weather (e.g., droughts, heavy precipitation, heat waves, extreme cold, and increased intensity of tropical cyclones). Specific effects from climate change in California may include a decline in the Sierra Nevada snowpack, erosion of California’s coastline, and seawater intrusion in the Sacramento-San Joaquin River Delta (Trinity, 2022a, p. 3-14).

Natural earth systems and human activities, including fossil fuel combustion and land use changes, both release carbon dioxide (CO₂) and other compounds cumulatively termed greenhouse gases (GHGs). GHGs are effective at trapping radiation that would otherwise escape the atmosphere. This trapped radiation warms the atmosphere, the oceans, and the earth’s surface. Many scientists believe

most of the warming observed over the last 50 years is attributable to human activities. The increased amount of CO₂ and other GHGs in the atmosphere is the alleged primary result of human-induced warming (Trinity, 2022a, p. 3-15).

GHGs are present in the atmosphere naturally, released by natural sources, or formed from secondary reactions taking place in the atmosphere. They include CO₂, methane (CH₄), nitrous oxide (N₂O), and O₃. In the last 200 years, substantial quantities of GHGs have been released into the atmosphere, primarily from fossil fuel combustion. These human-induced emissions are increasing GHG concentrations in the atmosphere, therefore enhancing the natural greenhouse effect. The GHGs resulting from human activity are believed to be causing global climate change. While human-made GHGs include CO₂, CH₄, and N₂O, some (like chlorofluorocarbons [CFCs]) are completely new to the atmosphere. GHGs vary considerably in terms of Global Warming Potential (GWP), the comparative ability of each GHG to trap heat in the atmosphere. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and the length of time that the gas remains in the atmosphere (“atmospheric lifetime”). The GWP of each gas is measured relative to CO₂, the most abundant GHG. The definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO₂ over a specified time period. GHG emissions are typically measured in terms of pounds or tons of “CO₂ equivalents” (CO₂e) (Trinity, 2022a, p. 3-15).

Natural sources of CO₂ include the respiration (breathing) of humans and animals and evaporation from the oceans. Together, these natural sources release approximately 150 billion metric tons of CO₂ each year, far outweighing the 7 billion metric tons of GHG emissions from fossil fuel burning, waste incineration, deforestation, cement manufacturing, and other human activity. Nevertheless, natural GHG removal processes such as photosynthesis cannot keep pace with the additional output of CO₂ from human activities. Consequently, GHGs are building up in the atmosphere (Trinity, 2022a, p. 3-15).

Methane is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources of CH₄ production include wetlands, termites, and oceans. Human activity accounts for an estimated 50-65% of combined methane emissions of the approximately 500 million metric tons of CH₄ emitted annually. These anthropogenic sources include the mining and burning of fossil fuels; digestive processes in ruminant livestock such as cattle; rice cultivation; and the decomposition of waste in landfills. The major removal process for atmospheric CH₄, the chemical breakdown in the atmosphere, cannot keep pace with source emissions; therefore, CH₄ concentrations in the atmosphere are rising. (Trinity, 2022a, p. 3-15)

Worldwide emissions of GHGs in 2008 were 30.1 billion metric tons of CO₂e and have increased considerably since that time. It is important to note that the global emissions inventory data are not all from the same year and may vary depending on the source of the data. Emissions from the top five emitting countries and the European Union accounted for approximately 70% of total global anthropogenic GHG emissions in 2014. Of these anthropogenic emissions, the United States was the number two producer of GHG emissions behind China. The primary GHG emitted by human activities

was CO₂, representing approximately 78.8% of total global anthropogenic GHG emissions (Trinity, 2022a, p. 3-15).

In 2020, the United States emitted approximately 5.98 billion metric tons of CO₂e. Of the six major sectors nationwide (transportation, electric power industry, industry, agriculture, commercial, and residential), the transportation and electric power industry sectors combined account for approximately 52% of the US anthropogenic GHG emissions; the majority of the electrical power industry and all of the transportation emissions are generated from direct fossil fuel combustion. Between 1990 and 2020, total United States GHG emissions have decreased by approximately 7.3%. The California Air Resources Board (CARB) is responsible for developing and maintaining the California GHG emissions inventory. This inventory estimates the amount of GHGs emitted into and removed from the atmosphere by human activities within the state of California and supports the Assembly Bill (AB) 32 Climate Change Program. CARB's current GHG emission inventory covers the years 2000 through 2017 and is based on fuel use, equipment activity, industrial processes, and other relevant data (e.g., housing, landfill activity, and agricultural lands) (Trinity, 2022a, p. 3-16).

CARB estimates that transportation was the source of approximately 40% of California's GHG emissions in 2019, followed by industrial sources at 21% and electricity generation at 14%. Other sources of GHG emissions were residential plus commercial activities at 11%, agriculture at 7%, high global warming potential gases at 5%, and waste sources at 2% (CARB, 2022). CARB also reported that the total GHG emissions in California for 2019 was 418.2 MMT of CO₂e. Although 2020 data is not yet reported, CARB projected the estimated statewide GHG emissions for the year 2020, which represent the emissions that were expected to occur with reductions anticipated from Pavley I and the Renewables Electricity Standard (30 MMT CO₂e total), would be 509 MMT of CO₂e. GHG emissions from the transportation and electricity sectors as a whole were expected to increase at approximately 36% and 20% of total CO₂e emissions, respectively, as compared to 2009. The industrial sector consists of large stationary sources of GHG emissions and the percentage of the total 2020 emissions was projected to be 18% of total CO₂e emissions. The remaining sources of GHG emissions in 2020 are expected to be high global warming potential gases at 6%, residential and commercial activities at 10%, agriculture at 7%, and recycling and waste at 2% (Trinity, 2022a, p. 3-16).

B. Effects of Global Climate Change

Changes in the global climate are assessed using historical records of temperature changes that have occurred in the past. Climate change scientists use this temperature data to extrapolate a level of statistical significance specifically focusing on temperature records from the last 150 years (the Industrial Age) that differ from past climate changes in rate and magnitude (Trinity, 2022a, p. 3-16).

The Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. In its Sixth Assessment, 2021 Summary for Policymakers, the IPCC reported that the global surface temperature in the first two decades of the 21st century (2001–2020) was 0.99 degrees Celsius (°C) higher than 1850–1900 and was 1.09 °C higher in 2011–2020 than 1850–1900, with larger increases over land (1.59 °C) than over

the ocean (0.88 °C) (IPCC, 2021, p. 5). The IPCC prepared projections of future temperature increases based on three scenarios and reported that compared to 1850–1900, projected global surface temperature averaged over future years 2081–2100 is very likely to be higher by 1.0 °C to 1.8 °C under a very low GHG emissions scenario, higher by 2.1 °C to 3.5 °C under an intermediate GHG emissions scenario and higher by 3.3 °C to 5.7 °C under a very high GHG emissions scenario (IPCC, 2021, p. 14).

The IPCC concluded in its Fifth Assessment (2019) and again in its Sixth Assessment (2021) that global climate change was largely the result of human activity. However, the scientific literature is not consistent regarding many of the aspects of climate change, the actual temperature changes during the 20th century, and contributions from human versus non-human activities (Trinity, 2022a, p. 3-16) (IPCC, 2021).

Effects from global climate change include temperature increases, climate sensitive diseases, extreme weather events, and degradation of air quality. There may be direct temperature effects through increases in average temperature leading to more extreme heat waves and less extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems. Heat-related problems include heat rash and heat stroke, drought, etc. In addition, climate-sensitive diseases may increase, such as those spread by mosquitoes and other disease-carrying insects. Such diseases include malaria, dengue fever, yellow fever, and encephalitis. Extreme events such as flooding and hurricanes can displace people and agriculture. Global warming may also contribute to air quality problems from increased frequency of smog and particulate air pollution (Trinity, 2022a, p. 3-17) (IPCC, 2021).

Large urbanized areas can experience higher temperatures, greater pollution and more negative health impacts during hot summer months when compared to more rural communities. This phenomenon is known as an urban heat island. Heat islands are created by a combination of heat-absorptive surfaces (such as dark pavement and roofing), heat-generating activities (such as engines and generators) and the absence of vegetation (which provides evaporative cooling). The California Department of Environmental Protection (CalEPA) maps urban heat islands in California using 2006 and 2013 data, resulting in a numerical Index score. The Index is reported in degree-hours per day on a Celsius scale. An increase of one degree over an eight-hour period would equal eight degree-hours, as would an increase of two degrees over a four-hour period. The degree-hour therefore combines both the intensity of the heat and the duration of the heat into a single numerical measure. The census tract in which the Project site is located is mapped as having a degree-hour Index of 11.568022 (CalEPA, 2022).

According to the 2006 California Climate Action Team (CAT) Report, several climate change effects can be expected in California over the course of the next century. These are based on trends established by the IPCC and are summarized below (Trinity, 2022a, p. 3-17).

- A diminishing Sierra snowpack declining by 70% to 90%, threatening the state's water supply.
- A rise in sea levels, resulting in the displacement of coastal businesses and residences. During the past century, sea levels along California's coast have risen about seven inches. If emissions

continue unabated and temperatures rise into the higher anticipated warming range, sea level is expected to rise an additional 22 to 35 inches by the end of the century. Sea level rises of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. (Note: This condition would not affect the Project area, as it is a long distance away from coastal areas.)

- An increase in temperature and extreme weather events. Climate change is expected to lead to increases in the frequency, intensity, and duration of extreme heat events and heat waves in California. More heat waves can exacerbate chronic disease or heat-related illness.
- Increased risk of large wildfires if rain increases as temperatures rise. Wildfires in the grasslands and chaparral ecosystems of southern California are estimated to increase by approximately 30% toward the end of the 21st century because more winter rain will stimulate the growth of more plant fuel available to burn in the fall. In contrast, a hotter, drier climate could promote up to 90% more northern California fires by the end of the century by drying out and increasing the flammability of forest vegetation.
- Increasing temperatures from 8 to 10.4 °F under the higher emission scenarios, leading to a 25% to 35% increase in the number of days that ozone pollution levels are exceeded in most urban areas (see below).
- Increased vulnerability of forests due to forest fires, pest infestation, and increased temperatures.
- Reductions in the quality and quantity of certain agricultural products. The crops and products likely to be adversely affected include wine grapes, fruit, nuts, and milk.
- Exacerbation of air quality problems. If temperatures rise to the medium warming range, there could be 75 to 85% more days with weather conducive to ozone formation in Los Angeles and the San Joaquin Valley, relative to today's conditions. This is more than twice the increase expected if rising temperatures remain in the lower warming range. This increase in air quality problems could result in an increase in asthma and other health-related problems.
- A decrease in the health and productivity of California's forests. Climate change can cause an increase in wildfires, an enhanced insect population, and establishment of non-native species.
- Increased electricity demand, particularly in the hot summer months.
- Increased ground-level ozone formation due to higher reaction rates of ozone precursors.

4.7.2 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the federal, State, and local environmental laws and related regulations related to GHG emissions.

A. International Regulations

1. Kyoto Protocol

The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change, which commits its Parties by setting internationally binding emission reduction targets. Recognizing that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."

The Kyoto Protocol was adopted in Kyoto, Japan, on December 11, 1997 and entered into force on February 16, 2005. On December 8, 2012, in Doha, Qatar, the "Doha Amendment to the Kyoto Protocol" was adopted. The amendment includes:

- New commitments for Annex I Parties to the Kyoto Protocol who agreed to take on commitments in a second commitment period from January 1, 2013 to December 31, 2020;
- A revised list of greenhouse gases (GHG) to be reported on by Parties in the second commitment period; and
- Amendments to several articles of the Kyoto Protocol which specifically referenced issues pertaining to the first commitment period and which needed to be updated for the second commitment period.

On December 21, 2012, the amendment was circulated by the Secretary-General of the United Nations, acting in his capacity as Depositary, to all Parties to the Kyoto Protocol in accordance with Articles 20 and 21 of the Protocol. During the first commitment period, 37 industrialized countries and the European Community committed to reduce GHG emissions to an average of 5% against 1990 levels. During the second commitment period, Parties committed to reduce GHG emissions by at least 18 percent below 1990 levels in the eight-year period from 2013 to 2020; however, the composition of Parties in the second commitment period is different from the first (UNFCCC, n.d.).

2. The Paris Agreement

The Paris Agreement builds upon the Convention and – for the first time – brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so. The Paris Agreement’s central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change. The Paris Agreement requires all Parties to put forward their best efforts through “nationally determined contributions” (NDCs) and to strengthen these efforts in the years ahead. This includes requirements that all Parties report regularly on their emissions and on their implementation efforts. The Paris Agreement entered

into force on November 4, 2016, thirty days after the date on which at least 55 Parties to the Convention accounting in total for at least an estimated 55% of the total global greenhouse gas emissions have deposited their instruments of ratification, acceptance, approval, or accession with the Depositary (UNFCCC, n.d.).

On June 1, 2017, President Donald Trump announced he would begin the process of withdrawing the United States from the Paris Agreement. In accordance with articles within the Paris Agreement, the earliest effective date for the United States' withdrawal from the Agreement was November 4, 2020, at which time the withdraw became official. On January 20, 2021, President Biden signed an executive order for the United States to rejoin the Paris Agreement, which became official on February 19, 2021.

B. Federal Regulations

1. Clean Air Act

Coinciding with a 2009 meeting of international leaders in Copenhagen, on December 7, 2009, the EPA issued an Endangerment Finding under § 202(a) of the Clean Air Act (CAA), opening the door to federal regulation of GHGs. The Endangerment Finding notes that GHGs threaten public health and welfare and are subject to regulation under the CAA. To date, the EPA has not promulgated regulations on GHG emissions, but it has begun to develop them (EPA, 2021h; DOJ, 2021).

Previously the EPA had not regulated GHGs under the CAA because it asserted that the Act did not authorize it to issue mandatory regulations to address Global Climate Change (GCC) and that such regulation would be unwise without an unequivocally established causal link between GHGs and the increase in global surface air temperatures. In *Massachusetts v. Environmental Protection Agency et al.* (127 S. Ct. 1438 [2007]); however, the U.S. Supreme Court held that GHGs are pollutants under the CAA and directed the EPA to decide whether the gases endangered public health or welfare. The EPA had also not moved aggressively to regulate GHGs because it expected Congress to make progress on GHG legislation, primarily from the standpoint of a cap-and-trade system. However, proposals circulated in both the House of Representative and Senate have been controversial and it may be some time before the U.S. Congress adopts major climate change legislation. The EPA's Endangerment Finding paves the way for federal regulation of GHGs with or without Congress (EPA, 2021h; DOJ, 2021).

C. State Regulations

1. Title 24 Building Energy Standards

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods. The latest revisions (2019 Building

Energy Efficiency Standards) became effective on January 1, 2020. The 2019 Building Energy Efficiency Standards are 7 percent more efficient than the previous (2016) Building Energy Efficiency Standards for residential construction and 30 percent more efficient than the previous Standards for non-residential construction. The 2016 Building Energy Efficiency Standards already were 28 percent more efficient for residential construction and 5 percent more efficient for nonresidential construction than the 2013 Building Energy Efficiency Standards they replaced. (CEC, 2018)

Part 11 of Title 24 is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to “improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality.” The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC). Unless otherwise noted in the regulation, all newly constructed buildings in California are subject of the requirements of the CALGreen Code. (CEC, 2018)

2. *California Assembly Bill No. 1493 (AB 1493)*

AB 1493 required the California Air Resources Board (CARB) to adopt the nation’s first GHG emission standards for automobiles. On September 24, 2009, CARB adopted amendments to the “Pavley” regulations that reduced GHG emissions in new passenger vehicles from model year 2009 through 2016. The U.S. EPA granted California the authority to implement GHG emission reduction standards for new passenger cars, pickup trucks, and sport utility vehicles on June 30, 2009. It is expected that the Pavley regulations reduced GHG emissions from California passenger vehicles by about 22 percent in 2012 and about 30 percent in 2016, all while improving fuel efficiency and reducing motorists’ costs. CARB has since adopted a new approach to cars and light trucks by combining the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California. (CARB, n.d.)

3. *Executive Order S-3-05*

Executive Order (EO) S-3-05 documents GHG emission reduction goals, creates the Climate Action Team and directs the Secretary of the California EPA to coordinate efforts with meeting the GHG reduction targets with the heads of other state agencies. The EO requires the Secretary to report back to the Governor and Legislature biannually to report: progress toward meeting the GHG goals; GHG impacts to California; and applicable Mitigation and Adaptation Plans. EO S-3-05 goals for GHG emissions reductions include: reducing GHG emissions to 2000 levels by the year 2010; reducing GHG emissions to 1990 levels by the year 2020; and reducing GHG emissions to 80 percent below 1990 levels by 2050. (CA State Library, 2005)

4. *California Assembly Bill 32 – Global Warming Solutions Act of 2006*

In September 2006, Governor Schwarzenegger signed Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006. AB 32 required California to reduce its GHG emissions to 1990 levels by 2020, which represented a reduction of approximately 15% below emissions expected under a “business as usual” scenario. (CARB, 2018)

In November 2007, CARB completed its estimated calculations of Statewide 1990 GHG levels. Net emission 1990 levels were estimated at 427 million metric tons (MMTs). Accordingly, 427 million metric tons of carbon dioxide equivalent (MMTCO_{2e}) equivalent was established as the emissions limit for 2020. For comparison, CARB’s estimate for baseline GHG emissions was 473 MMTCO_{2e} for 2000 and without emissions reduction measures 2010 emissions were projected to be 532 MMTCO_{2e}. “Business as usual” conditions (without the reductions to be implemented by CARB regulations) for 2020 were projected to be 596 MMTCO_{2e}. (CARB, 2007)

AB 32 required CARB to develop a Scoping Plan to lay out California’s strategy for meeting the goals that must be updated every five years. In December 2008, CARB approved the initial Scoping Plan, which included a suite of measures to sharply cut GHG emissions. Overall, CARB determined that achieving the 1990 emission level in 2020 would require a reduction in GHG emissions of approximately 28.5 percent in the absence of new laws and regulations (referred to as “Business-As-Usual” [BAU]). When the 2020 emissions level projection also was updated to account for implemented regulatory measures, including Pavley (vehicle model-years 2009 - 2016) and the renewable portfolio standard (12% - 20%), the 2020 projection in the BAU condition was reduced further to 507 metric tons of carbon dioxide equivalent (MTCO_{2e}). As a result, based on the updated economic and regulatory data, CARB determined that achieving the 1990 emissions level in 2020 would now only require a reduction of GHG emissions of 80 MTCO_{2e}, or approximately 16 percent (down from 28.5 percent), from the BAU condition.

In May 2014, CARB approved the First Update to the Climate Change Scoping Plan (Update), which built upon the initial Scoping Plan with new strategies and recommendations. The Update highlighted California’s progress toward meeting the near-term 2020 GHG emission reduction goals, highlighted the latest climate change science and provided direction on how to achieve long-term emission reduction goal described in Executive Order S-3-05. The Update recalculated 1990 GHG emissions using new global warming potentials identified in the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report released in 2007. Using those Global Warming Potentials (GWPs), the 427 MTCO_{2e} 1990 emissions level and 2020 GHG emissions limit identified in the 2008 Scoping Plan would be slightly higher, at 431 MTCO_{2e}. Based on the revised 2020 emissions level projection identified in the 2011 Final Supplement and the updated 1990 emissions levels identified in the discussion draft of the First Update, achieving the 1990 emissions level in 2020 would require a reduction of 78 MTCO_{2e} (down from 509 MTCO_{2e}), or approximately 15.3 percent (down from 28.5 percent), from the BAU condition. (CARB, 2018; CARB, 2017)

In November 2017, CARB released the Final 2017 Scoping Plan Update, which identifies the State's post-2020 reduction strategy. The Final 2017 Scoping Plan Update reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Key programs that the proposed Second Update builds upon include the Cap-and-Trade Regulation, the Low Carbon Fuel Standard (LCFS), much cleaner cars, trucks, and freight movement, utilizing cleaner, renewable energy, and strategies to reduce CH₄ emissions from agricultural and other wastes. The Final 2017 Scoping Plan Update establishes a new emissions limit of 260 MMTCO_{2e} for the year 2030, which corresponds to a 40% decrease in 1990 levels by 2030 (CARB, 2017).

5. *California Senate Bill No. 1368 (SB 1368)*

In 2006, the State Legislature adopted Senate Bill (SB) 1368 (Perata, Chapter 598, Statutes of 2006), which directs the California Public Utilities Commission (CPUC) to adopt a GHG emission performance standard (EPS) for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than five years from resources that exceed specified emissions criteria. Accordingly, SB 1368 effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. SB 1368 will lead to dramatically lower GHG emissions associated with California energy demand (CEC, n.d.).

6. *Executive Order S-01-07*

Executive Order (EO) S-01-07 is known as the Low Carbon Fuel Standard (LCFS). The Executive Order seeks to reduce the carbon intensity of California's passenger vehicle fuels by at least 10 percent by 2020. The LCFS requires fuel providers in California to ensure that the mix of fuel they sell into the California market meet, on average, a declining standard for GHG emissions measured in CO_{2e} grams per unit of fuel energy sold (CA State Library, 2007).

7. *Senate Bill 1078*

Senate Bill (SB) 1078 establishes the California Renewables Portfolio Standard Program, which requires electric utilities and other entities under the jurisdiction of the California Public Utilities Commission to meet 20% of their renewable power by December 31, 2017 for the purposes of increasing the diversity, reliability, public health, and environmental benefits of the energy mix (CA Legislative Info, n.d.).

8. *Senate Bill 107*

SB 107 directed California Public Utilities Commission's Renewable Energy Resources Program to increase the amount of renewable electricity (Renewable Portfolio Standard) generated per year, from 17% to an amount that equals at least 20% of the total electricity sold to retail customers in California per year by December 31, 2010 (CA Legislative Info, n.d.).

9. *Executive Order S-14-08*

On November 17, 2008, Governor Schwarzenegger signed Executive Order S-14-08, revising California's existing Renewable Portfolio Standard (RPS) upward to require all retail sellers of electricity to serve 33% of their load from renewable energy sources by 2020. In order to meet this new goal, a substantial increase in the development of wind, solar, geothermal, and other "RPS eligible" energy projects would be needed. Executive Order S-14-08 sought to accelerate such development by streamlining the siting, permitting, and procurement processes for renewable energy generation facilities. To this end, S-14-08 issued two directives: (1) the existing Renewable Energy Transmission Initiative will identify renewable energy zones that can be developed as such with little environmental impact, and (2) the California Energy Commission (CEC) and the California Department of Fish and Wildlife (CDFW) will collaborate to expedite the review, permitting, and licensing process for proposed RPS-eligible renewable energy projects (CA State Library, 2008).

10. *Senate Bill 97*

Senate Bill 97 (SB 97) was enacted in 2007 to recognize the need to analyze GHGs as a part of the CEQA process. SB 97 required the Governor's Office of Planning and Research (OPR) to develop, and the Natural Resources Agency to adopt, amendments to the CEQA Guidelines addressing the analysis and mitigation of GHGs. As part of the administrative rulemaking process, the Natural Resources Agency developed a Final Statement of Reasons explaining the legal and factual bases, intent, and purpose of the CEQA Guidelines amendments. The amendments to the CEQA Guidelines implementing SB 97 became effective on March 18, 2010. Of note, the CEQA Guidelines state that a lead agency has discretion to determine whether to use a quantitative model or methodology, or rely on a qualitative analysis or performance-based standards to evaluate GHGs (CA Legislative Info, n.d.).

CEQA emphasizes that GHG effects are cumulative, and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis. (See CEQA Guidelines § 15130(f)). CEQA Guidelines § 15064.4(b) provides direction for lead agencies for assessing the significance of impacts of greenhouse gas emissions:

1. The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; or
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

The CEQA Guideline amendments do not identify a threshold of significance for GHG emissions, nor do they prescribe assessment methodologies or specific mitigation measures. Instead, they call for a “good-faith effort, based on available information, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project.” The amendments encourage lead agencies to consider many factors in performing a CEQA analysis and preserve lead agencies’ discretion to make their own determinations based upon substantial evidence. The amendments also encourage public agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses.

11. *Senate Bill 375*

The Sustainable Communities and Climate Protection Act of 2008 (Sustainable Communities Act, SB 375, Chapter 728, Statutes of 2008) supports the State's climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of more sustainable communities. Under the Sustainable Communities Act, CARB set regional targets for GHG emissions reductions from passenger vehicle use. In 2010, CARB established these targets for 2020 and 2035 for each region covered by one of the State's metropolitan planning organizations (MPO). CARB periodically reviews and updates the targets, as needed (CARB, n.d.).

Each of California’s MPOs must prepare a "sustainable communities strategy" (SCS) as an integral part of its regional transportation plan (RTP). The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its GHG emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region. CARB must review the adopted SCS to confirm and accept the MPO's determination that the SCS, if implemented, would meet the regional GHG targets. If the combination of measures in the SCS would not meet the regional targets, the MPO must prepare a separate “alternative planning strategy” (APS) to meet the targets. (CARB, n.d.)

12. *Executive Order B-30-15*

On April 29, 2015, Governor Brown issued Executive Order B-30-15, which sets a goal to reduce GHG emissions in California to 40 percent below 1990 levels by 2030. The 2030 target serves as a benchmark goal on the way to achieving the GHG reduction goal set by former Governor Schwarzenegger via Executive Order S-3-05 (i.e., 80 percent below 1990 greenhouse gas emissions levels by 2050). (CA State Library, 2015)

13. *Senate Bill 32*

On September 8, 2016, Governor Jerry Brown signed the Senate Bill (SB) 32 and its companion bill, Assembly Bill (AB) 197. SB 32 requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal of 1990 levels by 2020 and provides an intermediate goal to achieving S-3-05, which sets a statewide greenhouse gas reduction target of 80% below 1990 levels by 2050. (CA Legislative Info, n.d.)

14. California Air Resources Board Rules

The CARB enforces rules related to GHG emissions in the State of California. Rules with applicability to the Project include, but are not limited to, those listed below.

- CARB Rule 2485 (13 CCR 2485): Airborne Toxic Control Measure to Limit Diesel-Fuel Commercial Vehicle Idling, which limits nonessential idling to five minutes or less for commercial trucks.
- CARB Rule 2449 (13 CCR 2449): In-Use Off-Road Diesel Idling Restricts, which limits nonessential idling to five minutes or less for diesel-powered off-road equipment.

D. Regional Regulations

1. Kern Council of Governments Regional Transportation Plan and Sustainable Communities Strategy

Kern Council of Governments (Kern COG) is a federally-designated Metropolitan Planning Organization (MPO) and a state designated Regional Transportation Planning Agency (RTPA). To guide the development of the planned multimodal transportation systems in Kern County, the *2018 RTP* establishes a 24-year blueprint that provides a set of regional transportation goals, policies, and actions. As required by California's Sustainable Communities and Climate Protection Act, of SB 375, a Sustainable Communities Strategy (SCS) also is included in the *2018 RTP*. The RTP provides transportation and air quality goals, policies, and actions and includes programs and projects for congestion management, transit, airports, bicycles and pedestrians, roadways, and freight. In addition, it provides a discussion of all mechanisms used to finance transportation and air quality program implementation. In addition, the companion RTP conformity document demonstrates that the Plan will not delay attainment of federal air quality standards in the State Implementation Plans for air quality. (Kern COG, 2018, pp. ES-1)

4.7.3 BASIS FOR DETERMINING SIGNIFICANCE

According to Section VIII of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to climate change if the Project or any Project-related component would (OPR, 2019):

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

In order to assess the significance of a proposed Project's environmental impacts it is necessary to identify quantitative or qualitative thresholds which, if exceeded, would constitute a finding of significance.

On December 17, 2009, San Joaquin Valley Air Pollution Control District (SJVAPCD) adopted “Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA,” which outlined the SJVAPCD’s methodology for assessing a project’s significance for GHGs under CEQA. The Guidance stated that projects requiring preparation of an EIR would require quantification of project-specific GHG emissions and that projects implementing Best Performance Standards (BPS) or achieving at least a 29% GHG emission reduction compared to BAU would be determined to have a less-than-significant individual and cumulative impact for GHG. (Trinity, 2022a, p. 4-3) However, because this methodology is based on a 2020 target, which is now in the past, it will not be relied upon herein.

Given that the City of Bakersfield has not yet adopted a Climate Action Plan (CAP) and the SJVAPCD has not yet updated its GHG significance methodology guidance post year 2020, there is no widely accepted significance threshold for GHG emissions in the City of Bakersfield at this time for a development project such as the proposed Project. For that reason, this EIR uses a threshold of net zero. Although a net zero threshold is more conservative than any higher numerical threshold or comparison against BAU assumptions as previously promulgated by the SJVAPCD, and is also more conservative than criteria that likely will be set forth in the City’s future CAP when it is adopted, there are no provisions in CEQA that preclude a lead agency from applying a more conservative threshold on a case-by-case basis. The City recognizes that a net zero threshold for GHG emissions is highly conservative. In the 2009 Final Statement of Reasons for adoption of the CEQA Guidelines update for GHG emissions it states, “Notably, [CEQA] section 15064.4(b)(1) is not intended to imply a zero net emissions threshold of significance. As case law makes clear, there is no ‘one molecule rule’ in CEQA.” Regardless, a net zero threshold aligns with the State’s carbon neutrality goals identified in Executive Order B-55-18. The California Air Resources Board (CARB) Draft 2022 Scoping Plan was published on May 10, 2022 and is expected to be adopted later in 2022, and evaluates a path for California to achieve carbon neutrality by 2045 (CARB, 2022a). Accordingly, the Project’s impacts due to GHGs would be significant if the Project were to result in a net increase in GHG emissions as compared to existing conditions.

4.7.4 IMPACT ANALYSIS

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

The Project entails a proposed commercial development area and a proposed warehouse distribution center on ±90.59 gross acres (±84.67 net acres). The commercial area is conceptually designed to contain 12 commercial buildings providing up to 187,500 square feet (s.f.) of building space. Although a final design of the commercial area would be considered by the City of Bakersfield City Council at a future date, the Project Applicant’s conceptual design provides a reasonably foreseeable projection of the design features and building sizes to enable quantified analysis. The proposed warehouse distribution building would provide up to 1,012,185 s.f. of building space. GHG emissions would occur from construction and operation of both the commercial and warehouse distribution components of the Project.

Although the Project would add impervious surfaces and contribute to the urban heat island, the site would be landscaped as shown in Figure 4-12, *Conceptual Landscape Plan*. The notes on Figure 4-12, covering both the proposed warehouse facility development and the conceptual commercial development, indicate that 786 trees would be planted on the property. The passenger vehicle parking lots would have a shade cover of 54.7%, whereas a minimum of 40% is required by Chapter 17.61 of the Bakersfield Municipal Code, thereby lowering the Project's contribution to the heat island such that the Project's impact would be less than significant. Furthermore, there are no established significance thresholds specific to the urban heat island. Temperature increases are considered in both the evaluation of potential air quality impacts and GHG impacts.

While estimated Project-related GHG emissions can be quantified, the direct impacts of such emissions on global climate change and global warming cannot be determined on the basis of available science. There is no evidence that would indicate that the emissions from a project the size of the proposed Project would directly or indirectly affect the global climate. Because global warming is the result of GHG emissions, and GHGs are emitted by innumerable sources worldwide, the proposed Project would have no potential to result in a direct impact to global warming; rather, Project-related contributions to global climate change could only have potential significance on a cumulative basis. Therefore, the analysis below focuses on the Project's potential to contribute to GCC in a cumulatively considerable way.

The proposed Project's estimated construction and operational GHG emissions were calculated using the California Emissions Estimator Model (CalEEMod) program (version 2020.4.0). These emissions are summarized in Table 4.7-1, *Estimated Annual GHG Emissions (MT/Year)*. As shown, the Project is estimated to be constructed between 2023 and 2029, with the warehouse site being developed first followed by construction of the commercial buildings based on market demand. In total, GHG emissions resulting from the construction process are calculated at 125.61 MT CO₂e annualized. Operation of the Project would produce GHG emissions from area sources (such as building operations), energy sources (from supplying power to the Project), mobile sources (from vehicles traveling to and from and operating on the Project site), waste sources (from decomposition of waste discarded from Project operations), and water sources (from supplying water to the Project). In total, Project operations are calculated to generate 20,504.28 MT CO₂e annually.

Table 4.7-1 Estimated Annual GHG Emissions (MT/Year)

Source	CO ₂	CH ₄	N ₂ O	CO _{2e}
Construction Emissions				
2023 Construction Emissions	1,076.73	0.25	0.008	1,085.38
2024 Construction Emissions	338.58	0.06	0.004	341.21
2025 Construction Emissions	594.43	0.14	0.005	599.52
2026 Construction Emissions	505.23	0.05	0.011	509.87
2027 Construction Emissions	497.93	0.05	0.011	502.40
2028 Construction Emissions	489.56	0.05	0.010	493.88
2029 Construction Emissions	234.24	0.03	0.004	236.18
Mitigated Operational Emissions				
Area Emissions	0.07	0.00	0.00	0.07
Energy Emissions	1,633.00	0.12	0.03	1,645.29
Mobile Emissions	17,369.45	0.45	1.75	17,903.15
Waste Emissions	233.10	13.78	0.00	577.50
Water Emissions	167.27	6.57	0.16	378.27
<i>Total Project Operational Emissions</i>	<i>19,402.89</i>	<i>20.92</i>	<i>1.94</i>	<i>20,504.28</i>
Annualized Construction Emissions ¹	124.56	0.02	0.00	125.61
Project Emissions	19,402.89	20.92	1.94	20,504.28
*Note: 0.000 could represent <0.000 Per South Coast AQMD's Methodology				

(Trinity, 2022a, Table 4-9)

Based on the emissions shown in Table 4.7-1, the Project would result in a total net increase of approximately 20,504.28 MT CO_{2e}/yr, the majority of which are from mobile sources (vehicle tailpipe emissions). The Project would not result in the emissions of hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), or sulfur hexafluoride (SF₆), the other gases identified as GHGs in AB 32.

The Project would implement design measures to maximize energy efficiency and reduce GHG emissions as required by State law (for example, the installation of a solar-ready roof on the warehouse building, compliance with Title 24, and the use of energy efficient appliances as required by the CBSC). Although mandatory compliance with applicable State regulations would reduce Project-related GHG emissions, these regulations would not reduce the Project's mobile source GHG emissions (i.e., emissions from construction equipment, passenger cars, and heavy-duty trucks), which comprise approximately 86% of all Project-related GHG emissions. As advancements in vehicle technology progress, it is expected that a higher percentage of vehicles, including trucks, will be electric-powered than occurs today. However, until vehicle technology advances and electric trucks are more commonly commercially available with enough power to haul heavy loads over long distances, it is reasonable to assume that the truck fleet that will access the Project site will be diesel-powered. Mobile source GHG emissions are regulated by State and federal fuel standards and tailpipe emissions standards, and are outside of the control and authority of the City of Bakersfield, the Project Applicant, and future Project occupants.

As previously noted, the City of Bakersfield is using a net-zero threshold for this Project, meaning that any amount of GHG emissions from the Project is considered a significant impact. Because the Project would result in a total net increase of approximately 20,504.28 MT CO₂e/yr, the Project's impact is significant on a cumulatively-considerable basis.

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

As demonstrated by the following analysis, the Project would not conflict with applicable plans, policies, and/or regulations adopted with the intent to reduce GHG emissions, including AB 32 and SB 32, Kern COG's RTP/SCS, and Title 24 of the CBSC, which are particularly applicable to the Project.

In April 2015, Governor signed EO B-30-15, which advocated for a statewide GHG-reduction target of 40 percent below year 1990 levels by 2030 and 80 percent below 1990 levels by 2050. In September 2016, Governor Brown signed SB 32, which formally established a statewide goal to reduce GHG emissions to 40% below year 1990 levels by 2030. To date, no statutes or regulations have been adopted to translate the year 2050 GHG reduction goal into comparable, scientifically-based statewide emission reduction targets.

CARB prepared the 2017 Scoping Plan Update to identify the measures that would achieve the emissions reductions goals of SB 32 (and, thus, also would achieve the emissions reductions goals of AB 32). Pursuant to Section 15604.4 of the CEQA Guidelines, a lead agency may rely on qualitative analysis or performance-based standards to determine the significance of impacts from GHG emissions. The City of Bakersfield has not adopted a Climate Action Plan. As such, the applicable regulation adopted for the purpose of reducing the emissions of GHGs is SB 32.

As previously indicated, SB 32 requires the State to reduce statewide GHG emissions to 40% below 1990 levels by 2030. In November 2017, CARB released the Final 2017 Scoping Plan Update, which identifies the State's post-2020 reduction strategy. The Final 2017 Scoping Plan Update reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Although CARB published a Draft 2022 Scoping Plan Update on May 10, 2022, the Scoping Plan Update was not yet approved by CARB at the time this EIR was prepared, and thus the adopted 2017 Scoping Plan remains the relevant document for purposes of evaluation herein.

Table 4.7-2, *2017 Scoping Plan Consistency Summary*, summarizes the Project's consistency with the 2017 Scoping Plan. As summarized, the Project would not conflict with any of the provisions of the Scoping Plan and in fact supports several of the action categories. Any future regulations adopted to address GHG emissions would apply directly or indirectly to the Project. Further, recent studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40% below 1990 levels by 2030, consistent with SB 32. Accordingly, the Project would not conflict with or obstruct implementation of the 2017 Scoping Plan Update.

Table 4.7-2 2017 Scoping Plan Consistency Summary

Action	Responsible Parties	Consistency
Implement SB 350 by 2030		
Increase the Renewables Portfolio Standard (RPS) to 50% of retail sales by 2030 and ensure grid reliability.	CPUC, CEC, CARB	Consistent. The Project would use energy from Pacific Gas and Electric (PG&E). PG&E has committed to diversify its portfolio of energy sources by increasing energy from wind and solar sources. The Project would not interfere with or obstruct PG&E energy source diversification efforts.
Establish annual targets for Statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of Statewide energy efficiency savings in electricity and natural gas end uses by 2030.		Consistent. The Project would be designed and constructed to implement the energy efficiency measures for new commercial and industrial developments and would include several measures designed to reduce energy consumption. The Project would not interfere with or obstruct policies or strategies to establish annual targets for Statewide energy efficiency savings and demand reduction.
Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in Integrated Resource Planning (IRP) to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly-owned utilities meet GHG emissions reductions planning targets through a combination of measures as described in IRP.		Consistent. The proposed Project would be designed and constructed to implement energy efficiency measures, where applicable, by including several measures designed to reduce energy consumption. The proposed Project includes energy efficient lighting and fixtures that meet the current Title 24 Standards throughout the Project and would be a modern development with energy efficient boilers, heaters, and air conditioning systems.
Implement Mobile Source Strategy (Cleaner Technology and Fuels)		
At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025.	CARB, California State Transportation Agency (CalSTA), Strategic Growth Council (SGC), California Department of Transportation (Caltrans), CEC, OPR, Local Agencies	Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty electric vehicle 2025 targets.
At least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030.		Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty electric vehicle 2030 targets.
Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations.		Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations.
Medium- and Heavy-Duty GHG		Consistent. This is a CARB Mobile Source

Table 4.7-2 2017 Scoping Plan Consistency Summary

Action	Responsible Parties	Consistency
Phase 2.		Strategy. The Project would not obstruct or interfere with CARB efforts to implement Medium- and Heavy-Duty GHG Phase 2.
Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20% of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100% of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NO _x standard.		Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts improve transit-source emissions.
Last Mile Delivery: New regulation that would result in the use of low NO _x or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes zero-emission vehicles comprise 2.5% of new Class 3-7 truck sales in local fleets starting in 2020, increasing to 10% in 2025 and remaining flat through 2030.		Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to improve last mile delivery emissions.
Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming Statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document “Potential VMT Reduction Strategies for Discussion.”		Consistent. This Project would not obstruct or interfere with implementation of SB 375 and would therefore not conflict with this measure. As discussed in EIR Subsection 4.13, <i>Transportation</i> , the Project’s VMT impact would be less than significant.
Increase stringency of SB 375 Sustainable Communities Strategy (2035 targets).	CARB	Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to Increase stringency of SB 375 Sustainable Communities Strategy (2035 targets).

Table 4.7-2 2017 Scoping Plan Consistency Summary

Action	Responsible Parties	Consistency
Harmonize project performance with emissions reductions and increase competitiveness of transit and active transportation modes (e.g., via guideline documents, funding programs, project selection, etc.).	CalSTA, SGC, OPR, CARB, Governor's Office of Business and Economic Development (GOBiz), California Infrastructure and Economic Development Bank (IBank), Department of Finance (DOF), California Transportation Commission (CTC), Caltrans	Consistent. The Project would not obstruct or interfere with agency efforts to harmonize transportation facility project performance with emissions reductions and increase competitiveness of transit and active transportation modes.
By 2019, develop pricing policies to support low-GHG transportation (e.g. low-emission vehicle zones for heavy duty, road user, parking pricing, transit discounts).	CalSTA, Caltrans, CTC, OPR, SGC, CARB	Consistent. The Project would not obstruct or interfere with agency efforts to develop pricing policies to support low-GHG transportation.
Implement California Sustainable Freight Action Plan		
Improve freight system efficiency.	CalSTA, CalEPA, California Natural Resources Agency (CNRA), CARB, Caltrans, CEC, GO-Biz	Consistent. This measure would apply to all trucks accessing the Project site, this may include existing trucks or new trucks that are part of the Statewide goods movement sector. The Project would not obstruct or interfere with agency efforts to improve freight system efficiency.
Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.		Consistent. The Project would not obstruct or interfere with agency efforts to deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.
Adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18%.	CARB	Consistent. When adopted, this measure would apply to all fuel purchased and used by the Project in the State. The Project would not obstruct or interfere with agency efforts to adopt a Low

Table 4.7-2 2017 Scoping Plan Consistency Summary

Action	Responsible Parties	Consistency
		Carbon Fuel Standard with a Carbon Intensity reduction of 18%.
Implement the Short-Lived Climate Pollutant Strategy (SLPS) by 2030		
40% reduction in methane and hydrofluorocarbon emissions below 2013 levels.	CARB, California's Department of Resources Recycling and Recovery (CalRecycle), CDFA, SWRCB, Local Air Districts	Consistent. The Project would be required to comply with this measure and reduce any Project-source SLPS emissions accordingly. The Project would not obstruct or interfere agency efforts to reduce SLPS emissions.
50% reduction in black carbon emissions below 2013 levels.		
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the Short-Lived Climate Pollutants (SLCP) and SB 1383.	CARB, CalRecycle, CDFA SWRCB, Local Air Districts	Consistent. The Project would implement waste reduction and recycling measures consistent with State and City requirements. The Project would not obstruct or interfere agency efforts to support organic waste landfill reduction goals in the SLCP and SB 1383.
Implement the post-2020 Cap-and-Trade Program with declining annual caps.	CARB	Consistent. The Project would be required to comply with any applicable Cap-and-Trade Program provisions. The Project would not obstruct or interfere agency efforts to implement the post-2020 Cap-and-Trade Program.
By 2018, develop Integrated Natural and Working Lands Implementation Plan to secure California's land base as a net carbon sink		
Protect land from conversion through conservation easements and other incentives.	CNRA, Departments Within CDFA, CalEPA, CARB	Consistent. The Project would not obstruct or interfere agency efforts to protect land from conversion through conservation easements and other incentives.
Increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity.		Consistent. The Project site is vacant disturbed property and does not comprise an area that would effectively provide for carbon sequestration. The Project would not obstruct or interfere agency efforts to increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity.
Utilize wood and agricultural products to increase the amount of carbon stored in the natural and built environments.		Consistent. Where appropriate, the Project would incorporate wood or wood products. The Project would not obstruct or interfere agency efforts to encourage use of wood and agricultural products to increase the amount of carbon stored in the natural and built environments.
Establish scenario projections to serve as the foundation for the		Consistent. The Project would not obstruct or interfere agency efforts to establish scenario

Table 4.7-2 2017 Scoping Plan Consistency Summary

Action	Responsible Parties	Consistency
Implementation Plan.		projections to serve as the foundation for the Implementation Plan.
Establish a carbon accounting framework for natural and working lands as described in SB 859 by 2018.	CARB	Consistent. The Project would not obstruct or interfere agency efforts to establish a carbon accounting framework for natural and working lands as described in SB 859 by 2018.
Implement Forest Carbon Plan.	CNRA, California Department of Forestry and Fire Protection (CAL FIRE), CalEPA	Consistent. The Project would not obstruct or interfere agency efforts to implement the Forest Carbon Plan.
Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.	State Agencies & Local Agencies	Consistent. The Project would not obstruct or interfere with agency efforts to identify and expand funding and financing mechanisms to support GHG reductions across all sectors.

Rendering a significance determination for year 2050 GHG emissions relative to EO B-30-15 would be speculative because EO B-30-15 establishes a goal three decades into the future; no agency with GHG subject matter expertise has adopted regulations to achieve these statewide goals at the project-level; and, available analytical models cannot presently quantify all project-related emissions in those future years. Further, due to the technological shifts anticipated and the unknown parameters of the regulatory framework in 2050, available GHG models and the corresponding technical analyses are subject to limitations for purposes of quantitatively estimating the Project's emissions in 2050.

The Kern COG's *RTP/SCS* was prepared to ensure that the region attains the per capita vehicle miles targets for passenger vehicles identified by CARB (and, thus, meeting associated GHG emissions targets), as required by Senate Bill 375. As explained in EIR Subsection 4.15, *Transportation*, the Project would not conflict with applicable measures of the *RTP/SCS* and, therefore, would not interfere with the region's ability to minimize GHG emissions from transportation sources.

The Project would provide for the construction and operation of commercial and warehouse distribution development that would be constructed with contemporary, energy-efficient/energy-conserving design features and operational characteristics. Commercial and warehouse distribution land uses are not inherently energy intensive and the total Project energy demands would be comparable to, or less than, other development projects of similar scale and configuration due to the Project's modern construction and requirement to be constructed in accordance with the most recent CBSC. The CBSC includes the California Energy Code, or Title 24, Part 6 of the California Code of Regulations, also titled The Energy Efficiency Standards for Residential and Nonresidential Buildings. The California Energy Code was established in 1978 in response to a legislative mandate to reduce

California's energy consumption. The standards are updated approximately every three years to improve energy efficiency by allowing incorporating new energy efficiency technologies and methods. The Project would be required to comply with all applicable provisions of the CBSC. As such, the Project's energy demands would be minimized through design features and operational programs that, in aggregate, would ensure that Project energy efficiencies would comply with – or exceed – incumbent CBSC energy efficiency requirements, thereby minimizing GHG emissions produced from energy consumption.

In conclusion, implementation of the Project would not conflict with the State's ability to achieve the Statewide GHG reduction mandates and would be consistent with applicable policies and plans related to GHG emissions reductions. Implementation of the Project would not actively interfere with any future federally-, State-, or locally-mandated retrofit obligations (such as requirements to use new technologies such as diesel particulate filters, emissions upgrades to a higher tier equipment, etc.) enacted or promulgated to legally require development projects to assist in meeting State-adopted GHG emissions reduction targets, including those established under EO S-3-05, EO B-30-15, or SB 32. For these reasons, the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs and would result in a less than significant impact.

4.7.5 CUMULATIVE IMPACT ANALYSIS

As discussed in Subsection 4.7.3, there is no evidence that would indicate that the emissions from a project the size of the proposed Project would directly or indirectly affect the global climate. As such, Project impacts due to GHG emissions are inherently cumulative in nature.

As discussed under the analysis of Threshold a., the City of Bakersfield has opted to apply a net-zero significance threshold for this Project, meaning that the Project's impacts due to GHGs would be significant if the Project were to result in any amount of GHG emissions. As previously shown in Table 4.7-1, the Project would result in annual emissions of approximately 20,504.28 MT CO_{2e} per year. As other cumulative developments within the region also have the potential to result in GHG impacts, the Project's GHG emissions would represent a significant impact on a cumulatively-considerable basis.

As discussed under the analysis of Threshold b., the proposed Project would be consistent with the CARB 2017 Scoping Plan Update, which was prepared to address the reduction requirements set forth by SB 32. Because the Project would be consistent with the Scoping Plan Update, the Project also would not interfere with the State's ability to achieve the GHG reduction requirements of SB 32. Thus, the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, and impacts would be less than significant on a cumulatively-considerable basis.

4.7.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Significant Cumulatively-Considerable Impact. The Project would generate approximately 20,504.28 MT CO₂e/yr of GHGs, which is significant on a cumulatively-considerable basis.

Threshold b: Less-than-Significant Impact. The Project would be consistent with the CARB 2017 Scoping Plan Update, which was prepared to address the GHG reduction requirements set forth by SB 32. Because the Project would be consistent with the Scoping Plan Update, the Project also would not interfere with the State's ability to achieve the GHG reduction requirements of SB 32. Thus, the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, and impacts would be less than significant.

4.7.7 MITIGATION

Please refer to AIR MM-1 in Subsection 4.2, *Air Quality*, which requires that the Project Applicant enter into a Voluntary Emission Reduction Agreement (VERA) with the SJVAPCD. AIR MM-1 also serves to reduce GHG emissions. Additional mitigation measures are as follows.

- GHG MM-1 Construction contractors shall assure that construction equipment greater than 150 horsepower achieves or is equivalent to or better than Environmental Protection Agency (EPA)/California Air Resources Board (CARB) Tier 4 emissions standards, or Tier 3 standards if Tier 4 equipment is not available at the time of construction. Prior to grading and building permit issuance, the construction contractor(s) shall submit an equipment list to the City's Development Services Director confirming that the equipment used is compliant.
- GHG MM-2 Construction contractors shall assure that hand tools, forklifts, and pressure washers used for construction are electric-powered and shall designate an area of the construction site where electric-powered construction vehicles and equipment can charge. The City of Bakersfield shall verify the location of the designated charging area in association with grading and building permit issuance.
- GHG MM-3 Project construction contractors shall tune and maintain all construction equipment in accordance with the equipment manufacturer's recommended maintenance schedule and specifications. Maintenance records for all pieces of equipment shall be kept on-site for the duration of construction activities and shall be made available for periodic inspection by City of Bakersfield or its designee.
- GHG MM-4 Provisions shall be made at the warehouse site for emerging electric truck technology. Prior to the issuance of a shell building permit for the warehouse building, the City of Bakersfield shall verify that the warehouse site plan identifies an on-site location for future electric truck (tractor) charging stations, with space available for a minimum of 9 trailers to simultaneously charge (5% of the number of warehouse building dock

doors) when charging stations are installed in the future. The conduit trenching shall be installed to that location for future conduit pull as a requirement of the shell building permit.

- GHG MM-5 In conjunction with the approval of tenant improvement plans and prior to the issuance of an occupancy permit, a minimum of 9 truck (tractor) electric charging stations shall be installed on-site. If the warehouse building tenant is not served by electric trucks, this requirement can be deferred to a future point in time when the building begins to be served by electric trucks, as a condition of the occupancy permit.
- GHG MM-6 Prior to issuance of a shell building permit for the warehouse building, the City of Bakersfield shall verify that electric charging stations are provided at the exterior for the purpose of charging electric yard equipment such as forklifts and yard hostlers.
- GHG MM-7 The roof of the warehouse building shall be solar-ready. Prior to issuance of a shell building permit for the warehouse building, the City of Bakersfield shall verify that the roof structure is designed to support the installation of solar panels.
- GHG MM-8 Any loading dock serving refrigerated warehouse space shall be equipped with an electric plug to power a transport refrigeration unit. Prior to issuance of a tenant improvement building permit that authorizes the installation of refrigerated warehouse space, the City of Bakersfield shall verify that the electric plug will be provided.
- GHG MM-9 The warehouse building's electrical room shall be sufficiently sized to accommodate the number and size of electrical panels reasonably anticipated to be needed to support technological advances in zero-emission technologies. Prior to issuance of a shell building permit for the warehouse building, the City of Bakersfield shall ensure that either a secondary electrical room will be provided in the building or that the primary electrical room of the building is sized 25% larger than is required to satisfy the service requirements of the building or the electrical gear installed with the initial construction has 25% excess demand capacity.
- GHG MM-10 At least 10% of all passenger vehicle parking spaces shall be electric vehicle (EV) ready, with all necessary conduit and related appurtenances installed. At least 5% of all passenger vehicle parking spaces shall be equipped with working Level 2 Quick charge EV charging stations installed and operational, prior to building occupancy. Signage shall be installed indicating EV charging stations and specifying that spaces are reserved for clean air/EV vehicles. Unless superior technology is developed that would replace the EV charging units, the building operators and any successors in interest shall be responsible for maintaining the EV charging stations in working order for the life of the buildings.

- GHG MM-11 The rooftops of commercial buildings and the office portions of the warehouse building shall be constructed with light colored roofing material with a solar reflective index (“SRI”) of not less than 78. This material shall be the minimum solar reflective rating of the roof material for the life of the building. Prior to issuance of building permits, the City of Bakersfield shall verify that the roofing material complies.
- GHG MM-12 The Project Applicant or its successor in interest shall provide the warehouse building operator with an information packet regarding EPA Smartway features that are required to be incorporated into haul trucks, as required by CARB. Prior to the issuance of an occupancy permit, the Project Applicant or its successor in interest shall provide a copy of the packet to the City of Bakersfield as verification of the packet contents.
- GHG MM-13 The Project’s building users shall be encouraged to explore incentives available from the SJVAPCD under the “Heavy Duty Truck Replacement Program.” This program provides incentives for the replacement of existing heavy-duty diesel trucks with new, zero or near-zero-emission technology. (At the time of this writing, information is available at <https://ww2.valleyair.org/grants/truck-replacement-program/>.) Provided that this program or a comparable program remains available, an information packet about the program shall be provided to every building user prior to occupancy. Prior to the issuance of occupancy permits, the Project Applicant, its successor in interest, or the Project’s property owner’s association shall provide a copy of the packet to the City of Bakersfield as verification of the packet contents.

4.7.8 DESIGN FEATURES AND REGULATORY REQUIREMENTS

The City of Bakersfield is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Greenhouse Gas Emissions, which include the following:

- GHG RR-14 All buildings shall be constructed in compliance with Title 24 of the Uniform Building Code to minimize total consumption of energy. The City of Bakersfield shall confirm Title 24 compliance prior to the issuance of building permits.
- GHG RR-15 All vehicle operators are required to comply with CARB Rule 2485 and CARB Rule 2449, which limits nonessential idling of diesel-fueled commercial vehicle engines and diesel-powered off-road equipment to five minutes or less. Prior to issuance of occupancy permits for buildings with loading dock areas, the City of Bakersfield shall verify that signs are posted in these areas that inform vehicle and equipment operators about the requirements of these Rules.
- GHG RR-16 In compliance with SJVAPCD Rule 9510 (Indirect Source Review (ISR)), the Project Applicant or its successor in interest shall submit an Air Impact Assessment (AIA) application to the SJVAPCD, which will identify emission reduction measures for

emissions of NO_x and PM₁₀. The performance measures listed below can be met through any combination of on-site emission reduction measures or off-site fees.

- a) Related to construction-related emissions, the exhaust emissions for construction equipment greater than fifty (50) horsepower used or associated with the project shall be reduced by the following amounts from the statewide average as estimated by the ARB: 20% of the total NO_x emissions, and 45% of the total PM₁₀ exhausts emissions. Construction emissions can be reduced by using less polluting construction equipment, which can be achieved by utilizing add-on controls, cleaner fuels, or newer lower emitting equipment.
- b) Related to operational emissions, NO_x emissions shall be reduced by 33.3% of the project's operational baseline NO_x emissions over a period of ten years as quantified in the approved AIA. PM₁₀ emissions shall be reduced by 50% of the project's operational baseline PM₁₀ emissions over a period of ten years as quantified in the approved AIA.

4.7.9 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a: Significant and Unavoidable Cumulatively-Considerable Impact. Although the Project's GHG emissions would only be a very small fraction of the global GHG emissions that contribute to climate change, the City is using a net-zero threshold. Because the Project would result in a net increase in GHG emissions as compared to existing conditions even with implementation of mitigation measures, the Project's impacts due to GHG emissions would be significant and unavoidable on a cumulatively-considerable basis.

4.8 HAZARDS AND HAZARDOUS MATERIALS

The information and analysis in this Subsection 4.8 is based in part on a technical study that was prepared to determine the presence or absence of hazardous materials on the Project site under existing conditions. The technical study titled “Phase I Environmental Site Assessment,” dated January 7, 2021, was prepared by Nova Group, and is included as EIR *Technical Appendix G* to this EIR (Nova, 2021). Refer to Section 7.0, *References*, for a complete list of reference sources used in this analysis.

4.8.1 EXISTING CONDITIONS

A. Definition of Terms

“Toxic substance” is defined as a substance that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may present an unreasonable risk of injury to human health or the environment. Toxic substances include chemical, biological, flammable, explosive, and radioactive substances.

“Hazardous material” is defined as a substance that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may: 1) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, disposed of, or otherwise mismanaged; or 2) cause or contribute to an increase in mortality or an increase in irreversible or incapacitating illness (CCR, n.d.).

“Hazardous waste” is defined in the California Code of Regulations (CCR), Title 22, § 66261.3. The defining characteristics of hazardous waste are: ignitability (oxidizers, compressed gases, and extremely flammable liquids and solids), corrosivity (strong acids and bases), reactivity (explosives or generates toxic fumes when exposed to air or water), and toxicity (materials listed by the United States Environmental Protection Agency (USEPA) as capable of inducing systemic damage to humans or animals). Certain wastes are called “Listed Wastes” and are found in the CCR, Title 22, Sections 66261.30 through 66261.35. Wastes appear on the lists because of their known hazardous nature or because the processes that generate them are known to produce hazardous wastes (which are often complex mixtures).

“Recognized Environmental Condition (REC)” is defined as the presence or likely presence of any hazardous substance or petroleum products in, on, or at a property: 1) due to any release to the environment; 2) under conditions indicative of a release to the environment; or 3) under conditions that pose a material threat of a future release to the environment (Nova, 2021, p. 3).

“Controlled Recognized Environmental Condition (CREC)” is defined as a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (Nova, 2021, p. 3).

“Historical Recognized Environmental Condition (HREC)” is defined as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (Nova, 2021, p. 3).

B. Historical Review, Regulatory Records Review, and Field Reconnaissance

1. Historical Review

As part of the Project’s Phase I ESA, Nova Group reviewed various sources of information to determine the historical use of the Project site, including historical aerial photographs, fire insurance maps, historical topographic maps, Environmental Data Resources (EDR) collection of regulatory database records, city directories, and historical site ownership records (Nova, 2021, p. 16). Refer to the Project’s Phase I ESA (*Technical Appendix G*) for a detailed accounting of Nova Group’s research procedure.

Historical review of the property concluded that from 1932 to 1954, the Project site was in use for agricultural purposes and two residential/farm structures were present on the northeast corner of the property. By 1956, the property continued to be used for agricultural purposes and no structures were apparent on the property. From 1968 to 2006, an apparent residential/farm structure was located on the southern portion of the property and the property appeared to remain in active agricultural use. By 2009, the property was vacant with unpaved roads, no structures were present, and the property no longer was in active agricultural use (Nova, 2021, p. 17).

2. Regulatory Records Review

Nova Group researched federal, State, and local environmental records databases to identify properties with reported environmental issues. The Project site is not listed on any of the regulatory records. Several properties within one-mile of the Project site were listed in the regulatory records; however, none of the identified properties were considered an REC to the Project site (Nova, 2021, pp. 10-13).

3. Field Reconnaissance

During Nova Group’s reconnaissance of the property was conducted on January 5, 2021. Nova Group observed several areas of household waste scattered within the property and two inactive water wells, one near the northern perimeter of the property and one in the southeastern corner of the property. Based on the past use of the property, the two wells observed appear to have been used for domestic water supply purposes and are not considered an REC for the property. No hazardous substances were observed on the Project site.

Indication of a property septic system or cesspool was not observed at the property during the reconnaissance and/or review of publicly available resources. However, because the site was historically used for agricultural purposes, private septic system(s) may be present, although none were observed by Nova Group (Nova, 2021, pp. 19 - 23).

Nova Group concluded that no evidence of RECs (including CRECs) is present on the property under existing conditions (Nova, 2021, p. 26).

4. Vapor Migration

During Nova Group's observations of the property, review of historical sources, and review of regulatory databases, no current or historical usage of chemicals of concern at the property or reported release or other indication of subsurface contamination from a property source was evident. Additionally, no release or material threat of a release to the subsurface from an off-property sources was identified. Therefore, a vapor migration concern was not identified for the property during the course of the Phase I ESA (Nova, 2021, p. 13).

C. Airport Hazards

The Project site is not located within two miles of a public airport or within an airport land use plan. The closest airport is the Bakersfield Municipal Airport located approximately 2.5 southwest of the Project site. According to Figure 4-1 of the *Kern County Airport Land Use Compatibility Plan* (ALUCP), the Project site is located outside of the compatibility zones for the Bakersfield Municipal Airport (Kern County, 2012, Figure 4-1).

Google Earth shows the Costerisan Farms Airport is located approximately 1.7 miles southwest of the Project site. However, this private airstrip appears to no longer be in operation; all but one of the buildings that were previously located on this property were removed within the last several years. (Google Earth, 2022).

D. Wildland Fire Hazards

The Project site is surrounded by urbanized land uses and the site not located adjacent to any wildlands. The California Department of Forestry and Fire Protection (Cal Fire) does not identify the Project site within a very high fire hazard severity zone (Cal Fire, 2022).

4.8.2 REGULATORY SETTING

The following is a brief description of the federal, state, and local environmental laws and related regulations related to hazards and hazardous materials.

A. Federal Plans, Policies, and Regulations

1. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Superfund Amendments and Reauthorization Act (SARA)

The Comprehensive Environmental Response, Compensation, and Liability Act, also known as CERCLA or Superfund, provides a Federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, the Environmental Protection Agency (EPA) was given power to seek out those parties responsible for any release and assure their cooperation in

the cleanup. EPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, EPA obtains private party cleanup through orders, consent decrees, and other small party settlements. EPA also recovers costs from financially viable individuals and companies once a response action has been completed. EPA is authorized to implement the Act in all 50 states and U.S. territories. Superfund site identification, monitoring, and response activities in states are coordinated through the state environmental protection or waste management agencies (EPA, 2021b)

The Superfund Amendments and Reauthorization Act (SARA) of 1986 reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definitions clarifications, and technical requirements were added to the legislation, including additional enforcement authorities. Also, Title III of SARA authorized the Emergency Planning and Community Right-to-Know Act (EPCRA) (EPA, 2021b).

2. *Resource Conservation and Recovery Act (RCRA)*

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances (EPA, 2021c).

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program (EPA, 2021c).

3. *Hazardous Materials Transportation Act (HMTA)*

The Hazardous Materials Transportation Act of 1975 (HMTA) empowered the Secretary of Transportation to designate as hazardous material any "particular quantity or form" of a material that "may pose an unreasonable risk to health and safety or property" (OSHA, n.d.).

4. *Hazardous Materials Transportation Uniform Safety Act of 1990*

In 1990, Congress enacted the Hazardous Materials Transportation Uniform Safety Act (HMTUSA) to clarify the maze of conflicting state, local, and federal regulations. Like the HMTA, the HMTUSA requires the Secretary of Transportation to promulgate regulations for the safe transport of hazardous material in intrastate, interstate, and foreign commerce. The Secretary also retains authority to designate materials as hazardous when they pose unreasonable risks to health, safety, or property. The statute includes provisions to encourage uniformity among different state and local highway routing

regulations, to develop criteria for the issuance of federal permits to motor carriers of hazardous materials, and to regulate the transport of radioactive materials (OSHA, n.d.).

5. *Occupational Safety and Health Act (OSHA)*

Congress passed the Occupational and Safety Health Act (OSHA) to ensure worker and workplace safety. Their goal was to make sure employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions (EPA, 2021d).

In order to establish standards for workplace health and safety, the Act also created the National Institute for Occupational Safety and Health (NIOSH) as the research institution for OSHA. OSHA is a division of the U.S. Department of Labor that oversees the administration of the Act and enforces standards in all 50 states (EPA, 2021d).

6. *Toxic Substances Control Act*

The Toxic Substances Control Act (TSCA) of 1976 provides EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics, and pesticides. TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint (EPA, 2021e).

7. *Public Resources Code (PRC) § 3208.1*

PRC 3208.1 is to prevent, as far as possible, damage to life, health, and property, the supervisor or district deputy may order the re-abandonment of any previously abandoned well if the supervisor or the district deputy has reason to question the integrity of the previous abandonment (Cal. Pub. Res. Code Section 3208.1, 2000).

B. *State Plans, Policies, and Regulations*

1. *Cal/OSHA and the California State Plan*

Under an agreement with OSHA, since 1973, California has operated an occupational safety and health program in accordance with Section 18 of the federal OSHA. The State of California's Department of Industrial Relations administers the California Occupational Safety and Health Program, commonly referred to as Cal/OSHA. The State of California's Division of Occupational Safety and Health (DOSH) is the principal agency that oversees plan enforcement and consultation. In addition, the California State program has an independent Standards Board responsible for promulgating State safety and health standards, and reviewing variances. It also has an Appeals Board to adjudicate contested citations and the Division of Labor Standards Enforcement to investigate complaints of discriminatory retaliation in the workplace. Cal/OSHA is the only agency in the State authorized to adopt, amend, or repeal occupational safety and health standards or orders. In addition, the Standards

Board maintains standards for certain things not covered by federal standards or enforcement, including: elevators, aerial passenger tramways, amusement rides, pressure vessels and mine safety training. The Cal/OSHA enforcement unit conducts inspections of California workplaces in response to a report of an industrial accident, a complaint about an occupational safety and health hazard, or as part of an inspection program targeting industries with high rates of occupational hazards, fatalities, injuries or illnesses. (OSHA, n.d.).

2. *California Hazardous Waste Control Law*

The Hazardous Waste Control Law (HWCL) (Health and Safety Code [HSC], Division 20, Chapter 6.5, Section 25100, et seq.) is the primary hazardous waste statute in California. The HWCL implements RCRA as a “cradle-to-grave” waste management system in the State. It specifies that generators have the primary duty to determine whether their wastes are hazardous and to ensure its proper management. The HWCL also establishes criteria for the reuse and recycling of hazardous wastes used or reuse as raw materials. The HWCL exceeds federal requirements by mandating source reduction planning and broadening requirements for permitting facilities that treat hazardous waste. It also regulates a number of waste types and waste management activities not covered by federal law (RCRA) (CA Legislative Info, n.d.).

3. *California Code of Regulations (CCR), Titles 22 and 26*

A variety of California Code of Regulation (CCR) titles address regulations and requirements for generators of hazardous waste. Title 22 contains detailed compliance requirements for hazardous waste generators, transporters, and facilities for treatment, storage, and disposal. Because California is a fully-authorized state according to RCRA, most regulations (i.e., 40 CFR 260, et seq.) have been duplicated and integrated into Title 22. However, because the Department of Toxic Substances Control (DTSC) regulates hazardous waste more stringently than the EPA, the integration of state and federal hazardous waste regulations that make up Title 22 does not contain as many exemptions or exclusions as does 40 CFR 260. As with the HSC, Title 22 also regulates a wider range of waste types and waste management activities than does RCRA. To aid the regulated community, California has compiled hazardous materials, waste, and toxics-related regulations from CCR, Titles 3, 8, 13, 17, 19, 22, 23, 24 and 27 into one consolidated listing: CCR Title 26 (Toxics). However, the hazardous waste regulations are still commonly referred to collectively as “Title 22” (DTSC, n.d.; Cornell, n.d.).

C. Local Plans, Policies, and Regulations

1. *Local Permitting Requirements*

The aforementioned federal and State hazardous materials regulations require all businesses that handle more than a specified number of hazardous materials or extremely hazardous materials to obtain a hazardous materials permit and submit a business plan to its local Certified Unified Program Agency (CUPA). The CUPA also ensures local compliance with all applicable hazardous materials regulations. The CUPAs with responsibility for the City of Bakersfield are the Bakersfield City Fire Department and the Kern County Environmental Health Services Department (CUPA, 2022).

2. Kern County Operational Area Hazardous Materials Area Plan

The Kern County Operational Area Hazardous Materials Area Plan addresses the use, storage, and transportation of hazardous materials and the generation and transportation of hazardous wastes in the Kern County Operational Area. At the time of a significant emergency, the Kern County Operational Area serves as the coordination and communication link between the cities and special districts with the County's boundaries. Serving as the lead agency in the Kern County Operational Area is County government, while oversight and administrative support is provided by the Kern County Office of Emergency Services. During incidents involving the release or threatened release of hazardous substances, the Hazardous Materials Area Plan identifies local, State, and federal responsibilities (Kern County, 2014).

4.8.3 BASIS FOR DETERMINING SIGNIFICANCE

Section IX of Appendix G to the CEQA Guidelines addresses typical adverse effects due to hazards and hazardous materials, and includes the following threshold questions to evaluate the Project's impacts from hazards and hazardous materials (OPR, 2019):

- a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;*
- 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;*
- c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;*
- 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;*
- 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;*
- f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;*

4.8.4 IMPACT ANALYSIS

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

Threshold 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?

A. Impact Analysis for Existing Site Conditions

Based on the Phase I ESA conducted by Nova Group, the Project site contains no evidence of RECs, CRECs, HRECs or other environmental issues (Nova, 2021, p. 26).

There are three conditions associated with the site's existing condition that could create a significant hazard to the public or the environment associated with handling of existing site materials that could be hazardous. These include the need to cap two existing water wells, the potential for existence subsurface private septic system(s) associated with past uses, and the potential to encounter agricultural-related chemicals, such as pesticides, herbicides, and fertilizers in soils during the construction process. The two water wells would be capped in compliance with applicable regulatory requirements. Should a septic system be encountered during the Project's construction activities, it would need to be properly removed, handled, and disposed of in accordance with all applicable local and State regulations, including but not limited to the CCR Title 5, Appendix H. Last, if residual amounts of pesticides or herbicides are found in soils during the construction process, any concentrations of these materials would be reduced during construction activities through grading and filling, with capping of the soils beneath proposed building footprints and pavements (Nova, 2021, p. 17).

There are State and federal thresholds dictating the characterization of pesticide contaminated soils. Specifically, the United States Environmental Protection Agency (U.S. EPA) and California EPA monitor a number of pesticides that were once widely used, but are currently banned or heavily regulated in the United States due to concerns regarding their environmental impact and/or human health risks. Risk-based soil screening levels have been calculated and published by the U.S. EPA, as well as the California EPA Office of Environmental Health Hazard Assessment (OEHHA) for guidance purposes. Both agencies have developed screening levels for both residential and industrial/commercial settings which set forth a safe level of contaminants by land use type.

Based on the above analysis, a significant hazard to the public or the environment could occur through a reasonable risk of upset or the routine transport, use, or disposal of hazardous materials associated with these features that are part of the existing site condition. Therefore, impacts would be potentially significant and mitigation is required.

B. Impact Analysis for Short-Term Temporary Construction-Related Activities

Heavy equipment (e.g., dozers, excavators, tractors) would be operated on the Project site during construction. This heavy equipment likely would be fueled and maintained by petroleum-based substances such as diesel fuel, gasoline, oil, and hydraulic fluid, which are considered hazardous if improperly stored or handled. In addition, materials such as paints, adhesives, solvents, and other substances typically used in building construction would be located on the Project site during construction. Improper use, storage, or transportation of hazardous materials can result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment. This is a standard risk on all construction sites, and there would be no greater risk for improper handling, transportation, or spills associated with the Project than would occur on any other similar construction site. Construction contractors would be required to comply with all applicable federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited requirements imposed by the EPA, DTSC, and the Central Valley RWQCB. With mandatory compliance with applicable hazardous materials regulations, the Project's short-term construction activities would not create significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials. Therefore, impacts would be less than significant and no mitigation is required.

C. Impact Analysis for Long-Term Operation

The future occupants of the Project's proposed buildings are not yet known. However, the future building occupants will likely include warehouse and commercial uses and it is possible that hazardous materials could be used during the course of a future building user's daily operations. State and federal Community-Right-to-Know laws allow the public access to information about the amounts and types of chemicals in use at local businesses. Laws also are in place that require businesses to plan and prepare for possible chemical emergencies. Any business that occupies the warehouse or commercial buildings on the Project site and that handles hazardous materials (as defined in Section 25500 of California Health and Safety Code, Division 20, Chapter 6.95) will be required to comply with California's Hazardous Materials Release Response Plans and Inventory Law, which requires immediate reporting to the Kern County Fire Department and the State Office of Emergency Services regarding any release or threatened release of a hazardous material, regardless of the amount handled by the business, and to prepare a Hazardous Materials Business Emergency Plan (HMBEP). An HMBEP is a written set of procedures and information created to help minimize the effects and extent of a release or threatened release of a hazardous material.

If businesses that use or store hazardous materials occupy the future buildings on the Project site, the business owners and operators would be required to comply with all applicable federal, State, and local regulations to ensure proper use, storage, use, emission, and disposal of hazardous substances (as described above). With mandatory regulatory compliance, the Project would not pose a significant hazard to the public or the environment through the routine transport, use, storage, emission, or disposal of hazardous materials, nor would the Project increase the potential for accident conditions which could result in the release of hazardous materials into the environment.

With mandatory compliance with applicable hazardous materials regulations, during long-term operation, the Project would not create significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials. Therefore, impacts would be less than significant and no mitigation is required.

Threshold 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?

The nearest school to the Project site is Granite Pointe Elementary School which is located approximately 0.3- miles west of the Project site (Google Earth, 2022).

Because there are no existing or proposed schools within 0.25-mile of the Project site, the Project has no potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, and/or wastes within one-quarter mile of an existing or proposed school. Therefore, no impact would occur and no mitigation is required.

Threshold d: Would the Project 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?

Because the Project site is not located on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, the Project has no potential to create a significant hazard to the public or the environment associated with a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, no impact would occur and no mitigation is required.

Threshold 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?

As discussed in Subsection 4.8.1, the Project site is not located within two miles of a public airport or within an airport land use plan. The closest airport is the Bakersfield Municipal Airport located approximately 2.5 miles southwest of the Project site. According to Figure 4-1 of the *Kern County Airport Land Use Compatibility Plan (ALUCP)*, the Project site is located outside of the compatibility zones for the Bakersfield Municipal Airport, indicating the Project site is not subject to airport-related hazards (Kern County, 2012, Figure 4-1).

Because the Project site is not located within an airport land use plan and is not within two miles of a public airport or public use airport, or a private airstrip, there is no potential for implementation of the Project to result in a safety hazard or excessive noise for people residing or working in the Project area. No impact would occur and no mitigation is required.

Threshold f: Would the Project impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. During construction and long-term operation, the proposed Project would be required to maintain adequate emergency access for emergency vehicles. As part of the City's discretionary review process, the City of Bakersfield reviewed the Project's application materials to ensure that appropriate emergency ingress and egress would be available to-and-from the Project site and that the Project would not substantially impede emergency response times in the local area. Additionally, the proposed Project would be required to comply with the Kern County Operational Area Hazardous Materials Area Plan to ensure compliance with established procedures, rules, and regulations for emergency responses in the event of a hazardous materials incident. Accordingly, implementation of the Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan, and no impact would occur.

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

The Project site is not located within a very high fire hazard severity zone (Cal Fire, 2022). Neither Cal Fire nor the City of Bakersfield identify the Project site within an area susceptible to wildland fires and the Project site and surrounding areas generally consist of commercial, industrial, and/or residential uses, which are generally not associated with wildland fire hazards (Cal Fire, 2022) (Bakersfield, 2007). Because the Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, no impact would occur.

4.8.5 CUMULATIVE IMPACT ANALYSIS

Routine Transport, Use, or Disposal of Hazardous Materials

The construction contractors and future occupants of the Project's proposed buildings would be required to comply with all applicable federal, State, and local regulations relating to the routine transport, use, or disposal of hazardous materials. Such uses also would be subject to additional review and permitting requirements by the Kern County Fire Department and the Kern County Operational Area Hazardous Materials Area Plan. Similarly, any other developments in the area proposing the construction of uses with the potential for use, storage, or transport of hazardous materials also would be required to comply with applicable federal, State, and local regulations, and such uses would be subject to additional review and permits from their local oversight agency. Therefore, cumulatively-considerable impacts would be less than significant.

Release of Hazardous Materials into the Environment

The construction contractors and future occupants of the Project's proposed buildings would be required to comply with all applicable federal, State, and local regulations to ensure proper use, storage, and disposal of hazardous substances. Such uses also would be subject to additional review and permitting requirements by the Kern County Fire Department and the Kern County Operational Area

Hazardous Materials Area Plan. Similarly, any other developments in the area proposing the construction of uses with the potential for release of hazardous materials into the environment would also be required to comply with applicable federal, State, and local regulations, and such uses would be subject to additional review and permits from their local oversight agency. Therefore, cumulatively-considerable impacts would be less than significant.

Hazardous Emissions Within One-Quarter Mile of an Existing or Proposed School

The Project site is not located within one-quarter mile of an existing or planned school; therefore, the Project would not contribute to a cumulatively significant hazards/hazardous materials impact on any public or private schools located within one-quarter mile of the site.

Hazardous Materials Sites Compiled Pursuant to Government Code Section 65962.5

The Project site is not located on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; therefore, the Project has no potential to contribute to substantial, cumulative effects related to the development or re-development of contaminated property.

Airport Land Use Plan or Airports

The Project site is not located within an airport land use plan or, where such a plan has not been adopted, or within two miles of a public airport or public use airport; therefore, the Project has no potential to contribute to a cumulatively significant effect associated with an airport land use plan or airports.

Emergency Response or Emergency Evacuation Plans

The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route; thus, there is no potential for the Project to contribute to any cumulative impacts associated with an adopted emergency response plan or emergency evacuation plan.

Wildland Fires

Because the Project site is not located within or in close proximity to areas identified as being subject to wildland fire hazards, the Project has no potential to contribute to adverse, cumulative wildland fire hazards.

4.8.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Thresholds a and b: Significant Direct Impact. The Project site contains no evidence of RECs, CRECs, HRECs or other environmental issues. However, the need to cap two existing water wells, the potential for existence of subsurface private septic system(s), and the potential to encounter agricultural-related chemicals, such as pesticides, herbicides, and fertilizers in soils during the construction process could result in a significant hazard to the public or the environment either through risk of upset, transport, use, or disposal of hazardous materials.

Threshold c: No Impact. The Project site is not located within one-quarter mile of any existing or proposed school. Accordingly, the Project has no potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Threshold d: No Impact. The Project site is not located on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Threshold e: No Impact. The Project site is not located within an airport land use plan or, where such a plan has not been adopted, or within two miles of a public airport or public use airport.

Threshold f: No Impact. The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. During construction and long-term operation, adequate emergency vehicle access is required to be provided. Accordingly, implementation of the Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan.

Threshold g: No Impact. The Project site is not located in close proximity to wildlands or areas with high fire hazards. Thus, the Project would not expose people or structures to a significant wildfire risk.

4.8.7 MITIGATION

HAZ MM-1 The Project's construction contractors shall provide training and personal protective equipment to construction workers and provide information to all construction personnel involved in ground-disturbing construction activities about the potential for discovery of subsurface septic systems and soil contaminants. Project construction contractors shall be required by their contracts to provide the training and protective gear, and permit periodic inspection of the construction site by City of Bakersfield staff or its designee to confirm compliance. A note that requires these items is required on all grading plans approved by the City of Bakersfield.

HAZ MM-2 Any stained or odorous soil that may be encountered during ground-disturbing activities shall be removed, stockpiled, and transported for disposal in accordance with local, State, and federal regulations. Soil samples shall be collected from the resulting excavation(s) to verify complete removal of any impacted soil. During soils/debris removal operations, a Project Environmental Professional (Environmental Professional) shall be retained by the Project Applicant or construction contractor and shall be available to identify and address other issues that may arise in the course soil-disturbing construction activities. As determined necessary by the Environmental Professional, additional measures shall be employed to minimize effects of any encountered hazards. Documentation of the measures employed and resulting conditions after their application shall be documented and submitted to the City of Bakersfield.

4.8.8 DESIGN FEATURES AND REGULATORY REQUIREMENTS

The City of Bakersfield is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Hazards and Hazardous Materials.

- HAZ RR-3 Existing water wells shall be abandoned and capped as part of the site preparation phase of the construction process, consistent with applicable regulations of the State of California Department of Water Resources (as reflected in Bulletins 74-81 and 74-90); and the Central Valley RWQCB.
- HAZ RR-4 Any septic systems encountered during construction activities shall be properly abandoned in compliance with the regulations of the Central Valley RWQCB; the California Uniform Plumbing Code; and Manual of Septic Tank Practice as published by the U.S. Department of Health, Education and Welfare; and the rules, standards and regulations of the City of Bakersfield.
- HAZ RR-5 Construction contractors shall be required to comply with all applicable federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited requirements imposed by the EPA, DTSC, and the Central Valley RWQCB.
- HAZ RR-6 Any business that occupies the Project site and that handles hazardous materials (as defined in Section 25500 of California Health and Safety Code, Division 20, Chapter 6.95) shall be required to comply with California's Hazardous Materials Release Response Plans and Inventory Law, which requires immediate reporting to the Kern County Fire Department and the State Office of Emergency Services regarding any release or threatened release of a hazardous material, regardless of the amount handled by the business, and to prepare a Hazardous Materials Business Emergency Plan (HMBEP).
- HAZ RR-7 If businesses that use or store hazardous materials occupy the future buildings on the Project site, the business owners and operators would be required to comply with all applicable federal, State, and local regulations to ensure proper use, storage, use, emission, and disposal of hazardous substances.
- HAZ RR-8 The proposed Project would be required to comply with the Kern County Operational Area Hazardous Materials Area Plan to ensure compliance with established procedures, rules, and regulations for emergency responses in the event of a hazardous materials incident.

4.8.9 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Thresholds a and b: Less than Significant Impact with Mitigation Incorporated. With implementation of HAZ MM-1, HAZ MM-2, and HAZ RR-3 through HAZ RR-8, the Project's potential to result in a significant hazard to the public or the environment either through risk of upset, transport, use, or disposal of hazardous materials would be reduced to below a level of significance.

4.9 HYDROLOGY AND WATER QUALITY

The following analysis is largely based on a study entitled, “Preliminary Hydrology Report for General Plan Amendment/Zone Change (GPA/ZC) No. 21-0184 located at the northwest corner of Hosking Avenue and South H Street,” prepared by Cornerstone Engineering, Inc. (herein, “Cornerstone”), dated March 24, 2022, and included as *Technical Appendix H1* to this EIR (Cornerstone, 2022a). Refer to Section 7.0, *References*, for a complete list of all reference sources.

4.9.1 EXISTING CONDITIONS

A. Existing Drainage Conditions

Under existing conditions, the Project site is vacant and undeveloped. The topography of the Project site is characterized by relatively flat land that gently slopes south-southwest. Stormwater runoff generated on the Project site under existing conditions either infiltrates on site, or sheet flows to existing drainage facilities located within South H Street and Hosking Avenue (Google Earth, 2021).

B. Flood Hazards

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) generally describe the anticipated extent of flooding in a mapping area; however, FIRM Map Number 06029C2300E, which includes the Project site, is not in print. The FEMA web site indicates that the Project area is in “Zone X”, an area of minimal flooding. It is likely that the flood map is not in print because the entire map is in Zone X. The portion of the City of Bakersfield in which the Project site is located has never experienced flooding in the modern era (Cornerstone, 2022a, p. 1).

C. Water Quality

The Project site is located within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB). Water quality within the Central Valley region is regulated by the RWQCB’s, *Water Quality Control Plan for the Tulare Lake Basin, Third Edition* (herein, “WQCP”), dated May 2018. According to the WQCP, the Tulare Lake Basin (“Basin”) comprises the drainage area of the San Joaquin Valley south of the San Joaquin River. Surface water from the Tulare Lake Basin only drains north into the San Joaquin River in years of extreme rainfall. The Basin encompasses approximately 10.5 million acres, of which approximately 3.25 million acres are in federal ownership. The Basin is one of the most important agricultural centers of the world. Industries related to agriculture, such as food processing and packaging (including canning, drying, and wine making), are prominent throughout the area (RWQCB, 2018, p. 1-1).

The Project site is located within the Kern River sub-basin. The federal Clean Water Act (CWA) requires all states to conduct water quality assessments of their water resources to identify water bodies that do not meet water quality standards. Water bodies that do not meet water quality standards are placed on a list of impaired waters pursuant to the requirements of Section 303(d) of the CWA. The WQCP describes the Kern River, which provides the bulk of the surface water supply native to the Basin, as having excellent water quality (RWQCB, 2018, p. 1-2). Additionally, according to a

document entitled, *Surface Water Monitoring Plan*, prepared by the Kern River Watershed Coalition Authority (KRWCA), the only body of water within the KRWCA area that was listed on the 2010 Environmental Protection Agency (EPA) Section 303(d) list was Isabella Lake (KRWCA, 2015, p. 2-1). Isabella Lake is located approximately 39.6 miles northeast of the Project site and is located at an elevation of approximately 2,583 feet above mean sea level (amsl), while the Project site is located at an elevation of approximately ± 350 feet amsl. As such, the Project site is not tributary to Isabella Lake (Google Earth, 2021).

D. Groundwater

The Project site is located within the Kern River portion of the Tulare Lake Basin. As discussed in the RQWCB's WQCP, surface water supplies tributary to or imported for use within the Basin are inadequate to support the present level of agricultural use and other development. Therefore, ground water resources within the valley are being mined to provide additional water to supply demands. Water produced in extraction of crude oil is used extensively to supplement agricultural irrigation supply in the Kern River sub-basin. The greatest long-term problem facing the entire Tulare Lake Basin is the increase of salinity in ground water. Even though an increase in the salinity of ground water in a closed basin is a natural phenomenon, salinity increases in the Basin have been accelerated by man's activity, with the major impact coming from intensive use of soil and water resources by irrigated agriculture. Salinity increases in ground water could ultimately eliminate the beneficial uses of this resource (RWQCB, 2018, pp. 1-2, 4-1, and 4-2).

Domestic water service for the proposed Project would be provided by the Greenfield County Water District (GCWD). The GCWD service area is approximately 3.3 square miles and is bound by the Arvin-Edison Intake Canal to the north, Cottonwood Road to the east, Di Giorgio Road to the south and SR-99 to the west. The total land within the GCWD sphere of influence is approximately 6 square miles, a good portion of which is undeveloped and mostly farmland. The GCWD does not supply water to agricultural customers in this undeveloped area. The sole source of water supply to the GCWD is groundwater; no raw or recycled water is supplied. No potable water is purchased from any other source; however, the GCWD does purchase Kern Island Canal seepage water from the Kern Delta Water District. This water supply is characterized as seepage that has passed through the GCWD service area and has become groundwater. Additionally, the GCWD does not use surface, storm, waste, recycled, or desalinated water. Per the GCWD's Urban Water Management Plan (UWMP), they also do not enter into water exchanges or transfers from other water suppliers for direct use (Cornerstone, 2021c, pp. 3-4).

4.9.2 REGULATORY SETTING

The following is a brief description of the federal, state, and local environmental laws and related regulations related to hydrology and water quality.

A. Federal Regulations

1. Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was substantially reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry, and also has set water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters (EPA, 2020e).

2. *Federal Flood Insurance Program*

The U.S. Congress established the National Flood Insurance Program (NFIP) with the passage of the National Flood Insurance Act of 1968. The NFIP is a federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages. Participation in the NFIP is based on an agreement between communities and the Federal Government. If a community adopts and enforces a floodplain management ordinance to reduce future flood risk to new construction in floodplains, the Federal Government will make flood insurance available within the community as a financial protection against flood losses. This insurance is designed to provide an insurance alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods. The Federal Insurance and Mitigation Administration (FIMA) within the Federal Emergency Management Agency (FEMA) is responsible for administering the NFIP and administering programs that provide assistance for mitigating future damages from natural hazards (FEMA, 2021).

3. *Executive Order 11988 – Floodplain Management*

Executive Order 11988 requires federal agencies to avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. In accomplishing this objective, agencies are to take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by flood plains (FEMA, 2020b).

B. *State Regulations*

1. *Porter-Cologne Water Control Act*

The Porter-Cologne Act (California Water Code § 13000 et seq.), is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and

the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution.

The Porter-Cologne Act established nine Regional Water Boards (based on hydrogeologic barriers) and the State Water Board, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The State Water Board provides program guidance and oversight, allocates funds, and reviews Regional Water Boards decisions. In addition, the State Water Board allocates rights to the use of surface water. The Regional Water Boards have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The State Water Board and Regional Water Boards have numerous non-point source (NPS) related responsibilities, including monitoring and assessment, planning, financial assistance, and management (SWRCB, 2014).

The Regional Water Boards (such as the Central Valley RWQCB which is the Regional Board with authority over the Project site) regulate discharges under the Porter-Cologne Act primarily through issuance of NPDES permits for point source discharges and waste discharge requirements (WDRs) for NPS discharges. Anyone discharging or proposing to discharge materials that could affect water quality (other than to a community sanitary sewer system regulated by an NPDES permit) must file a report of waste discharge. The State Water Resources Control Board (SWRCB) and the RWQCBs can make their own investigations or may require dischargers to carry out water quality investigations and report on water quality issues. The Porter-Cologne Act provides several options for enforcing WDRs and other orders, including cease and desist orders, cleanup and abatement orders, administrative civil liability orders, civil court actions, and criminal prosecutions (SWRCB, 2014).

The Porter-Cologne Act also implements many provisions of the CWA, such as the NPDES permitting program. The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. In addition, regional water quality control plans (basin plans) have been adopted by each of the RWQCBs and get updated as necessary and practical. These plans identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. The basin plans also contain implementation, surveillance, and monitoring plans (SWRCB, 2014). The Project site is located in the Tulare Lake Basin, which is within the purview of Central Valley RWQCB. The Central Valley RWQCB's document entitled, *Water Quality Control Plan for the Tulare Lake Basin, Third Edition*, is the governing water quality plan for the region.

2. California Water Code

The California Water Code is the principal law regulating water quality in California. Water quality provisions must be complied with as contained in numerous code sections including: 1) the Health and Safety Code for the protection of ground and surface waters from hazardous waste and other toxic substances; 2) the Fish and Game Code for the prevention of unauthorized diversions of any surface water and discharge of any substance that may be deleterious to fish, plant, animal, or bird life; 3) the Harbors and Navigation Code for the prevention of the unauthorized discharge of waste from vessels

into surface waters; and 4) the Food and Agriculture Code for the protection of groundwater which may be used for drinking water supplies. The California Department of Fish and Wildlife (CDFW), through provisions of the Fish & Game Code (§§ 1601 - 1603) is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by CDFW (CA Legislative Info, n.d.).

Surface water quality is the responsibility of RWQCBs, water supply and wastewater treatment agencies, and city and county governments. The principal means of enforcement by the RWQCBs is through the development, adoption, and issuance of water discharge permits. RWQCB basin plans establish water quality objectives that are defined as the limits or levels of water quality constituents or characteristics for the reasonable protection of beneficial uses of water (CA Legislative Info, n.d.).

3. *California Toxics Rule (CTR)*

The California Toxics Rule (CTR) fills gap in California's water quality standards necessary to protect human health and aquatic life beneficial uses. The CTR supplements, and does not change or supersede, the criteria that EPA promulgated for California waters in the National Toxics Rule (NTR). The human health NTR and CTR criteria that apply to drinking water sources (those water bodies designated in the Basin Plans as municipal and domestic supply) consider chemical exposure through consumption of both water and aquatic organisms (fish and shellfish) harvested from the water. For waters that are not drinking water sources (e.g., enclosed bays and estuaries), human health NTR and CTR criteria only consider the consumption of contaminated aquatic organisms. The CTR and NTR criteria, along with the beneficial use designations in the Basin Plans and the related implementation policies, are the directly applicable water quality standards for toxic priority pollutants in California waters (SWRCB, 2016, pp. 14-15).

4. *Watershed Management Initiative (WMI)*

The State and Regional Water Boards are currently focused on looking at entire watersheds when addressing water pollution. The Water Boards adopted the Watershed Management Initiative (WMI) to further their goals. The WMI establishes a broad framework overlying the numerous federal and State mandated priorities. As such, the WMI helps the Water Boards achieve water resource protection, enhancement and restoration while balancing economic and environmental impacts (SWRCB, 2017). The integrated approach of the WMI involves three main ideas:

- Use water quality to identify and prioritize water resource problems within individual watersheds. Involve stakeholders to develop solutions.
- Better coordinate point source and nonpoint source regulatory efforts. Establish working relationships between staff from different programs.
- Better coordinate local, state, and federal activities and programs, especially those relating to regulations and funding, to assist local watershed groups.

5. Sustainable Groundwater Management Act (SGMA)

The 2014 Sustainable Groundwater Management Act (SGMA) requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. The DWR categorizes the priority of groundwater basins. For critically over-drafted basins, that will be 2040. For the remaining high and medium priority basins, 2042 is the deadline. The SGMA also requires local public agencies and Groundwater Sustainability Agencies (GSAs) in high- and medium-priority basins to develop and implement Groundwater Sustainability Plans (GSPs) or Alternatives to GSPs. GSPs are detailed road maps for how groundwater basins will reach long term sustainability (DWR, n.d.) (DWR, 2020).

The Valley portion of Kern County in which the Project site is located is managed by the Kern River Groundwater Sustainability Agency (KRGSA) which is comprised of the City of Bakersfield, Kern Delta Water District and Improvement District No. 4 of the Kern County Water Agency. The KRGSA Groundwater Sustainability Plan (GSP) states that the KRGSA has under its control sufficient Kern River and imported State Water Project (SWP) water to achieve sustainability under a variety of future demand scenarios (KRGSA, 2019).

6. Senate Bill 610 (Chapter 643, Statutes of 2001)

The California Water Code (Water Code) §§ 10910 through 10915 were amended by the enactment of SB 610 in 2002. SB 610 requires an assessment of whether available water supplies are sufficient to serve the water demand generated by large development projects, as well as the reasonably foreseeable cumulative demand in the region over the next 20 years under average normal year, single dry year, and multiple dry year conditions. If groundwater is the supply source, the required assessments must include detailed analyses of historic, current, and projected groundwater pumping and an evaluation of the sufficiency of the groundwater basin to sustain a new project's demands (DWR, 2003; CA Legislative Info, n.d.).

4.9.3 BASIS FOR DETERMINING SIGNIFICANCE

Section X of Appendix G to the CEQA Guidelines addresses typical adverse effects to hydrology and water quality, and indicates that the Project's impacts on hydrology and water quality would be significant if the Project or any Project-related component would (OPR, 2019):

- a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;*
- b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;*
- c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*

- i) *Result in substantial erosion or siltation on- or off-site;*
- ii) *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;*
- 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
- iv) *Impede or redirect flood flows.*
- d. *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.*
- e. *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.*

4.9.4 IMPACT ANALYSIS

Threshold a: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Threshold e: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

A. Surface Water Quality

The California Porter-Cologne Water Quality Control Act (Section 1300 [“Water Quality”] et seq., of the California Water Code), and the Federal Water Pollution Control Act Amendment of 1972 (also referred to as the Clean Water Act [CWA]) require that comprehensive water quality control plans be developed for all waters within the State of California. The Project site is within the jurisdiction of the Central Valley RWQCB. The Water Quality Control Plan for the Tulare Lake Basin (“WQCP”) is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters (RWQCB, 2018). Specifically, the Basin Plan: (a) designates beneficial uses for surface and ground waters; (b) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State's anti-degradation policy; and (c) describes implementation programs to protect all waters in the Region. In addition, the Basin Plan incorporates (by reference) all applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations.

The CWA requires all states to conduct water quality assessments to their water resources to identify water bodies that do not meet water quality standards. Water bodies that do not meet water quality standards are placed on a list of impaired waters pursuant to the requirements of Section 303(d) of the CWA. The Project site is located within the Kern River sub-basin. The WQCP describes the Kern River, which provide the bulk of the surface water supply native to the Basin, as having excellent water quality (RWQCB, 2018, p. 1-2). Additionally, according to a document entitled, *Surface Water Monitoring Plan*, prepared by the Kern River Watershed Coalition Authority (KRWCA), the only body of water within the KRWCA area that was listed on the 2010 Environmental Protection Agency (EPA)

Section 303(d) list was Isabella Lake (KRWCA, 2015, p. 2-1). The Project site is not tributary to Isabella Lake.

A specific provision of the CWA applicable to the Project is CWA Section 402, which authorizes the NPDES permit program that covers point source pollution discharging to a water body. The NPDES program also requires operators of construction site one acre or larger to prepare a storm water pollution prevention plan (SWPPP) and obtain authorization to discharge storm water under an NPDES construction storm water permit. A discussion of the Project's potential to result in water quality impacts during construction and long-term operation is presented below.

Temporary Construction Activities

Construction of the Project would involve clearing, grading, paving, utility installation, building construction, and landscaping activities. Construction activities would result in the generation of potential water quality pollution such as silt, debris, chemicals, paints, solvents, and other chemicals with the potential to adversely affect water quality. As such, short-term water quality impacts have the potential to occur during construction of the Project in the absence of any protective or avoidance measures.

Pursuant to the requirements of the Central Valley RWQCB and Chapter 15.05 (California Building Code) of the City of Bakersfield Municipal Code, the Project Applicant would be required to obtain a NPDES Municipal Storm Water Permit for construction activities. The NPDES permit is required for all projects that include construction activities, such as clearing, soil stockpiling, grading, and/or excavation that disturb at least one acre of total land area. In addition, the Project would be required to comply with the WQCP. Compliance with the NPDES Permit and the WQCP involves the preparation and implementation of a SWPPP for construction-related activities, including grading. The SWPPP would specify the Best Management Practices (BMPs) that the Project would be required to implement during construction activities to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property. Examples of BMPs include:

- Silt fence
- Fiber roll
- Street sweeping and vacuuming
- Stockpile management
- Vehicle and equipment maintenance
- Erosion control mats
- Spray-on applications
- Desilting basin
- Gravel bag berm
- Sandbag barrier
- Spill prevention and control
- Concrete waste management
- Water conservation practices

Mandatory compliance with the SWPPP would ensure that the Project does not violate any water quality standards or waste discharge requirements during construction activities. The proposed Project would not conflict with the RWQCB's WQCP. Therefore, water quality impacts associated with construction activities would be less than significant.

Post-Development Water Quality Impacts

Following development of the Project site as proposed, all runoff generated on site would be conveyed to the proposed water quality/retention basin proposed along the western site boundary in the central portion of the Project site. The onsite water quality/retention basin is sized to accommodate a design storm event over the entire Project area following development of the site. The City of Bakersfield's long-term average annual rainfall is only 6.47 inches, and there are only a few days per year when rainfall comes in the form of a storm, so the proposed basin would receive water infrequently and the likelihood of stagnant water being in the basin is low (Cornerstone, 2022a, p. 1; Cornerstone, 2022e). As such, there would be no significant impacts associated with stagnant water including the potential attraction of vectors. Furthermore, the Project site is located within the service area of the Kern Mosquito & Vector Control District and should there ever be a vector concern, the District's surveillance, prevention, and treatment programs would address the matter in accordance with their protocols (Kern M&VCD, n.d.).

The water quality/retention basin is designed to retain a 5-day/10-year storm event (Cornerstone, 2022a). Runoff within the water quality/retention basin largely would infiltrate into the on-site soils. The water quality/retention basin is designed to capture all first-flush flows generated on the Project site. Furthermore, the Project site is not tributary to any bodies of water that are listed on the CWA Section 303(d) list, further demonstrating that the Project has no potential to cause or contribute to surface water quality impacts downstream. As such, the Project would not result in the generation of runoff from the Project site that has the potential to violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. The proposed Project would not conflict with the RWQCB's WQCP. Impacts would be less than significant.

B. Groundwater Quality

With respect to groundwater quality, all runoff generated on the Project site would be treated by the proposed on-site water quality/retention basin, which would provide water quality treatment of storm water prior to infiltration of the runoff into the on-site soils. Additionally, the City of Bakersfield along with the County of Kern adopted a "Storm Water Management Plan," the objective of which is to *"describe the framework for management of storm water discharges during the term of the [NPDES] Permit. The Storm Water Management Plan includes program elements and control measures that each Permittee will implement to reduce the discharge of pollutants in storm water to the maximum extent practicable, and to effectively prohibit non-storm water discharges into MS4s and watercourses within each Permittees' jurisdiction."* As such, the City of Bakersfield and Kern County enact measures to prohibit the discharge of pollutants into stormwater, thereby protecting groundwater quality. The *Commercial and Industrial Element* of the Storm Water Management Plan establishes measures to control potential pollutants from ongoing operations in that category of land use. Accordingly, during operation of the proposed Project, the City's program for "best conventional pollutant control technology" would be in effect. This includes site inspections by City personnel and enforcement of vegetation, sediment, and debris that may accumulate in retention/detention basins (Cornerstone, 2022b). With implementation of the proposed water quality/retention basin and

compliance with the Storm Water Management Plan, long-term operation of the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality, and the Project would not conflict with the Storm Water Management Plan requirements. Impacts would be less than significant.

Threshold 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?

No operating groundwater wells occur on the Project site under existing conditions, and no wells are proposed as part of the Project. Existing inactive wells would be removed or capped as part of the Project's construction, although there is the potential they could be used as a temporary source of water during the construction process for dust control. As such, the Project would not result in the direct long-term extraction of groundwater supplies.

The Project would be served with potable water by the Greenfield County Water District (GCWD). The GCWD's sole water supply source is groundwater. Greenfield CWD does not purchase potable water from any other source; however, they do purchase Kern Island Canal "seepage" water from the Kern Delta Water District. That supply is characterized in the GCWD's Urban Water Management Plan (UWMP) as seepage that "passes through GCWD's service area and becomes groundwater". Additionally, GCWD does not use surface, storm, waste, recycled, or desalinated water. Per the UWMP, the GCWD also does not enter into water exchanges or transfers from other water suppliers for direct use (Cornerstone, 2021c, p. 4).

As more fully documented in EIR Subsection 4.15, *Utilities and Service Systems*, under the analysis of Threshold b., the GCWD UWMP forecasts 9,722 acre-feet of reliable supply for a normal year, single-year drought, and multi-year drought in 5-year increments over a 20-year planning period, which is nearly three times the forecasted water demand over the planning period, even accounting for the Project's increase in water demand. Similarly, the KRGSA Groundwater Sustainability Plan estimates groundwater safe yield combined with other sources of supply and supplemental supply projects which combined "fully mitigate potential future overdraft"(Cornerstone, 2021c, p. 8). Accordingly, because the GCWD would have adequate groundwater supplies to serve the Project, and because the actions to be undertaken pursuant to the Kern River Groundwater Sustainability Plan, the Project's water demand would not substantially decrease groundwater supplies. Impacts would be less than significant.

With respect to groundwater recharge, under existing conditions the Project site is vacant and undeveloped and allows for groundwater recharge. With implementation of the proposed Project, runoff generated on the site would be conveyed to the proposed on-site water quality/retention basin, where the runoff would infiltrate into the on-site soils. Because runoff from the Project site would be captured to allow infiltration into on-site soils, the Project would not interfere substantially with groundwater recharge, and impacts would be less than significant.

Threshold 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 off-site;
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
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
iv) impede or redirect flood flows?

Please refer to the analysis provided above under Threshold a. for a discussion of erosion/siltation and water quality. As indicated therein, with implementation of the Project's water quality/retention basin and implementation of a SWPPP during construction activities, Project impacts to water quality, including erosion and siltation, during both construction and long-term operation would be less than significant.

With respect to flood hazards, the City of Bakersfield's long-term average annual rainfall is only 6.47 inches, and there have never been any recorded floods in the modern era within the Project vicinity (Cornerstone, 2022a, p. 1; Cornerstone, 2022e). Additionally, all runoff generated on the Project site would be conveyed to the proposed on-site water quality/retention basin, where the runoff would be allowed to infiltrate into on-site soils. There would be no runoff from the Project site following site development. As such, the Project has no potential to increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, and the Project would not create runoff water which would exceed the capacity of existing or planned stormwater drainage systems.

FEMA FIRM Map Number 06029C2300E, which includes the Project site, is not in print. The FEMA web site indicates that the Project area is in "Zone X", an area of minimal flooding. It is likely that the flood map is not in print because the entire map is in zone X. The portion of the City of Bakersfield in which the Project site is located has never experienced flooding in the modern era (Cornerstone, 2022a, p. 1). Accordingly, the Project has no potential to impede or redirect flood flows, and no impact would occur.

Threshold d: Would the Project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

FEMA FIRM Map Number 06029C2300E, which includes the Project site, is not in print. The FEMA web site indicates that the Project area is in "Zone X", an area of minimal flooding. It is likely that the flood map is not in print because the entire map is in zone X. The portion of the City of Bakersfield in which the Project site is located has never experienced flooding in the modern era (Cornerstone, 2022a, p. 1). Accordingly, the Project site would not be subject to inundation during peak storm events, and the Project therefore would not risk the release of pollutants due to flood hazards. No impact would occur.

A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank. There are no enclosed or semi-enclosed bodies of water in proximity to the Project site other than the Kern Island Canal (Google Earth, 2021) which would not be subject to seiches because it is not a large water body. Accordingly, the Project would not risk the release of pollutants due to inundation from seiches, and no impact would occur.

The Project site is located approximately 67 miles northeast of the Pacific Ocean. As such, the Project site is not subject to inundation due to tsunamis. Accordingly, the Project would not risk the release of pollutants due to inundation from seiches, and no impact would occur.

4.9.5 CUMULATIVE IMPACT ANALYSIS

The cumulative impact analysis considers construction and operation of the proposed Project in conjunction with other development projects in the vicinity of the Project site and resulting from full buildout of the City of Bakersfield General Plan and the general plans of local jurisdictions that are located within the Kern River sub-basin of the Tulare Lake Basin.

As indicated under the analysis of Threshold a. and e., the Project would result in less-than-significant impacts to surface and groundwater quality during construction because the Project Applicant would be required to obtain a NPDES Municipal Stormwater Permit for construction activities. Compliance with the NPDES permit and the WQCP involves the preparation and implementation of a SWPPP for construction-related activities. The SWPPP is required to specify the BMPs that the Project would be required to implement during construction activities to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property. Other cumulative developments within the cumulative study area also would be required to comply with the NPDES Municipal Stormwater Permit and would be required to implement BMPs during construction activities to preclude water quality impacts that could impair downstream waters or groundwater. As such, construction-related water quality impacts, as well as impacts due to a conflict with the WQCP, would be less-than-cumulatively considerable. With respect to long-term impacts to water quality, the Project's proposed storm drain system would be designed to route all runoff generated on-site to the proposed water quality/retention basin. The water quality/retention basin would retain all site runoff, which would infiltrate into on-site soils and would treat site runoff to remove pollutants. Other cumulative developments would similarly be required to incorporate measures to treat water quality pollutants of concern. Accordingly, the Project's impacts would be less than significant on a cumulatively-considerable basis.

As discussed under the analysis of Threshold b., no wells are proposed as part of the Project, and the Project has no potential to result in cumulatively-considerable impacts due to direct groundwater extraction. Although the Project would be served with potable water by the GCWD, which obtains almost all of its water from groundwater extraction, the GCWD UWMP forecasts 9,722 acre-feet of reliable supply for a normal year, single-year drought, and multi-year drought in 5-year increments over a 20-year planning period, which is nearly three times the forecasted water demand over the planning period, even accounting for the Project's increase in water demand as well as the projected

water demand from cumulative developments within the GCWD's service area. Additionally, runoff generated on site would be conveyed to the proposed on-site water quality/retention basin, where the runoff would be allowed to infiltrate into the on-site soils. As such, the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin, and impacts would be less than significant on a cumulatively-considerable basis.

As discussed under the analysis of Threshold c., the Project has no potential to increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site because all runoff generated on site would be conveyed to the on-site water quality/retention basin, where runoff would be fully retained on site with no runoff leaving the Project site. Additionally, the Project site is not located within or near any flood plains, and the Project would not contribute runoff to existing drainage systems off site. Thus, the Project would not result in any cumulatively-considerable impacts due to flooding or due to exceeding the capacity of existing or planned stormwater drainage facilities. Refer also to the discussion of cumulatively-considerable impacts to water quality, discussed above under the cumulative analysis of Thresholds a. and e.

The Project site is not located within or near any flood hazard areas, is not subject to tsunami hazards, and there are no enclosed or semi-enclosed bodies of water in proximity to the Project site capable of producing seiches that could affect the Project site. Accordingly, the Project would not result in cumulatively-considerable impacts related to the risk of release of pollutants due to Project inundation from floods, tsunamis, or seiches.

4.9.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Thresholds a and e: Less-than-Significant Impact. The Project would be required to comply with a Stormwater Pollution Prevention Plan (SWPPP) for construction-related activities, including grading. Best management practices (BMPs) would be implemented as part of the SWPPP to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated. Under long-term conditions, the Project's proposed water quality/retention basin would capture all first-flush flows generated on the Project site and infiltrate the captured water into the groundwater basin. Furthermore, the Project site is not tributary to any impaired water bodies listed on the CWA Section 303(d) list. As such, the Project has no potential to cause or contribute to surface water quality impacts downstream. Accordingly, the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality, and would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant.

Threshold b: Less-than-Significant Impact. The Project would be provided potable water by the GCWD. The GCWD UWMP forecasts 9,722 acre-feet of reliable supply for a normal year, single-year drought, and multi-year drought in 5-year increments over a 20-year planning period, which is nearly three times the forecasted water demand over the planning period, even accounting for the Project's increase in water demand. Similarly, the Kern River Groundwater Sustainability Plan

estimates groundwater safe yield combined with other sources of supply and supplemental supply projects which combined fully mitigate potential future overdraft. With respect to groundwater recharge, runoff generated on site would be conveyed to the proposed on-site water quality/retention basin, where the runoff would infiltrate into the on-site soils. Accordingly, the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin, and impacts would be less than significant.

Threshold c: Less-than-Significant Impact. For the reasons discussed under the analysis of Thresholds a. and e., Project impacts to surface and groundwater quality would be less than significant. The Project has no potential to increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, and the Project would not create runoff water which would exceed the capacity of existing or planned stormwater drainage systems. Additionally, the Project site and surrounding areas are not subject to flood hazards. Accordingly, the Project would not substantially alter the existing drainage pattern of the site or area in a manner which would result in flooding on or off site, exceed the capacity of existing or planned drainage systems, or impede or redirect flood flows. Impacts would be less than significant.

Threshold d: No Impact. The Project site is not located within or near any flood hazard areas, is not subject to tsunami hazards, and there are no enclosed or semi-enclosed bodies of water in proximity to the Project site capable of producing seiches that could affect the Project site. Accordingly, Project would not result in any impacts related to the risk of release of pollutants due to Project inundation from floods, tsunamis, or seiches.

4.9.7 MITIGATION

Impacts to hydrology and water quality would be less than significant; therefore, mitigation measures are not required.

4.9.8 DESIGN FEATURES AND REGULATORY REQUIREMENTS

The City of Bakersfield is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Hydrology and Water Quality, which include the following:

- HYD RR-1 The Project Applicant and construction contractor are required to comply with the requirements of a NPDES permit, and SWPPP. Compliance with the NPDES permit and the SWPPP require an effective combination of erosion control and sediment control measures (i.e., Best Management Practices) to reduce or eliminate discharges to surface water from storm water and non-stormwater discharges during construction activities.
- HYD RR-2 During construction, Project construction contractors are required to comply with the requirements of the 2019 California Green Building Standards Code (CalGreen, Part

11 of Title 24, California Code of Regulations) or any subsequent version of the Title 24 in effect at the time of building permit issuance, which requires among other items the installation of low water-use features.

HYD DF-3 A water quality/retention basin that meets the sizing requirements for a 5-day/10yr storm event, for both the warehouse distribution and commercial components of the Project, shall be installed in the west-central portion of the Project site and shall be operational prior to issuance of the first occupancy permit for the Project. The sizing parameters are specified in a Preliminary Hydrology Report prepared for the Project by Cornerstone Engineering, dated March 24, 2022, and included as EIR *Technical Appendix H*.

4.10 LAND USE AND PLANNING

This Subsection 4.10 discusses the Project's consistency with applicable land use and planning policies adopted by the City of Bakersfield and other governing agencies for the purpose of reducing adverse effects on the physical environment. This subsection also addresses present and future land uses, zoning, and the physical arrangement of uses on the land. Information used to support the analysis in this Subsection was obtained primarily from the Metropolitan Bakersfield General Plan (Bakersfield, 2007), City of Bakersfield Municipal Code, Title 17, Zoning Ordinance (Bakersfield, 2022), and Kern Council of Governments *2018 Regional Transportation Plan and Sustainable Communities Strategy* (RTP/SCS) (Kern COG, 2018). Refer to Section 7.0, *References*, for a complete list of reference sources.

4.10.1 EXISTING CONDITIONS

A. Existing On-Site and Adjacent Land Uses

Under existing conditions, the Project site is vacant and undeveloped with remnants of past use scattered throughout the site. The Project site has been subject to various disturbances including farming, off-road vehicle trespass, illegal dumping, and grass fires (MBI, 2021, p. 6). There was a farm-related residence previously on the site that was demolished prior to the construction of the Hosking Avenue/SR 99 Interchange – New Connection Project, and the foundation, abandoned well, and abandoned reservoir/drainage basin are still present on the property (PaleoWest, 2021).

As previously depicted on Figure 2-1, *Surrounding Land Uses*, land uses in the immediate vicinity of the Project are described below.

- North: To the north of the Project site is Berkshire Road, which extends from the northeast corner of the site for approximately 0.3-mile to the west, and ends where it meets Colony Street. The land immediately north of Berkshire Road is a planned retail center with one major tenant, Floor & Décor, already sited on the property, as well as land owned by Kaiser Permanente which it is holding as a real estate asset with no current plans for development. Further north is the Arvin-Edison Canal which is owned and operated by the Arvin-Edison Water Storage District (AEWSD) (AEWSD, n.d.).
- East: To the east of the Project site is South H Street. Immediately east of South H Street is the Kern Island Canal, which is fenced and managed by Kern Delta Water District (KDWD, 2019). East of the canal is a solid wall, behind which is a residential neighborhood of single-family residential homes. Horizon Elementary School and Golden Valley High School are both located in the easterly portion of the neighborhood at the intersection of Hosking Avenue and Monitor Street. Monitor Street is approximately 0.5-mile east of the Project site. Ollivier Middle School is located east of Monitor Street at the intersection of Berkshire Road and Monitor Street.

- South: To the south of the Project site at the northwest corner of Hosking Avenue and South H Street is vacant, undeveloped land. To the southwest of the Project site is the Hosking Avenue/SR-99 interchange, with the on-ramp from eastbound Hosking Avenue to northbound SR-99 being adjacent to the Project site. South of Hosking Avenue and west of South H Street is vacant, undeveloped land planned for commercial development.
- West: To the west of the Project site is SR-99 and to the southwest is the Hosking Avenue/SR-99 interchange and the on-ramp from eastbound Hosking Avenue to northbound SR-99.

B. Existing On -Site Land Use Designations and Zoning

The City of Bakersfield's prevailing planning document is the Metropolitan Bakersfield General Plan (MBGP) (adopted in 2007 and most recently amended in 2016). The MBGP is a policy document with land use maps and related information. It is designed to give long-range guidance to City staff and officials who make decisions that affect growth and resources in the Metropolitan Bakersfield planning area. The General Plan helps to ensure that day-to-day decisions conform to the long-range program, which was designed to protect and further the public interest as it relates to the City's growth and development, and mitigate environmental impacts. The General Plan also serves as a guide to the private sector regarding the economy so that development initiatives conform to the City's public plans, objectives, and policies (Bakersfield, 2007). At the time this EIR was prepared, the City of Bakersfield was preparing a General Plan Update; regardless, the adopted MBGP is the pertinent long-range planning document for purposes of evaluation in this EIR.

As previously depicted on Figure 2-4, *Existing General Plan Land Use Map*, the General Plan designates the Project site as General Commercial (GC). The "GC" land use designation is intended for retail and service facilities providing a broad range of goods and services which serve the day-to-day needs of nearby residents. The maximum allowable density is a 1.0 floor area ratio (FAR) and 4 story building height (Bakersfield, 2007, p. II-7).

According to Chapter 17.02.030, Purpose, of the City of Bakersfield Zoning Ordinance, Title 17 was adopted to implement the goals and policies of the MBGP which serve to promote and protect the public health, safety, peace, morals, comfort, convenience and general welfare. The specific purposes of this title are listed below (Bakersfield, 2022).

- To assist in providing a definite plan of development for the city and to guide, control and regulate the future growth of the city in accordance with said plan (MBGP); and
- To protect the established character and the social and economic stability of agricultural, residential, commercial, industrial and other areas within the city, and to assure the orderly and beneficial development of such areas.

As previously shown on Figure 2-5, *Existing Zoning*, under existing conditions, the Project site is zoned Regional Commercial-Planned Commercial Development Combining (C-2/PCD). According to the

City of Bakersfield Municipal Code, the “C-2-PCD” combining zone is typically for larger commercial centers that contain a mix of larger scale stores and smaller retail outlets. Any uses permitted in the C-O and C-1 zones are permitted (Bakersfield, 2022, Title 17).

C. Existing Adjacent Land Use Designations and Zoning

As previously depicted on Figure 2-4, *Existing General Plan Land Use Map*, the Project site is shown as occurring north, east, and west of land designated as roadway. The land to the immediate north of the site is designated “GC” and the land immediately north of Berkshire Road is also designated “GC”. Land to the south of the site and immediately south of Hosking Avenue also is designated “GC”. Land to the east of the site and east of South H Street is designated Low Medium Density Residential/Low Density Residential “LMR/LR” and land west of the Project site and west of SR-99 is designated “GC” and “LMR”

As previously depicted on Figure 2-5, *Existing Zoning*, the Project site is shown as occurring north, east, and west of land designated as roadway. The land to the immediate north of the site is zoned “C-2/PCD” and the land immediately north of Berkshire Road is zoned “C-2.” Land to the south of the site and immediately south of Hosking Avenue is zoned “C-2/PCD.” Land to the east of the site and east of South H Street is zoned One-Family Dwelling “R-1” and land west of the Project site and immediately west of SR-99 is designated Regional Commercial “C-2” and “R-1.”

4.10.2 REGULATORY SETTING

In addition to the Metropolitan Bakersfield General Plan and Zoning Ordinance described above, the following is a brief description of other environmental laws and related regulations related to land use and planning.

A. State Plans, Policies and Regulations

1. California Planning and Zoning Law

The legal framework in which California cities and counties exercise local planning and land use functions is set forth in the California Planning and Zoning Law, §§ 65000 - 66499.58. Under State of California planning law, each city and county must adopt a comprehensive, long-term general plan. State law gives cities and counties wide latitude in how a jurisdiction may create a general plan, but there are fundamental requirements that must be met. These requirements include the inclusion of seven mandatory elements described in the Government Code, including a section on land use. Each of the elements must contain text and descriptions setting forth objectives, principles, standards, policies, and plan proposals; diagrams and maps that incorporate data and analysis; and mitigation measures (OPR, n.d.).

2. Office of Planning and Research (OPR) General Plan Guidelines

Each city and county in California must prepare a comprehensive, long term general plan to guide its future. To assist local governments in meeting this responsibility, the Governor’s Office of Planning and Research (OPR) is required to adopt and periodically revise guidelines for the preparation and

content of local general plans pursuant to Government Code § 65040.2. The General Plan Guidelines are advisory, not mandatory. Nevertheless, it is the State's only official document explaining California's legal requirements for general plans. Planners, decision-making bodies, and the public depend upon the General Plan Guidelines for help when preparing local general plans. The courts have periodically referred to the General Plan Guidelines for assistance in determining compliance with planning law. For this reason, the General Plan Guidelines closely adheres to statute and case law. It also relies upon commonly accepted principles of contemporary planning practice (OPR, 2017a, p. 1).

B. Regional Plans, Policies, and Regulations

1. Kern Council of Governments 2018 Regional Transportation Plan and Sustainable Communities Strategy

Kern Council of Governments (Kern COG) is a federally designated Metropolitan Planning Organization (MPO) and a state designated Regional Transportation Planning Agency (RTPA). These designations formally establish Kern COG's role in transportation planning. The preparation of a Regional Transportation Plan (RTP) is one of the primary statutory responsibilities of Kern COG under federal and state law. (Kern COG, 2018, pp. ES-1)

To guide the development of the planned multimodal transportation systems in Kern County, the *2018 RTP* establishes a 24-year blueprint which provides a set of regional transportation goals, policies, and actions. As required by California's Sustainable Communities and Climate Protection Act, of Senate Bill 375, a Sustainable Communities Strategy (SCS) also is included in the *2018 RTP*. The RTP provides transportation and air quality goals, policies, and actions and includes programs and projects for congestion management, transit, airports, bicycles and pedestrians, roadways, and freight. In addition, it provides a discussion of all mechanisms used to finance transportation and air quality program implementation. A Program Environmental Impact Report (Program EIR), pursuant to CEQA for the *RTP* was prepared by Kern COG which analyzed potential environmental impacts of individual transportation projects preliminarily identified in the *2018 RTP* from a regional perspective, providing opportunities for streamlining the analysis required in project specific environmental documents. In addition, the companion *RTP* conformity document demonstrates that the Plan will not delay attainment of federal air quality standards in the State Implementation Plans for air quality (Kern COG, 2018, pp. ES-1).

2. San Joaquin Valley Air Pollution Control District (SJVAPCD) Air Quality Attainment Plans (AQAPs)

The SJVAPCD has adopted several AQAPs that identify measures needed for the San Joaquin Valley to attain the U.S. Environmental Protection Agency's (EPA's) National Ambient Air Quality Standards (NAAQS) in order to protect the health, safety, and welfare of the public (Trinity, 2022, p. 3-8). The Project's consistency with the SJVAPCD's AQAPs was analyzed in detail in EIR Subsection 4.2, *Air Quality*, and as such is not further evaluated in this Subsection 4.10.

3. *Metropolitan Bakersfield Habitat Conservation Plan (including CESA ITP 2081-2013-025-04)*

The Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) was developed to obtain permits that meet both federal and state environmental regulations regarding incidental “take” of listed species set for in the ESA and CESA. In turn, urban development outlined in the Metropolitan Bakersfield 2010 General Plan can proceed while the goal of the MBHCP is to acquire, preserve, and enhance native habitats that support endangered and sensitive species. Since development on open lands in Metropolitan Bakersfield could potentially result in the incidental “take” of habitat and/or sensitive species, permits acquired under the MBHCP include Section 10(a)(1)(B) of the ESA and Section 2081 of the CESA. The MBHCP is funded through the collection of mitigation fees associated with all urban development occurring within the HCP permit area. The fee is paid to the City or County at the time of grading permit approval, grading plan approval, or issuance of building permit, whichever occurs first. Upon payment and provided that all applicable measures required in the HCP have been implemented, the applicant will become a sub-permittee and would be allowed the incidental take of species in accordance with federal and state endangered species laws (MBI, 2021, p. 22).

The proposed Project’s consistency with the MBHCP is discussed in detail in EIR Subsection 4.3, *Biological Resources*, and as such is not further evaluated in this Subsection 4.10.

4.10.3 BASIS FOR DETERMINING SIGNIFICANCE

Section XI of Appendix G to the CEQA Guidelines addresses typical adverse effects associated with Land Use and Planning, and includes the following threshold questions to evaluate the Project’s impacts on land use and planning (OPR, 2019):

- a. Physically divide an established community;*
- 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?*

4.10.4 IMPACT ANALYSIS

Threshold a: Would the Project physically divide an established community?

Under existing conditions, the Project site is bound by roadways on the south, southwest, east, and west, and vacant land occurs to the immediate southeast. Specifically, the Project site is bound by Berkshire Road on the north; SR-99 to the west, the on-ramp to SR-99 from Hosking Avenue to the southwest; South H Street to the east, and undeveloped land is located to the southeast at the corner of Hosking Avenue and South H Street. As such, the Project site is not directly, physically connected to any established community.

Residential communities are located to the east of the Project site and east of South H Street. The residential communities are separated from the Project site by South H Street, the Kern Island Canal, and a solid concrete wall. Residential communities are also located west of the Project site and

immediately west of SR-99. These residential communities are separated from the Project site by SR-99. Because the Project site is already physically separated from neighboring developed properties under existing conditions, development of the Project site as proposed would not physically divide any established community.

The Project would connect to the existing roadway system and other infrastructure and would not involve the reconfiguration of streets that could have the potential to alter the surrounding pattern of future development and affect the connectivity of existing residential uses located to the east of the Project site and east of South H Street, or to the west of the Project site and immediately west of SR-99. Because the Project would not physically divide an established community, no impact would occur and no mitigation is required.

Threshold 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?

Consistency with the SJVAPCD's AQAPs, which are plans adopted for the purpose of avoiding or mitigating air pollution, is discussed in detail in EIR Subsection 4.2, *Air Quality*. As concluded in Subsection 4.2, prior to mitigation the proposed Project would conflict with the AQAPs due to emissions of ROG and NO_x that exceed the SJVAPCD thresholds of significance for these pollutants, and by potentially providing more jobs in the area beyond those projected by the AQAPs through 2030. Accordingly, prior to mitigation the proposed Project would conflict with the applicable air quality plan, and impacts would be significant on both a direct and cumulatively-considerable basis. The mitigation measures provided in Subsection 4.2 would reduce the impact to below a level of significance.

Consistency with the MBHCP, which is a plan adopted for the purpose of avoiding or mitigating biological resource impacts, is discussed in detail in EIR Subsection 4.3, *Biological Resources*. The MBHCP is funded through the collection of mitigation fees associated with all urban development occurring within the HCP permit area. Upon fee payment, and provided that all applicable measures required in the HCP have been implemented, the applicant becomes a sub-permittee and would be allowed the incidental take of species in accordance with federal and state endangered species laws (MBI, 2021, p. 22). As indicated in EIR Subsection 4.3, the Project would have a potentially significant impact on the San Joaquin kit fox, which is addressed in the MBHCP. The Mitigation Measures provided in Subsection 4.3 would reduce the potential impact to less than significant.

The remainder of the analysis herein (below) focuses on Project consistency with the Kern COG Regional Transportation Plan and Sustainable Communities Strategy and the Metropolitan Bakersfield General Plan, which are not addressed in detail in other subsections of this EIR.

A. Kern COG Regional Transportation Plan and Sustainable Communities Strategy

At the core of the RTP are seven goals: 1) Mobility; 2) Accessibility; 3) Reliability; 4) Efficiency; 5) 6) Livability; 7) Sustainability; and 8) Equity. While all goals are considered interrelated and

important, mobility is considered the plans highest goal (Kern COG, 2018, p. 2-2). As shown in Table 4.10-1, *Kern COG'S RTP Goal Consistency Analysis*, the Project would not conflict with the adopted goals of the 2018 RTP.

Table 4.10-1 Kern COG'S RTP Goal Consistency Analysis

RTP Goals	Goal Statement	Project Consistency Discussion
2018 RTP		
Goal 1	Mobility – Improve the mobility of people and freight.	<u>No conflict identified.</u> EIR Subsection 4.12, <i>Transportation</i> , evaluates Project-related mobility and describes the roadway and intersection improvements that would be constructed by the Project Applicant to ensure that the roadway system would improve roadway capacity along Berkshire Road and South H Street and make intersection improvements and South H Street/Hosking Avenue. The Berkshire Road and South H Street roadway improvements to be constructed as part of the Project would accommodate Project-related traffic volumes in addition to existing and projected volumes. The Project is proposed immediately adjacent to SR-99, providing direct access for freight movement between SR-99 and the distribution warehouse component of the Project. There are no components of the project that would interfere with the mobility of people or freight.
Goal 2	Accessibility – Improve accessibility to, and the economic wellbeing of, major employment and other regional activity centers.	<u>No conflict identified.</u> The Project involves the development of a retail commercial area and a warehouse distribution facility in the southern portion of the City of Bakersfield and immediately east of SR-99, which is part the State highway system. Placing employment, commercial retail, and goods distribution activities immediately adjacent to SR-99 with accessibility from the Hosking Avenue on- and off-ramps would avoid or shorten truck-trip lengths on other roadways. The Project would improve the accessibility of goods to the surrounding area, provide employment opportunities, and contribute to the City's economic wellbeing consistent with this goal.
Goal 3	Reliability – Improve the reliability and safety of the transportation system.	<u>No conflict identified.</u> As described in EIR Subsection 4.12 there are no components of the

RTP Goals	Goal Statement	Project Consistency Discussion
		Project that would result in a substantial safety hazard to motorists or pedestrians. EIR Subsection 4.12 also describes the roadway and intersection improvements that would be constructed by the Project Applicant to ensure that the roadway system serving the Project site will reliably and safely accommodate Project traffic volumes in addition to existing and projected volumes.
Goal 4	Efficiency – Maximize the efficiency and cost effectiveness of the existing and future transportation system.	<u>No conflict identified.</u> The Project involves the development of a retail commercial area and a warehouse distribution facility immediately east of SR-99 and immediately northeast of the SR-99/Hosking Avenue northbound on-ramp, which maximizes efficiency of the transportation system by placing these uses on a property with short, direct access to the State highway system, which would avoid or shorten truck-trip lengths on other roadways. The Project site also is surrounded by existing roadways including Berkshire Road, South H Street, and Hosking Avenue, and development of the Project would maximize the efficiency of these existing roads and not require the construction of new roads, which is both efficient and cost effective. In addition, the warehouse component of the Project is designed to accommodate technological advancements in electric-powered and automated truck technologies, which may alter the goods movement environment with far-reaching improvements ranging from employment wages to highway safety. The proposed warehouse is designed to meet contemporary industry standards to support advancements in these and other transportation technologies.
Goal 5	Livability – Promote livable communities and satisfaction of consumers with the transportation system.	<u>No conflict identified.</u> The Project site is surrounded by existing roads (SR-99, Berkshire Road, South H Street, and Hosking Avenue) and a vacant parcel to the southwest designated for future commercial development. The Project is proposed in a location that would utilize existing and planned roads, sidewalks, and bike lanes that promote livable communities. Project site

RTP Goals	Goal Statement	Project Consistency Discussion
		frontage improvements along South H Street and Berkshire Road would include sidewalks and bike lanes.
Goal 6	Sustainability – Provide for the enhancement and expansion of the system while minimizing the effects on the environment.	<u>No conflict identified.</u> This policy would be implemented as part of regional transportation system planning by Kern COG. The Project would include frontage improvements to Berkshire Road and South H Street and make improvements to the South H Street/Hosking Avenue intersection, the environmental effects of which are analyzed throughout this EIR. The Project would not have an adverse effect on expansion or enhancement plans for the regional transportation network nor contribute to environmental effect minimization associated with enhancing or expanding the transportation network.
Goal 7	Equity – Ensure an equitable distribution of the benefits among various demographic and user groups.	<u>No conflict identified.</u> The Project involves the development of a retail commercial area and a warehouse distribution facility immediately east of SR-99, west of South H Street, south of Berkshire Road, and north of Hosking Avenue. The Project would include frontage improvements to Berkshire Road and South H Street and make improvements to the South H Street/Hosking Avenue intersection, and these improved roadways would be available for use by the general public. Placing employment, commercial retail, and goods distribution activities immediately adjacent to SR-99 with accessibility from the Hosking Avenue on- and off-ramps would be of similar to equal benefit to various demographic and user groups in terms of transportation system availability, as the Project site would be accessible by roads, sidewalks, and bike lanes. With respect to transit, bus service is currently available along Hosking Avenue via Golden Empire Transit District (GETD) Route 62, along Panama Lane via Routes 41, 42, 47, and 62, and at the Kern Delta Park and Ride near the intersection of McKee Road and South H Street via Route X-92 (GETD, 2022). Existing bus stops

RTP Goals	Goal Statement	Project Consistency Discussion
		in the area are adequate for these existing routes, and no new bus stops are required along the Project site's roadway frontages.

B. Project Consistency with the Metropolitan Bakersfield General Plan

1. Analysis of Project Consistency with General Plan Land Use and Zoning

General Plan Amendment/Zone Change (GPA/ZC) No. 21-0184 proposes the following modifications to the land use element of the Metropolitan Bakersfield General Plan (General Plan) and the City's official zoning map. Pertaining to the warehouse portion of the Project site, the General Plan land use designation would be modified from General Commercial (GC) to Light Industrial (LI), and the zoning classification would be modified from Regional Commercial-Planned Commercial Development Combining (C-2/PCD) to Light Manufacturing (M-1). Pertaining to the commercial portion of the Project site, the zoning classification would be changed from General Commercial-Planned Commercial Development Combining (C-2/PCD) to Exclusive PCD, which requires City Council approval of a site development plan.

Approval of General Plan Amendment/Zone Change (GPA/ZC) No. 21-0184 would eliminate any potential inconsistency between proposed land uses and the site's existing land use designations and zoning. Impacts to the environment associated with GPA/ZC No. 21-0184 are evaluated throughout this EIR, and where significant impacts are identified, mitigation measures are imposed to reduce impacts to the maximum feasible extent. Therefore, there are no environmental impacts that would result as a specific consequence of the GPA/ZC No. 21-0184, beyond what is already evaluated and disclosed by this EIR.

2. Analysis of Project Consistency with General Plan Goals and Policies

CEQA requires that inconsistencies with general plan policies and municipal ordinances be analyzed. Where project elements are determined to be consistent with planning policies, only brief statements to that effect are necessary. The ultimate decision on whether a project is consistent with planning policies is made by the Planning Commission and City Council when considering a project for approval, and a project need not to be consistent with each and every goal and policy to be found consistent with the overall General Plan.

Table 4.10-2, *Project Consistency with the MBGP Goals and Policies*, presents the applicable goals and policies and Project consistency discussion for land use planning in the MGBP. As indicated in Table 4.10-2, the Project would not conflict with any of the specific objectives, policies, or actions in the General Plan's Elements that were adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant.

Table 4.10-2 Project Consistency with the MBGP Goals and Policies

Goals and/Policies	Project Consistency Discussion
Goal 1. Accommodate new development which captures the economic demands generated by the marketplace and establishes Bakersfield's role as the capital of the southern San Joaquin Valley.	<u>Consistent.</u> The Project would support this goal by attracting new employment-generating businesses to Bakersfield.
Goal 2. Accommodate new development which provides a full mix of uses to support its population.	<u>Consistent.</u> The Project would support this goal by providing a mix of warehousing and commercial development.
Goal 3. Accommodate new development which is compatible with and complements existing land uses.	<u>Consistent.</u> The Project is proposed on a property that is designated for commercial development. To the north of the Project site is Berkshire Road, north of which is a planned retail center with one major tenant, Floor & Décor, already sited on the property. The Project is consistent with these uses to the north. To the east of the Project site is South H Street, the Kern Island Canal, a solid block wall, and a residential neighborhood of single-family residential homes and schools. The Project would provide employment and retail commercial opportunities to this community and mitigate its adverse environmental effects to sensitive receptors in this community as analyzed throughout this EIR. With the required adherence to regulatory requirements and implementation of mitigation presented in this EIR, the Project would be compatible with the residential community uses to the east. To the south of the Project site at the northwest corner of Hosking Avenue and South H Street is vacant, undeveloped land. To the southwest of the Project site is the Hosking Avenue/SR-99 interchange, with the on-ramp from eastbound Hosking Avenue to northbound SR-99 being adjacent to the Project site. South of Hosking Avenue and west of South H Street is vacant, undeveloped land planned for commercial development. To the west of the Project site is SR-99 and to the southwest is the Hosking Avenue/SR-99 interchange and the on-ramp from eastbound Hosking Avenue to northbound SR-99. The Project would be compatible with these land uses.
Goal 4. Accommodate new development which channels land uses in a phased, orderly manner and is coordinated with the provision of infrastructure and public improvements.	<u>Consistent.</u> The Project would support this goal with the development of a commercial and warehouse center in two phases with the warehouse facility and associated infrastructure including public road improvements to Berkshire Road and South H Street constructed first,

Goals and/Policies	Project Consistency Discussion
	followed by construction of the commercial uses in a second phase.
Goal 5. Accommodate new development which capitalizes on the planning area's natural environmental setting, including the Kern River and the foothills.	<u>Consistent.</u> The Project site is not located near the Kern River or foothills. The Project site was previously disturbed and does not contain a high degree of natural resources. The Conceptual Landscaping Plan indicates that approximately 786 trees would be planted on the property, including approximately 181 perimeter trees and 605 parking lot trees at minimum 24-inch box size at the time of planting, in addition to other ornamental plant material.
Goal 6. Accommodate new development that is sensitive to the natural environment, and accounts for environmental hazards.	<u>Consistent.</u> The Project site was previously disturbed and does not contain a high degree of natural resources. The Project entails a proposed commercial development area and warehouse distribution facility designed to contemporary standards and compliant with the California Green Building Code (CalGreen). No environmental hazards are known to exist on the property that needed to be accounted for in the Project's design. The potential environmental impacts of the Project have been studied throughout this EIR to ensure any potentially significant impacts are minimized or mitigated to the extent feasible.
Goal 7. Establish a built environment which achieves a compatible functional and visual relationship among individual buildings and sites.	<u>Consistent.</u> The Project would be consistent with this goal because it would be architecturally designed to meet contemporary industry standards. Refer to EIR Section 3.0 <i>Project Description</i> and Subsection 4.1, <i>Aesthetics</i> .
Goal 8. Target growth companies that meet clean air requirements, and create sustainable employment in jobs paying higher wages.	<u>Consistent.</u> The Project would be consistent with this goal because while at the time of the preparation of this EIR future building users/tenants are not known, mitigation measures, regulatory requirements, and project design features have been established which any future user must comply with. It is estimated that the Project would generate approximately 1,500 jobs.
<u>Commercial Development</u>	
Policy 15. Allow for the development of a variety of commercial centers/corridors which are differentiated by their function, intended users and level of intensity, including convenience centers servicing local residential neighborhoods, sub-regional centers which serve groupings of	<u>Consistent.</u> The Project would be consistent with this policy because it would diversify the mix of uses in the southern portion of the City of Bakersfield and greater Kern County while supporting the growing goods movement supply chain and providing a variety of retail shopping opportunities to local residents and passers-by on SR-99, which is part of the State highway system.

Goals and/Policies	Project Consistency Discussion
neighborhoods, and major regional centers which serve the planning area and surrounding areas.	
Policy 16. Allow for the development of a variety of commercial uses, including those which serve residents (groceries, clothing, etc.), highway users, and tourists-visitors.	<u>Consistent.</u> The Project would be consistent with this policy by providing area for retail commercial uses, conceptually designed to include anchor buildings and multi-tenant buildings to attract a variety of retail patrons. Although the Project Applicant is not proposing a commercial development plan for approval at this time, the Applicant provided a preliminary development plan that depicts a reasonably foreseeable design for the area that would be zoned Exclusive PCD. The preliminary development plan shows 12 commercial buildings. The proposed Exclusive PCD zoning will require approval of a final commercial development plan by the City Council at a future date.
Policy 17. Ensure that adequate lands are set aside for neighborhood-serving commercial uses adjacent to designated residential areas. Where land has not been set aside, permit neighborhood scale commercial uses in residential areas when compatible with surrounding development.	<u>Consistent.</u> The Project is consistent with this policy because it proposes a development area for retail commercial uses, conceptually designed to provide space for uses that serve local neighborhoods as well as to capture some passer-by patrons traveling on adjacent SR-99.
Policy 18. Require all new commercial designations be assigned to sites where the aggregate of all contiguous parcels designated for commercial use is no less than five (5) acres, except for approved specific plans, parcels to be developed for highway-oriented service uses at freeway on- and off-ramps, or where physical conditions are such that commercial is the only logical use of the property.	<u>Consistent.</u> The Project would be consistent with this policy because the Project proposes more than five (5) acres of commercial land uses. The commercial component of the Project would span 27.91 net-acres.
Policy 19. Allow for the intensification and development of existing commercial areas in an infill fashion.	<u>Consistent.</u> The Project would be consistent with this policy because it proposes infill development of an undeveloped parcel with a commercial development area and warehouse distribution facility. The site is surrounded by SR-99 to the west, Berkshire Road and existing and planned commercial development to the north, South H Street, the Kern Island Canal and a residential community to the east, and Hosking Avenue and planned commercial development to the south.

Goals and/Policies	Project Consistency Discussion
Policy 20. The depth of new commercial developments shall be at least half the length of the street frontage. Exceptions may be made where existing development or physical constraints provide a more logical shape.	<u>Consistent.</u> The commercial component of the Project would span 27.91 net-acres and is of sufficient size to accommodate lot depths and widths. Refer 3-6, <i>Vesting Tentative Parcel Map No. 12438</i> .
Policy 21. Encourage a separation of at least one-half mile between new commercial designations.	<u>Not Applicable.</u> While the Project does not entail a new commercial designation (the Project site is already designated for commercial development), no component of the Project would impede the City's ability to implement this policy.
Policy 23. Promote the recycling of block-long corridors of commercial uses so as to consolidate new commercial uses.	<u>Not Applicable.</u> While the Project does not entail recycling a block of commercial uses, no component of the Project would impede the City's ability to implement this policy.
Policy 25. Provide for infill of commercial land uses to be compatible with the scale and character of existing commercial districts and corridors.	<u>Consistent.</u> The Project would be consistent with this policy because it proposes infill development on a vacant property surrounded by roadways and land that is developed or planned for development. Although the Project Applicant is not proposing a commercial development plan for approval at this time, the Applicant provided a preliminary development plan that depicts a reasonably foreseeable design containing 12 commercial buildings. The proposed Exclusive PCD zoning will require approval of a final commercial development plan by the City Council at a future date. Scale and character of the proposed development would be considered by the City Council as part of its deliberations.
Policy 26. Encourage adjacent commercial uses to be of compatible height, setback, color and materials.	<u>Consistent.</u> Although the Project Applicant is not proposing a commercial development plan for approval at this time, the Applicant provided a preliminary development plan that depicts a reasonably foreseeable design containing 12 commercial buildings. The proposed Exclusive PCD zoning will require approval of a final commercial development plan by the City Council at a future date. Compatibility of building design would be considered by the City Council as part of its deliberations.
Policy 27. Require that new commercial uses maintain visual compatibility with single-family residences in areas designated for historic preservation.	<u>Not Applicable.</u> The Project would be consistent with this policy because the Project site is not located within an area designated for historic preservation.

Goals and/Policies	Project Consistency Discussion
Policy 28. Require that commercial development provide design features such as screen walls, landscaping and height, setback and lighting restrictions between the boundaries of adjacent residential land use designations so as to reduce impacts on residences due to noise, traffic, parking, and differences in scale.	<u>Consistent.</u> The Project would be consistent with this policy because the closest residential community is located to the east of the Project site and is separated from the Project site by South H Street, the Kern Island Canal, and a concrete wall located between the canal and the community. Exterior lighting associated with the Project would be required to comply with the City of Bakersfield Municipal Code Section 17.71, which among other things requires that all outdoor lighting be fully shielded and aimed downward, onto the ground surface with no escaping light permitted to contribute to sky glow by shining upward into the sky. A combination of wall fencing and landscaping would be installed around the warehouse building truck courts.
Policy 29. Require that automobile and truck access to commercial properties sited adjacent to designated residential parcels be located at the maximum practical distance from the residential parcel.	<u>Consistent.</u> The Project would be consistent with this policy because access to and from the commercial portion of the Project would be via South H Street and Berkshire Road. No access is available to the residential community to the east from South H Street due to the Kern Island Canal and concrete wall. No residential communities are located north of the Project site along Berkshire Road.
Policy 30. Street frontages along all new commercial development shall be landscaped.	<u>Consistent.</u> The Project would be consistent with this policy because ornamental landscaping is proposed around the perimeter of the Project site. The Project's Conceptual Landscaping Plan (EIR Figure 3-12) calls for the planting of 181 perimeter trees and 605 parking lot trees.
Industrial Development	
Policy 31. Allow for a variety of industrial uses, including land-extensive mineral extraction and processing, heavy manufacturing, light manufacturing, warehousing and distribution, transportation-related, and research and development uses	<u>Consistent.</u> The Project would be consistent with this policy because it includes a proposed warehouse distribution center, which would add to the mixture of industrial use types in the City.
Policy 32. Protect existing industrial designations from incompatible land use intrusions.	<u>Not Applicable.</u> While the Project site is not currently designated for industrial uses, no incompatible land uses intrude onto the Project site. There are no components of the Project that would impede the City's ability to implement this policy.
Policy 33. Encourage the efficient use of existing industrial land uses through	<u>Consistent.</u> The Project would be consistent with this policy because it includes commercial retail

Goals and/Policies	Project Consistency Discussion
consolidation of building and storage facilities.	development as well as a warehouse distribution facility that would support the growing goods movement supply chain and to streamline package delivery services in and around the City of Bakersfield.
Policy 34. Provide for the clustering of new industrial development adjacent to existing industrial uses and along major transportation corridors.	<u>Consistent.</u> The Project would be consistent with this policy because it proposes to establish commercial uses and a distribution warehouse facility adjacent to the State highway system (SR-99), which would avoid or shorten vehicular trip lengths on other roadways.
Policy 35. Encourage upgrading of visual character of heavy manufacturing industrial areas through the use of landscaping or screening-of visually unattractive buildings and storage areas.	<u>Not Applicable.</u> The Project is proposed to provide light industrial warehousing uses rather than heavy manufacturing. Nonetheless, the perimeter of the Project site would be landscaped as shown in EIR Figure 3-12.
Policy 36. Require that industrial uses provide design features, such as screen walls, landscaping and height, setback and lighting restrictions between the boundaries of adjacent residential land use designations so as to reduce impacts on residences due to light, noise, sound and vibration.	<u>Consistent.</u> The Project would be consistent with this policy because the closest residential community is located to the east of the Project site and is separated from the Project site by South H Street, the Kern Island Canal, and a concrete wall located between the canal and the community. Exterior lighting associated with the Project would be required to comply with the City of Bakersfield Municipal Code Section 17.71, which among other things requires that all outdoor lighting be fully shielded and aimed downward onto the ground surface with no escaping light permitted to contribute to sky glow by shining upward into the sky. A combination of walls, fencing and landscaping would be installed around the warehouse building truck courts and landscaping would also be installed around the perimeter of the Project site. As concluded in EIR Subsection 4.1, <i>Aesthetics</i> , Project-related development would not create substantial light or glare. Compliance with Bakersfield Municipal Code requirements for lighting would ensure less than significant impacts associated with light and glare. As concluded in EIR Subsection 4.11, <i>Noise</i> , the Project's construction and operational activities would not result in a perceptible groundborne vibration or noise that exceed thresholds of significance. Also, operational noise levels would be less than significant at the nearest sensitive receptor.
Policy 37. Street frontages along all new industrial development shall be landscaped.	<u>Consistent.</u> The Project would be consistent with this policy because landscaping is proposed to be installed around the perimeter of the Project site. The Project

Goals and/Policies	Project Consistency Discussion
	would include ornamental landscaping featuring trees, hedges, shrubs, groundcovers, and accent plants. The Project's Conceptual Landscaping Plan (EIR Figure 3-12) calls for the planting of 181 perimeter trees and 605 parking lot trees.
Policy 38. Minimize impacts of industrial traffic on adjacent residential parcels through the use of site plan review and improvement standards.	<u>Consistent.</u> The Project entails proposed Site Plan Review No. 21-0185 for the warehouse distribution component of the Project and a future site plan review would need to be considered by and approved by the City Council prior to the commencement of commercial use development. Impacts associated with traffic have been minimized to the extent feasible as analyzed throughout this EIR. No truck traffic is anticipated to traverse through residential neighborhoods, as the Project site is immediately adjacent to SR-99 and proximate to the SR-99/Hosking Avenue on and off-ramps to the west. The only road segment that would be substantially used by Project-related truck traffic and potentially impact residential uses is South H Street between Hosking Avenue and Berkshire Road. Impacts have been minimized to the extent possible by road widening and improvements, the installation of a sidewalk on the Project site side (west side) of the road, and the installation of landscaping, downward directed LED lighting, and screen walls interior to the Project site.
Centers Development	
Policy 39. Enhance existing and establish new centers as the principal focus of development and activity in the planning area, around which other land uses are grouped. Centers should be linked by adequate transportation facilities and may be linked to the Kern River, canals, or other resource amenities. Centers may be differentiated by functional activity, density/intensity, and physical character.	<u>Not Applicable.</u> While the Project would not be included in one of the identified center locations, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 40. Provide for the enhancement and intensification of existing "centers" such as: a) Downtown; b) California State University, Bakersfield; c) Bakersfield Airpark/Casa Loma; d) Meadows Field; e) Highway 58/Weedpatch Highway; f)	<u>Not Applicable.</u> While the Project would not be included in one of the identified center locations, there are no components of the Project that would impede the City's ability to implement this policy.

Goals and/Policies	Project Consistency Discussion
Lamont; g) Greenfield; h) McAllister Ranch; i) Northwest Bakersfield; j) Rosedale Ranch.	
Policy 41. Provide for the intensification of downtown Bakersfield for governmental, financial, professional office, retail, residential, cultural, specialty, and supporting uses.	<u>Not Applicable.</u> While the Project site is not located in downtown Bakersfield, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 42. Provide for the revitalization of downtown Bakersfield by the use of redevelopment authorities provided by California law, including the provision of incentives for new private development projects, joint private-public partnerships, and public improvements; accommodating the range of land uses defined for this "Center".	<u>Not Applicable.</u> While the Project site is not located in downtown Bakersfield, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 43. Encourage renovation and the adaptive reuse of significant cultural and entertainment facilities downtown.	<u>Not Applicable.</u> While the Project would not include any reuse of significant cultural or entertainment facilities, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 44. Provide for the establishment of the following new centers as the focus of development in the planning area: a) Southwest; b) Northwest; c) Northeast.	<u>Not Applicable.</u> While the Project would not be included in one of the identified center locations, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 45. Allow for the development of a center in southwest Bakersfield which is a focal point of activity and includes a mix of professional office and retail uses, moderate density residential, and filters outward to lower suburban-type densities, according to the following principles: a) Encourage focus on an open space amenity such as a park or water body; b) Provide opportunity for the development of residential units above ground floor commercial; c) Encourage land use link with the Kern River and promote pedestrian activity within center.	<u>Not Applicable.</u> While the Project would not include a center in southwest Bakersfield, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 46. Allow for the development of centers in northwest Bakersfield to serve the Rosedale Community and adjacent rural areas, containing retail commercial, light industrial, moderate and high density	<u>Not Applicable.</u> While the Project would not include a center in northwest Bakersfield, there are no components of the Project that would impede the City's ability to implement this policy.

Goals and/Policies	Project Consistency Discussion
residential, and is surrounded by low and estate residential densities, according to the following principles: a) Attempt to focus on open space amenities; b) Promote pedestrian activity and where feasible attempt to link land uses with the Kern River.	
Policy 47. Allow for the development of a low density "village-like" center in the Northeast as a focal point of activity which includes retail commercial, professional offices, moderate and high density residential, and filtering outwards to lower densities, according to the following principles. a) Attempt to focus on open space amenities; b) Cluster development to take advantage of views; c) Encourage development to preserve public views of foothill topography and sensitive habitats; d) Provide the opportunity for the development of residential units above ground floor commercial; e) Promote pedestrian activity and use of greenbelt links between land uses.	<u>Not Applicable.</u> While the Project does not involve a village center in northeast Bakersfield, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 48. Enhance pedestrian activity in principal activity centers of the planning area.	<u>Not Applicable.</u> While the Project site is not located in a principal activity center, there are no components of the Project that would impede the City's ability to implement this policy. A sidewalk would be installed along the Project site's frontage with South H Street as part of the Project's development.
Policy 49. Encourage development of pedestrian sensitive uses and design characteristics in the following areas: a) Downtown; b) Baker Street; c) Southwest Center; d) Northwest Centers; e) Northeast Center.	<u>Not Applicable.</u> While the Project site is not located in the named areas, there are no components of the Project that would impede the City's ability to implement this policy.
<u>Public Facilities</u>	
Policy 50. Coordinate with the appropriate agencies so that adequate land and facilities are set aside for schools, parks, police/fire, libraries, cultural facilities, recreational	<u>Consistent.</u> The Project would be consistent with this policy because adequate public services are available to service the proposed uses. Refer to EIR Subsection 5.4.3, <i>Public Services</i> .

Goals and/Policies	Project Consistency Discussion
facilities and other service uses to serve the community.	
Policy 51. Encourage the continued development of California State University Bakersfield and adjacent areas for education, cultural, and supporting commercial and residential uses.	<u>Not Applicable.</u> While the Project would not include any development related to the California State University Bakersfield, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 52. Locate new development where infrastructure is available or can be expanded to serve the proposed development.	<u>Consistent.</u> The Project would be consistent with this policy because, while the Project site is vacant under existing conditions, it is located proximate to existing utility infrastructure that is sized to serve the Project (i.e., existing water line beneath Berkshire Road; existing sewer lines beneath Hosking Avenue, South H Street, and Berkshire Road). Refer to EIR Section 3.0, <i>Project Description</i> and Subsection 4.15, <i>Utilities and Service Systems</i> .
Policy 53. Ensure that land use and infrastructure development are coordinated.	<u>Consistent.</u> The Project would be consistent with this policy because there is adequate existing infrastructure to serve the proposes uses. Refer to EIR Subsection 4.15, <i>Utilities and Service Systems</i> .
Policy 54. The developer shall be responsible for all on-site costs incurred as a result of the proposed project, in addition to a proportional share of off-site costs incurred in service extension or improvements. The availability of public or private services or resources shall be evaluated during discretionary project consideration. Availability may affect project approval or result in a reduction in size, density, or intensity otherwise indicated in the general plan's map provisions.	<u>Consistent.</u> The Project would be consistent with the policy because the Project Applicant would assume responsibility of on-site costs. The Project requires the City of Bakersfield Planning Commission to deliberate on the Project and make recommendations to the City Council. Approval of the City Council is required on the Project's General Plan Amendment/Zone Change No. 21-018 and Vesting Tentative Parcel Map No. 12438 and approval of Site Plan Review (No. 21-0185) is required by the City's Development Services Director following the City Council hearing.
Policy 55. Provide for the mitigation of significant noise impacts on adjacent sensitive uses from transportation corridor improvements.	<u>Not Applicable.</u> A noise impact analysis was completed for the Project and more information is available in EIR Subsection 4.11, <i>Noise</i> . Project-related traffic noise increases would be below the identified thresholds of significance under Existing plus Project conditions and in yeas 2024, 2029, and 2042 traffic conditions. As concluded in EIR Subsection 4.11, the Project would not generate substantial temporary or permanent increases in ambient noise levels in the vicinity of the project in excess of standards established in the City's General

Goals and/Policies	Project Consistency Discussion
	Plan or Noise Ordinance and impacts would be less than significant.
Policy 56. Review and evaluate the land use designations of the plan on agreement of a final route alignment of the Route 178/58 Freeway, and any other future freeways, to ensure appropriate land use relationships, including: a) Adequate setbacks, buffers, and/or restrictions on residential density to prevent noise impacts; b) Potential for commercial services at principal off-ramps; c) Potential for industrial uses which can benefit by close freeway proximity.	<u>Not Applicable.</u> While the Project would not involve the Route 178/58 Freeway, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 57. Utilize a joint powers agreement or other merchandise to promote the provision of uniform services related to development, public safety, recreation and other services.	<u>Not Applicable.</u> While the Project would not involve a joint powers agreement, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 58. Establish a joint City/County task force to identify inconsistencies in services and measures to enhance uniformity.	<u>Not Applicable.</u> While the Project would not involve a joint City/County task force, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 59. Encourage annexation of County islands into the City.	<u>Not Applicable.</u> While the Project would not involve annexation, there are no components of the Project that would impede the City's ability to implement this policy.
<u>Signage</u>	
Policy 60. Coordinate a consistent design vocabulary between city and county for all public signage, including fixture type, lettering, colors, symbols, and logos.	<u>Not Applicable.</u> While the Project does not involve design vocabulary coordination between the City of Bakersfield and Kern County, there are no components of the Project that would impede the City's ability to implement this policy. The Project would comply with the City of Bakersfield Municipal Code Chapter 17.60, regarding signs.
Policy 61. Provide signage which is adequately spaced and clearly visible during the day and night to control vehicular traffic, bicycles, and pedestrians.	<u>Consistent.</u> The Project would be consistent with this policy by complying with the City of Bakersfield Municipal Code Chapter 17.60, regarding signs.
Policy 62. Encourage the use of creative and distinctive signage which establishes a distinctive image for the planning area and identifies principal entries to the	<u>Consistent.</u> The Project would be consistent with this policy by complying with the City of Bakersfield Municipal Code Chapter 17.60, regarding signs.

Goals and/Policies	Project Consistency Discussion
metropolitan area, unique districts, neighborhoods and locations.	
Policy 63. Permit the use of well-designed banners for civic events, holidays, and other special occasions	<u>Consistent.</u> The Project would be consistent with this policy by complying with the City of Bakersfield Municipal Code Chapter 17.60, regarding signs.
Policy 64. Encourage that signs be designed and placed on buildings to be visible to pedestrians in areas designated for pedestrian activity.	<u>Consistent.</u> The Project would be consistent with this policy by complying with the City of Bakersfield Municipal Code Chapter 17.60, regarding signs.
Policy 65. Prohibit the use of private, permanent signs in residential neighborhoods, except those for identification, sales and rental of property.	<u>Not Applicable.</u> The Project site is not located inside a residential neighborhood. The Project would be required to comply with the City of Bakersfield Municipal Code Chapter 17.60, regarding signs.
Image	
Policy 66. Develop a distinctive identity for the Bakersfield region which differentiates it as a unique place in the Southern San Joaquin Valley.	<u>Consistent.</u> The Project would be consistent with this policy because it would attract employment-generating businesses to the City of Bakersfield and diversify the mix of uses in the City and greater Kern County.
Policy 67. Capitalize on the Kern River, parks, steep hills, and canals as organizational elements for the Bakersfield area, creating activity corridors around which development and recreational uses can be focused.	<u>Not Applicable.</u> While the Project would not involve the Kern River, parks, steep hills, or canals, there are no components of the Project that would impede the City's ability to implement this policy. The Kern Island Canal is located east of the Project site, on the opposite side of South H Street.
Policy 68. Allow variation in the use of street trees, shrubs, lighting, and other details to give streets better visual continuity and increased shade canopy.	<u>Consistent.</u> Upon development of the proposed Project, the site would be landscaped as shown in EIR Figure 3-12. Landscaping would be ornamental and feature trees, hedges, shrubs, groundcovers, and accent plants. Note that the landscaping plan for the warehouse component of the Project would be approved as part of proposed Site Plan Review No. 21-0185, while the landscaping shown for the commercial component of the Project site is conceptual and would be subject to future review and approval by the City Council when a final commercial site plan is brought forward for consideration. Prior to the issuance of building permits to construct the proposed warehouse building and commercial buildings, the Project Applicant would be required to submit final planting and irrigation plans to the City for review and approval. The plans are required to comply with Chapter 17.61 of the Bakersfield Municipal Code, which establishes requirements for landscape design, automatic

Goals and/Policies	Project Consistency Discussion
	irrigation system design, and water-use efficiency (Bakersfield, 2022, Chapter 17.61).
Policy 69. Provide for the installation of street trees which enhance pedestrian activity and convey a distinctive and high-quality visual image.	<u>Consistent.</u> The Project would be consistent with this policy because it would include ornamental landscaping featuring trees, hedges, shrubs, groundcovers, and accent plants. The Project's Conceptual Landscaping Plan (EIR Figure 3-12) calls for the planting of 181 perimeter trees and 605 parking lot trees.
Policy 70. Encourage landscaping the banks of flood control channels, canals, roadways and other public improvements with trees to provide a strong visual element in the planning area.	<u>Consistent.</u> The Project would be consistent with this policy because it would include ornamental landscaping featuring trees, hedges, shrubs, groundcovers, and accent plants. The Project's Conceptual Landscaping Plan (EIR Figure 3-12) calls for the planting of 181 perimeter trees and 605 parking lot trees.
Policy 71. Promote the establishment of attractive entrances into communities, major districts, and transportation terminals, centers, and corridors within the planning area.	<u>Consistent.</u> The Project would be consistent with this policy as it would include perimeter landscaping, including along the Project site frontages with SR-99, Berkshire Road, South H Street, and Hosking Avenue. The landscaping would be ornamental in nature and include trees, hedges, shrubs, groundcovers, and accent plants.
Policy 72. Promote the creation of both residential and commercial historic districts, and encourage the upgrading of historic structures.	<u>Not Applicable.</u> While the Project is not located in nor does it propose a historic district, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 73. Encourage the establishment of design programs which may include signage, street furniture, landscape, lighting, pavement treatments, public art, and architectural design.	<u>Consistent.</u> The Project is designed to meet applicable provisions of the City of Bakersfield Municipal Code, including standards for design. The Project would not impede the City's authority to establish design programs. Refer to EIR Section 3.0, <i>Project Description</i> and Subsection 4.1, <i>Aesthetics</i> for more information about the Project's design elements.
Policy 74. Construction effects shall be evaluated by the City of Bakersfield and/or County of Kern on a site-specific, project-by-project basis and subject to City and/or County standards and conditions of approval.	<u>Consistent.</u> Construction-related effects associated with the proposed Project have been evaluated throughout this EIR and mitigation measures, regulatory requirements and project design features have been included as applicable.
General	
Policy 75. Provide adequate land area for the expansion of existing uses and development of new uses consistent with the policies of the general plan.	<u>Consistent.</u> The Project would be consistent with this policy as it entails a proposed retail commercial and light industrial (warehouse distribution) project on land that is designated for the development of commercial uses by

Goals and/Policies	Project Consistency Discussion
	the Metropolitan Bakersfield General Plan. Although a GPA/CZ is proposed to accommodate the warehouse distribution component of the Project, the use would effectively utilize land area that is designated for the expansion of development.
Policy 76. Provide for a mix of land uses which meets the diverse needs of residents; offers a variety of employment opportunities; capitalizes, enhances, and expands upon existing physical and economic assets; and allows for the capture of regional growth.	<u>Consistent.</u> The Project would be consistent with this policy as it includes both commercial and light industrial (warehouse distribution) and uses which would attract employment-generating businesses to the City of Bakersfield that would expand economic development, and increase the tax base for the City.
Policy 77. Allow for the continuance of agricultural uses in areas designated for future urban growth.	<u>Not Applicable.</u> While the Project site was used for agricultural purposes in the past, it is not currently used for agriculture and there are no properties adjacent to the site that are used for agriculture. There are no components of the Project that would impede the City's ability to implement this policy.
Policy 78. Accommodate new projects which are infill or expansion of existing urban development.	<u>Consistent.</u> The Project would be consistent with this policy because it proposes infill development of an undeveloped parcel with a commercial development area and warehouse distribution facility. The site is surrounded by SR-99 to the west, Berkshire Road and existing and planned commercial development to the north, South H Street, the Kern Island Canal and a residential community to the east, and Hosking Avenue and planned commercial development to the south.
Policy 79. Provide for an orderly outward expansion of new "urban" development (any commercial, industrial, and residential development having a density greater than one unit per acre) so that it maintains continuity of existing development, allows for the incremental expansion of infrastructure and public services, minimizes impacts on natural environmental resources, and provides a high-quality environment for living and business.	<u>Consistent.</u> The Project would be consistent with this policy because it proposes the development of an undeveloped parcel with a commercial development area and warehouse distribution facility, representing incremental expansion of retail commercial and employment opportunities in the southern portion of Bakersfield, immediately adjacent to SR-99. As evaluated throughout this EIR, the Project's effects on natural environmental resources and people and their living and working environments have been minimized to the maximum feasible extents.
Policy 80. Assure that General Plan Amendment proposals for the conversion of designated agricultural lands to urban development occur in an orderly and logical	<u>Not Applicable.</u> While the Project site does not contain designated agricultural lands, there are no components of the Project that would impede the City's ability to implement this policy.

Goals and/Policies	Project Consistency Discussion
manner giving full consideration to the effect on existing agricultural areas.	
Policy 81. Allow for flexibility in the specific siting of multi-family residential and commercial uses from the locations generally depicted on the Land Use Map in areas which are undeveloped, used for resource production, or are developed at very low densities through Planned Unit Development, Planned Commercial Developments and Specific Plans, provided that: a) The overall density and distribution of land uses is maintained; b) Multi-family and commercial uses are located in proximity to principal roadways, public transit, employment nodes, commercial services, and recreational uses and within 330 feet of the location depicted on the Land Use Policy Map; c) Uses are sited to take advantage of pedestrian greenbelts, recreational amenities, and natural environmental resources; d) The availability of infrastructure to the site or adjacent service areas is not adversely impacted.	<u>Not Applicable.</u> The Project site is currently designated for commercial development and would entail the development of an undeveloped property with a commercial and light industrial center in close proximity to an established population and the State highway system (SR-99). Thus, no flexibilities are requested for the siting of commercial uses.
Policy 82. Preserve existing significant sound residential neighborhoods, commercial districts, and industrial areas.	<u>Consistent.</u> Although the Project site does not contain any existing development to be preserved, there is no component of the Project that would cause physical disturbances to or otherwise significantly affect the preservation of existing, sound, neighborhoods, commercial districts, and industrial areas.
Policy 83. Provide for the use of redevelopment authorities in other locations of the metropolitan area which California Redevelopment law has determined as blighted.	<u>Not Applicable.</u> While the Project would not involve use of redevelopment authorities, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 84. Provide incentives to upgrade deteriorating residential, commercial and industrial uses when the property owner or resident cannot afford improvements.	<u>Not Applicable.</u> While the Project would not involve any upgrades to deteriorating uses, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 85. Encourage the revitalization of deteriorated land uses and buildings.	<u>Not Applicable.</u> While the Project would not involve any deteriorating land uses or buildings, there are no components of the Project that would impede the City's ability to implement this policy.

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Policy 86. Encourage infill of vacant parcels.	<u>Consistent.</u> The Project would be consistent with this policy because it proposes infill development of an undeveloped parcel with a commercial development area and warehouse distribution facility. The site is surrounded by SR-99 to the west, Berkshire Road and existing and planned commercial development to the north, South H Street, the Kern Island Canal and a residential community to the east, and Hosking Avenue and planned commercial development to the south.
Policy 87. Encourage mixed-use development in the downtown area.	<u>Not Applicable.</u> The Project site is not located in the City's downtown area.
Policy 88. Encourage the recycling of dilapidated and economically-depressed residential neighborhoods, commercial districts, and industrial areas, where preservation is not an achievable or desirable objective.	<u>Not Applicable.</u> While the Project would not involve any dilapidated areas, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 89. Encourage new uses and buildings in pedestrian sensitive areas to incorporate design characteristics which include: a) Walls which are aesthetically treated by the use of color, materials, offset planes, columns, and/or other architectural details, to provide visual interest to pedestrians; b) Landscaping, including trees, flowering shrubs, and ground cover; c) Pedestrian amenities, such as benches, trash receptacles and signage oriented to the pedestrian; d) Design amenities related to the street level such as awnings, arcades, and paseos; e) Visual access to the interior of buildings; f) Uses other than parking and traffic circulation between the sidewalk and building.	<u>Consistent.</u> The Project would be consistent with this policy because it proposes the use of walls and fencing around the warehouse portion of the Project site and the use of ornamental landscaping around the entire Project site. Refer to EIR Section 3.0, <i>Project Description</i> and EIR Subsection 4.1, <i>Aesthetics</i> .
Policy 90. Encourage the development of a range of child care facilities including small and large family day care homes and public and private care centers.	<u>Not Applicable.</u> While the Project would not involve any child care facilities, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 91. Encourage employers and developers of employee-intensive commercial and industrial projects to	<u>Consistent.</u> While the Project does not include a child care facility, the City will encourage building users of the Project site to provide referral services for child care needs. The Project is proposed on a speculative basis,

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provide facilities or referral services for the child care needs of employees.	meaning that the future occupants of the proposed buildings are not known at this time.
Policy 92. In the county, all residential developments that provide complete public infrastructure improvements including community water distribution and sewage collection and treatment systems may be permitted a density increase up to 20 percent. All land division activities shall be consistent with this provision.	<u>Not Applicable.</u> While the Project would not involve any residential uses, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 93. Where possible, incorporate land encumbered with electrical transmission line easements with lines operating at 50,000 volts or above into development as a functional design component with the cooperation of the easement holder.	<u>Not Applicable.</u> While the Project would not involve any lands with high voltage electrical transmission lines, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 94. Encourage the incorporation of land encumbered with electrical transmission line easements with lines operating at 50,000 volts or above into project design by providing incentives for the affected development.	<u>Not Applicable.</u> While the Project would not involve any lands with high voltage electrical transmission lines, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 95. When planning for new development, coordinate with utility companies to designate future or potential electrical transmission line corridors as needed to serve the metropolitan area.	<u>Consistent.</u> The Project would be consistent with this policy because coordination with utility companies would occur as part of the entitlement and development permitting process. As part of the Project's development, existing overhead utility lines located along the Project site's frontage with South H Street would be undergrounded.
Policy 96. Where possible, utilize land encumbered with electrical transmission line easements to provide open space linkages, the Kern River corridor, trail systems and commercial/employment centers.	<u>Not Applicable.</u> While the Project would not involve any lands with electrical transmission lines encumbrances, there are no components of the Project that would impede the City's ability to implement this policy. As part of the Project's development, existing overhead utility lines located along the Project site's frontage with South H Street would be undergrounded.
Policy 97. Discourage the establishment of highly concentrated keeping of animals such as stockyards, feedlots, dairies, hog farms, turkey ranches, etc.	<u>Not Applicable.</u> While the Project would not involve keeping of animals, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 98. Coordinate the development of city and county permit information in a consistent format.	<u>Not Applicable.</u> While the Project would not involve coordination between the City of Bakersfield and Kern County in regards for permit information, there are no

Goals and/Policies	Project Consistency Discussion
	components of the Project that would impede the City's ability to implement this policy.
Policy 99. Develop a plan to ensure that all parking lots are 40 percent shaded at maturity to help alleviate "heat island effect."	<u>Consistent.</u> As shown on the Project's Conceptual Landscaping Plan (EIR Figure 3-12), the passenger vehicle parking lots would have a shade cover of 54.7%, whereas a minimum of 40% is required by Chapter 17.61 of the Bakersfield Municipal Code.
Policy 100. Encourage the use of reflective roofing material and other measures that reduce the "heat island effect."	<u>Consistent.</u> The roof of the proposed warehouse building would be constructed to support the future installation of solar panels, but because the location and size of such panels would be determined in conjunction with the future building user, which is not known at this time, the Project Applicant is not proposing the installation of rooftop solar panels as part of the initial Site Plan approval. When solar panels are installed, they will serve to reduce the urban heat island effect.
Policy 101. Consider including within Bakersfield's Sphere of Influence those parcels of land adjacent to the City limits whose development could have significant impacts on the City and to which public facilities and services can be provided by the City.	<u>Not Applicable.</u> While the Project would not involve parcels adjacent to City limits, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 102. Expand Bakersfield's Sphere of Influence based on the probable physical boundary that the City can reasonably control and service and discourage premature development outside existing communities in unincorporated areas surrounding the City.	<u>Not Applicable.</u> While the Project would not involve parcels adjacent to City limits, there are no components of the Project that would impede the City's ability to implement this policy.
Policy 103. Encourage the orderly annexation and development of unincorporated areas within Bakersfield's Sphere of Influence which can be developed in accordance with the Metropolitan Bakersfield General Plan and can be adequately served by the City. This policy acknowledges that people affected by annexation proposals are the best ones to determine the needs of their community and whether annexation best meets the needs of their community.	<u>Not Applicable.</u> While the Project would not involve unincorporated areas, there are no components of the Project that would impede the City's ability to implement this policy.

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Policy 104. As part of the environmental review procedure, an evaluation of the significance of paleontological, archaeological, and historical resources and the impact of proposed development on those resources shall be conducted and appropriate mitigation and monitoring included for development projects.	<p><u>Consistent.</u> A cultural resource study, including the topic of archaeological and paleontological resources, was completed for the Project and is discussed in Subsections 4.4 and 4.6 of this EIR.</p> <p>As concluded in Subsection 4.4, implementation of CR-MM-1 and CR-MM-2 would ensure the proper identification and subsequent treatment of any significant archaeological resources that may be encountered during ground-disturbing activities associated with Project construction. With implementation of the required mitigation, the Project's potential direct and cumulatively considerable impacts to important archaeological resources would be reduced to less than significant.</p> <p>As concluded in EIR Subsection 4.6, GEO MM-1, GEO MM-2, GEO MM-3, and GEO MM-4, would ensure the proper identification and subsequent treatment of any paleontological resources that may be encountered during ground-disturbing activities associated with implementation of the proposed Project. Therefore, with implementation of GEO MM-1, GEO MM-2, GEO MM-3, and GEO MM-4, the Project's potential direct and cumulatively considerable impacts to a unique paleontological resource or site or unique geologic feature would be reduced to less than significant.</p>
Policy 105. Development on land containing known archaeological resources (i.e., high sensitivity areas) shall utilize methodology set forth, as described necessary by a qualified archaeologist, to locate proposed structures, paving, landscaping, and fill dirt in such a way as to preserve these resources undamaged for future generations when it is the recommendation of a qualified archaeologist that said resources be preserved in situ.	<p><u>Consistent.</u> A cultural resource study, including the topic of archaeological resources, was completed for the Project and is discussed in Subsection 4.4 of this EIR. As concluded in Subsection 4.4, implementation of CR-MM-1 and CR-MM-2 would ensure the proper identification and subsequent treatment of any significant archaeological resources that may be encountered during ground-disturbing activities associated with Project construction. With implementation of the required mitigation, the Project's potential direct and cumulatively considerable impacts to important archaeological resources would be reduced to less than significant.</p>
Policy 106. The preservation of significant historical resources as identified on Table 4.10-1 shall be encouraged by developing	<p><u>Consistent.</u> As discussed in Subsection 4.4 of this EIR, there are no significant historical resources located on the Project site.</p>

Goals and/Policies	Project Consistency Discussion
and implementing incentives such as building and planning application permit fee waivers, Mills Act contracts, grants and loans, implementing the State Historic Building Code and other incentives as identified in the City's Historic Preservation Ordinance.	
Policy 107. The preservation of significant historical resources shall be promoted and other public agencies or private organizations shall be encouraged to assist in the purchase and/or relocation of sites, buildings, and structures deemed to be of historical significance.	<u>Consistent.</u> As discussed in Subsection 4.4 of this EIR, there are no significant historical resources located on the Project site.

4.10.5 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis for land use and planning considers development of the Project site in conjunction with other development projects in the vicinity of the Project site as well as full General Plan buildout in the City of Bakersfield and other jurisdictions in the region.

Physical Division of an Established Community

Under existing conditions, the Project site is physically separated from residential land uses to the east by South H Street, the Kern Island Canal and a solid concrete wall, and to the west by SR 99. Because the Project site does not directly abut any established communities, there is no potential for the Project to cause or cumulatively contribute to the division of an established community.

Conflict with any Land Use Plan, Policy, or Regulation

The Project's proposed General Plan Amendment/Zone Change No. 21-0184 (GPA/ZC No. 21-0184) would modify the General Plan land use and zoning designations on the 52.28 net-acre warehouse distribution portion of the Project site. The General Plan land use designation would be modified from General Commercial (GC) to Light Industrial (LI), and the zoning classification would be modified from Regional Commercial-Planned Commercial Development Combining (C-2/PCD) to Light Manufacturing (M-1). Pertaining to the 27.91 net-acre commercial portion of the Project site and the 4.48-acre retention basin portion of the Project site, the zoning classification would be changed from C-2/PCD to Exclusive PCD. The proposed amendment to the Metropolitan Bakersfield General Plan and the proposed change in zoning classifications would eliminate inconsistencies between the proposed commercial and warehouse distribution land uses and the site's existing General Plan land use designation and zoning. As development occurs elsewhere throughout the cities of Shafter, Wasco, Arvin, and Lamont, and the larger Kern County area, any proposal to change the underlying land use or development intensity for a specific property similarly would not have the potential to result in conflict with applicable land plans and result in substantial, adverse environmental effects with implementation of an amendment to the applicable land use plan. The Project would not result in any

cumulatively-considerable land use and planning conflicts in the context of compliance with applicable environmental plans, policies, and regulations beyond those identified in other Subsections of this EIR.

4.10.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: No Impact. The Project has no potential to physically divide an established community.

Threshold b: Less than Significant Impact. The Project's proposed General Plan Amendment would ensure consistency between the proposed Project's land uses and Metropolitan Bakersfield General Plan. The Project is consistent with General Plan goals and policies and the general intent of the General Plan and has no potential to result in significant land use and planning conflicts in the context of compliance with applicable environmental plans, policies, and regulations beyond those identified in other Subsections of this EIR.

4.10.7 MITIGATION

Impacts would be less than significant; therefore, no mitigation is required.

4.11 NOISE

The information and analysis in this Subsection 4.11 are based primarily on a technical study titled, “Noise and Vibration Impact Analysis,” dated May 26, 2022, prepared by Urban Crossroads, Inc. (Urban Crossroads”), and included as *Technical Appendix I* to this EIR. Refer to Section 7.0, *References*, for a complete list of reference sources used in this analysis.

4.11.1 NOISE FUNDAMENTALS

A. Noise Definitions

Noise is simply defined as “unwanted sound.” Sound becomes unwanted when it interferes with normal activities, when it causes physical harm, or when it has adverse effects on health. Because the range of sound that the human ear can detect is large, the logarithmic scale is used to measure sound intensity. The unit of measure to describe sound intensity is the decibel (dB). A sound increase of 10 dB represents a ten-fold increase in sound energy and is perceived by the human ear as being roughly twice as loud. A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise sources by discriminating against very low and very high frequencies of the audible spectrum (i.e., frequencies that are not audible to the human ear). The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at a distance of three feet is roughly 60 dBA, while a jet engine is 110 dBA at approximately 100 feet (Urban Crossroads, 2022, pp. 7-8).

B. Noise Descriptors

Environmental noise descriptors are generally based on averages, rather than instantaneous noise levels. The most commonly used figure is the equivalent continuous noise level (L_{eq}). L_{eq} represents a steady state sound level containing the same total energy as a time varying signal over a given time period. L_{eq} values are not measured directly but are calculated from sound pressure levels typically measured in dBA. Consequently, L_{eq} can vary depending on the time of day (Urban Crossroads, 2022, p. 8).

Peak hour or average noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour levels may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the Community Noise Equivalent Level (CNEL), representing a composite 24-hour noise level is utilized. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time-of-day corrections require the addition of five (5) dB to sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 dB to sound levels at night between 10:00 p.m. and 7:00 a.m. These additions are made to account for the noise sensitive time periods during the evening and nighttime hours when sound appears louder. CNEL does not represent the actual sound level heard at any particular time, but rather represents the total sound exposure. The City of Bakersfield relies on the 24-hour CNEL level to assess land use compatibility with transportation-related noise sources. (Urban Crossroads, 2022, p. 8)

C. Sound Propagation

When sound propagates over a distance, it changes in level and frequency content. The manner in which noise reduces with distance depends on the following factors.

1. Geometric Spreading

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source (Urban Crossroads, 2022, p. 8).

2. Ground Absorption Noise

To account for the ground-effect attenuation (absorption) of noise, two types of site conditions are commonly used in noise models: soft site and hard site conditions. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receptor, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., sites with an absorptive ground surface between the source and the receptor such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance from a line source (Urban Crossroads, 2022, p. 9).

3. Atmospheric Effects

Receivers located downwind from a noise source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors that may affect noise levels include air temperature, humidity, and turbulence (Urban Crossroads, 2022, p. 9).

4. Shielding

A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Solid objects or barriers are most effective at attenuating noise levels). Effective noise barriers can reduce noise levels by 10 to 15 dBA. Noise barriers, however, do have limitations. For a noise barrier to work, it must be high enough and long enough to block the path of the noise source (Urban Crossroads, 2022, p. 9).

D. Response to Noise

Approximately 16% of the population has a very low tolerance for noise and will object to any noise not of their own making. Consequently, even in the quietest environment, some complaints will occur. Twenty to thirty percent of the population will not complain even in very severe noise environments. Thus, a variety of reactions can be expected from people exposed to any given noise environment. Despite this variability in behavior on an individual level, the population as a whole can be expected to exhibit the following responses to changes in noise levels: an increase of 1 dBA cannot be perceived except in carefully controlled laboratory experiments; a change of 3 dBA is considered “barely perceptible;” and changes of 5 dBA are considered “readily perceptible” (Urban Crossroads, 2022, p. 10; Table 2-B).

E. Vibration

Vibration is the periodic oscillation of a medium or object. Sources of groundborne vibration include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, groundborne vibrations may be described by amplitude and frequency. Vibration is often described in units of velocity (inches per second) and decibels (dB) and is denoted as VdB (Urban Crossroads, 2022, p. 11).

The background vibration-velocity level in residential areas is generally 50 VdB. Groundborne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings (Urban Crossroads, 2022, p. 11).

4.11.2 EXISTING NOISE CONDITIONS

A. Existing Study Area Ambient Noise Conditions

Urban Crossroads recorded 24-hour noise readings at nine (9) locations near the Project site on Wednesday July 28, 2021. The noise measurement locations are identified in Figure 4.11-1, *Noise Measurement Locations*. The long-term noise level measurements were positioned as close to the nearest sensitive receiver locations as possible to assess the existing ambient hourly noise levels surrounding the Project site. Both Caltrans and the Federal Transit Administration (FTA) recognize that it is not reasonable to collect noise level measurements that can fully represent every part of a private yard, patio, deck, or balcony normally used for human activity when estimating impacts for new development projects. Thus, it is not necessary to collect measurements at each individual building or residence, because each receiver measurement represents a group of buildings that share acoustical equivalence. Collecting reference ambient noise level measurements at the nearby sensitive receiver

locations allows for a comparison of the before and after Project noise levels and is necessary to assess potential noise impacts due to the Project's contribution to the ambient noise levels (Urban Crossroads, 2022, pp. 23-24).

The noise measurements shown in Table 4.11-1, *Ambient Noise Level Measurements*, focus on the equivalent or the hourly energy average sound levels (L_{eq}). The equivalent sound level (L_{eq}) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. Table 4.11-1 identifies the hourly daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise levels at each noise level measurement location. Table 4.11-1 provides the equivalent noise levels used to describe the daytime and nighttime ambient conditions. These daytime and nighttime energy average noise levels represent the average of all hourly noise levels observed during these time periods expressed as a single number. Appendix 5.2 of *Technical Appendix I* provides summary worksheets of the noise levels for each of the daytime and nighttime hours (Urban Crossroads, 2022, pp. 24-25).

B. Sensitive Receiver Locations

To assess the potential for long-term operational and short-term construction noise impacts, sensitive receiver locations, as shown on Figure 4.11-2, *Sensitive Receiver Locations*, were identified as representative locations for analysis. Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, and recreation areas. Moderately noise-sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, outpatient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs. Land uses that are considered relatively insensitive to noise include business, commercial, and professional developments. Land uses that are typically not affected by noise include: industrial, manufacturing, utilities, agriculture, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals (Urban Crossroads, 2022, p. 49).

To describe the potential off-site Project noise levels, nine sensitive receiver locations in the vicinity of the Project site were identified to represent the existing noise environment in the area. All distances are measured from the Project site boundary to the outdoor living areas (e.g., private backyards) or at the building façade, whichever is closer to the Project site. The selection of receiver locations is based on FHWA guidelines and is consistent with additional guidance provided by Caltrans and the FTA. Due to the additional attenuation from distance and the shielding of intervening structures, other sensitive land

Table 4.11-1 Ambient Noise Level Measurements

Location ¹	Description	Energy Average Noise Level (dBA Leq) ²	
		Daytime	Nighttime
L1	Located west of the Project site near single-family residence at 2402 Basque Hills Drive.	58.3	57.7
L2	Located north of the Project site near single-family residence at 6801 Gretchen Court.	46.4	48.3
L3	Located east of the Project site near single-family residence at 1609 Berkshire Road.	60.9	61.9
L4	Located east of the Project site near single-family residence at 7417 Cross Glade Street.	59.8	60.2
L5	Located east of the Project site near single-family residence at 7719 Snowbird Street.	60.8	59.3
L6	Located east of the Project site near single-family residence at 8017 Snowbird Street.	65.8	65.0
L7	Located south of the Project site near Guru Nanak Mission Sikh Center at 8601 South H Street.	53.6	56.0
L8	Located southwest of the Project site near single-family residence at 2208 McGwire Court.	53.8	55.1
L9	Located west of the Project site near single-family residence at 2303 March Avenue.	63.3	63.0

¹ See Figure 4.11-1 for the noise level measurement locations.

² Energy (logarithmic) average levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2 of the Project's noise study. "Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

(Urban Crossroads, 2022, Table 5-1)

uses in the Project study area that are located at greater distances than those identified in these nine locations would experience lower noise levels than those presented. Distance is measured in a straight line from the Project site boundary to each receiver location. As previously noted, both Caltrans and the FTA recognize that it is not reasonable to fully represent noise levels at every part of a private yard, patio, deck, or balcony normally used for human activity when estimating impacts for new development projects. Thus, it is not necessary to estimate noise levels at each individual building or residence, because each receiver measurement represents a group of buildings that share acoustical equivalence (Urban Crossroads, 2022, pp. 23-24 and 49).

R1: Location R1 represents the existing noise sensitive residence at 2402 Basque Hills Drive, approximately 199 feet west of the Project site. R1 is placed in the private outdoor living areas (backyard) facing the Project site. A 24-hour noise measurement was taken near this location, L1, to describe the existing ambient noise environment.

R2: Location R2 represents the existing noise sensitive residence at 6816 Gretchen Court, approximately 1,447 feet north of the Project site. R2 is placed in the private outdoor living areas (backyard) facing the Project site. A 24-hour noise measurement was taken near this location, L2, to describe the existing ambient noise environment.

R3: Location R3 represents the existing noise sensitive residence at 1609 Berkshire Road, approximately 259 feet east of the Project site. R3 is placed in the private outdoor living areas (backyard) facing the Project site. A 24-hour noise measurement was taken near this location, L3, to describe the existing ambient noise environment.

R4: Location R4 represents the existing noise sensitive residence at 7503 Cross Glade Street, approximately 209 feet east of the Project site. R4 is placed in the private outdoor living areas (backyard) facing the Project site. A 24-hour noise measurement was taken near this location, L4, to describe the existing ambient noise environment.

R5: Location R5 represents the existing noise sensitive residence at 7719 Snowbird Street, approximately 215 feet east of the Project site. R5 is placed in the private outdoor living areas (backyard) facing the Project site. A 24-hour noise measurement was taken near this location, L5, to describe the existing ambient noise environment.

R6: Location R6 represents the existing noise sensitive residence at 8013 Snowbird Street, approximately 404 feet east of the Project site. R6 is placed in the private outdoor living areas (backyard) facing the Project site. A 24-hour noise measurement was taken near this location, L6, to describe the existing ambient noise environment.

R7: Location R7 represents the existing noise sensitive Guru Nanak Mission Sikh Center at 8601 South H Street, approximately 1,539 feet south of the Project site. R7 is placed on the Gurdwara's building façade closest to the Project site. A 24-hour noise measurement was taken near this location, L7, to describe the existing ambient noise environment.

R8: Location R8 represents the existing noise sensitive residence at 2204 McGwire Court, approximately 875 feet southwest of the Project site. R8 is placed in the private outdoor living areas (backyard) facing the Project site. A 24-hour noise measurement was taken near this location, L8, to describe the existing ambient noise environment.

R9: Location R9 represents the existing noise sensitive residence at 2303 March Avenue, approximately 301 feet west of the Project site. R9 is placed in the private outdoor living areas (backyard) facing the Project site. A 24-hour noise measurement was taken near this location, L9, to describe the existing ambient noise environment.

C. Existing Airports

The closest airport to the Project site is the Bakersfield Municipal Airport located roughly 2.5 miles northeast of the Project site (Urban Crossroads, 2022, p. 20). Aircraft overhead noise affecting the Project site is minimal.

4.11.3 REGULATORY SETTING

The following is a brief description of the federal, State, and local environmental laws and regulations related to noise that are applicable to the Project, the Project site, and/or the surrounding area.

A. Federal Plans, Policies, and Regulations

1. Noise Control Act of 1972

The Noise Control Act of 1972 establishes a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare. The Act also serves to (1) establish a means for effective coordination of federal research and activities in noise control; (2) authorize the establishment of federal noise emission standards for products distributed in commerce; and (3) provide information to the public respecting the noise emission and noise reduction characteristics of such products (EPA, 2020i).

While primary responsibility for control of noise rests with State and local governments, federal action is essential to deal with major noise sources in commerce, control of which require national uniformity of treatment. The Environmental Protection Agency (EPA) is directed by Congress to coordinate the programs of all Federal agencies relating to noise research and noise control (EPA, 2020i).

2. Federal Transit Administration

The Federal Transit Administration (FTA) has published a Noise and Vibration Impact Assessment (NVIA), which provides guidance for preparing and reviewing the noise and vibration sections of environmental documents (FTA, 2006, p. 1-1). In the interest of promoting quality and uniformity in assessments, the manual is used by project sponsors and consultants in performing noise and vibration analyses for inclusion in environmental documents. The manual sets forth the methods and procedures for determining the level of noise and vibration impact resulting from most federally-funded transit projects and for determining what can be done to mitigate such impact.

3. Federal Highway Administration

The Federal Highway Administration (FHWA) is the agency responsible for administering the federal-aid highway program in accordance with Federal statutes and regulations. The FHWA developed the noise regulations as required by the Federal-Aid Highway Act of 1970 (Public Law 91-605, 84 Stat. 1713). The regulation, 23 CFR 772 *Procedures for Abatement of Highway Traffic Noise and Construction Noise*, applies to highway construction projects where a state department of transportation has requested funding for participation in the project. The regulation requires the highway agency to investigate traffic noise impacts in areas adjacent to federally-aided highways for proposed construction

of a highway on a new location or the reconstruction of an existing highway to either significantly change the horizontal or vertical alignment or increase the number of through-traffic lanes. If the highway agency identifies impacts, it must consider abatement. The highway agency must incorporate all feasible and reasonable noise abatement into the project design.

The FHWA regulations for mitigation of highway traffic noise in the planning and design of federally aided highways are contained in Title 23 of the United States Code of Federal Regulations Part 772. The regulations contain noise abatement criteria, which represent the upper limit of acceptable highway traffic noise for different types of land uses and human activities. The regulations do not require meeting the abatement criteria in every instance. Rather, they require highway agencies make every reasonable and feasible effort to provide noise mitigation when the criteria are approached or exceeded. Compliance with the noise regulations is a prerequisite for the granting of Federal-aid highway funds for construction or reconstruction of a highway (FHWA, 2017).

4. *Construction-Related Hearing Conservation*

The Occupational Safety and Health Administration (OSHA) hearing conservation program is designed to protect workers with significant occupational noise exposures from hearing impairment even if they are subject to such noise exposures over their entire working lifetimes. Standard 29 CFR, Part 1910 indicates the noise levels under which a hearing conservation program is required to be provided to workers exposed to high noise levels (OSHA, 2002). Periodic exposure to high noise levels in short duration is typically considered an annoyance and not impactful to human health. It would take several years of exposure to high noise levels to result in hearing impairment.

B. State Plans, Policies, and Regulations

1. *State of California Noise Requirements*

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element which is to be prepared according to guidelines adopted by the Governor's Office of Planning and Research. The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels.

2. *Building Standards Code*

The State of California's noise insulation standards are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2, and the California Building Standards Code. These noise standards are applied to new construction in California for the purpose of controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are developed near major transportation noise sources, and where such noise sources create an exterior noise level of 60 dBA CNEL or higher. Acoustical studies that accompany building plans for noise-sensitive land uses must demonstrate that the structure has been designed to limit interior noise in

habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL (BSC, n.d.).

3. *California Noise Insulation Standards*

The California Noise Insulation Standards (CCR Title 25 Section 1092) establish uniform minimum noise insulation performance standards for new hotels, motels, dormitories, apartment houses, and dwellings other than detached single-family dwellings. Specifically, Title 25 specifies that interior noise levels attributable to exterior sources shall not exceed 45 dBA Ldn/CNEL (i.e., the same levels that the EPA recommends for residential interiors) in any habitable room of a new dwelling. An acoustical study must be prepared for proposed multiple unit residential and hotel/motel structures where outdoor Ldn/CNEL is 60 dBA or greater. The study must demonstrate that the design of the building would reduce interior noise to 45 dBA Ldn/CNEL or lower. Because noise levels can increase over time in developing areas, Title 25 also specifies that dwellings are to be designed so that interior noise levels will meet this standard for at least ten years from the time of building permit application (MLA, n.d.).

4. *OPR General Plan Guidelines*

Though not adopted by law, the 2017 California General Plan Guidelines, published by the California Governor's Office of Planning and Research (OPR), provides guidance for local agencies in preparing or updating General Plans. The Guidelines provide direction on the required Noise Element portion of the General Plans. The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels (OPR, 2017a, pp. 131-132).

C. Local Plans, Policies, and Regulations

1. *Metropolitan Bakersfield General Plan Noise Element*

The Metropolitan Bakersfield General Plan Noise Element is intended to protect local citizens from the harmful effect of excessive noise exposure. The Noise Element identifies the following two goals.

- *Ensure that residents of the Bakersfield Metropolitan Area are protected from excessive noise and existing moderate levels of noise are maintained.*
- *Protect citizens of the planning area from the harmful effects of exposure to excessive noise and protect the economic base of the area by preventing the encroachment of incompatible land uses near known noise-producing roadways, industries, railroads, airports, and other sources.*

The policies and implementation measures specified in the Noise Element are designed to satisfy these goals (Urban Crossroads, 2022, p. 13).

Noise Element - Land Use Compatibility Guidelines

To ensure that residents are protected from excessive noise, the Noise Element provides guidelines to evaluate the Land Use Compatibility for Community Noise Environments (General Plan Figure VII-1).

These guidelines are based on OPR guidance and are used to describe land use categories of compatibility and not specific noise standards. Noise sensitive land uses such as single-family residences are normally acceptable with exterior noise levels below 60 dBA CNEL and conditionally acceptable with noise levels below 70 dBA CNEL (Urban Crossroads, 2022, p. 14, Table 3-A).

Noise Element - Noise Level Performance Standards

The Metropolitan Bakersfield General Plan Table VII-2 establishes exterior noise level standards for stationary noise sources. For residential properties, the exterior noise level shall not exceed 55 dBA L_{eq} during the daytime hours (7:00 a.m. to 10:00 p.m.) and 50 dBA L_{eq} during the nighttime hours (10:00 p.m. to 7:00 a.m.) (Urban Crossroads, 2022, p. 15).

The exterior noise level standards apply for a cumulative period of 30 minutes in any hour, as well as the standard plus 5 dBA cannot be exceeded for a cumulative period of more than 15 minutes in any hour, or the standard plus 10 dBA for a cumulative period of more than 5 minutes in any hour, or the standard plus 15 dBA for a cumulative period of more than 1 minute in any hour, or the standard plus 20 dBA for any period of time. The City's stationary source noise level standards are shown on Table 4.11-2, *General Plan Noise Element Performance Standards* and included in Appendix 3.2 of *Technical Appendix I* (Urban Crossroads, 2022, p. 15).

Table 4.11-2 General Plan Noise Element Performance Standards

Time Period	Exterior Noise Level Standards (dBA) ¹				
	L_{50} (30 mins)	L_{25} (15 mins)	L_8 (5 mins)	L_2 (1 min)	L_{max} (Anytime)
Daytime (7:00 a.m. to 10:00 p.m.)	55	60	65	70	75
Nighttime (10:00 p.m. to 7:00 a.m.)	50	55	60	65	70

¹ Metropolitan Bakersfield General Plan Noise Element Table VII-2 Noise Level Performance Standards (Appendix 3.1 of *Technical Appendix I*.
(Urban Crossroads, 2022, Table 3-1)

2. City of Bakersfield Municipal Code

Chapter 9.22, Noise of the City of Bakersfield Municipal Code finds that excessive, unnecessary, and annoying noise levels are detrimental to the public health, welfare and safety and contrary to the public interest.

Noise Generally

In addition to the noise level performance standards outlined in Table VII-2 of the General Plan Noise Element, the Municipal Code identifies the following provisions to protect persons from excessive levels of noise (Urban Crossroads, 2022, pp. 15-16).

- *Section 9.22.030[A]: It is unlawful for any person to willfully make or continue, or allow to be made or continued, any loud, unnecessary noise which disturbs the peace or quiet of any*

neighborhood or which causes discomfort or annoyance to persons residing within one thousand feet of the noise source.

- *Section 9.22.030[C]: Refrigerator trucks shall be permitted to operate in any commercial or manufacturing zone at all hours; provided, however, that such use does not emit noise or vibration detrimentally impacting neighboring residential properties and the occupants thereof between ten p.m. and seven a.m.*

Construction Activity Noise

To control noise impacts associated with construction, which would include construction of the proposed Project, Section 9.22.050 of the Municipal Code has established limits to the hours of construction activities. Section 9.22.050[A] states that it is unlawful for any person, firm or corporation to erect, demolish, alter or repair any building, or to grade or excavate land, streets or highways, other than between the hours of six a.m. and nine p.m. on weekdays, and between eight a.m. and nine p.m. on weekends. According to Section 9.22.050[C], limits to the hours of construction shall not apply to any work of construction performed 1,000 feet or more from the nearest residential dwelling (Urban Crossroads, 2022, p. 16).

4.11.4 BASIS FOR DETERMINING SIGNIFICANCE

A. Significance Thresholds

According to Section XIII of the CEQA Guidelines, the proposed Project would result in a significant noise impact if the Project or any Project-related component would result in (OPR, 2019):

- 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;*
- b. Generation of excessive ground borne vibration or ground borne noise levels;*
- 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.*

Table 4.11-3, *Significance Criteria Summary*, shows the significance criteria used to evaluate the Project's potential impacts due to noise increases. Refer to Section 4 of the Project's Noise Study (EIR *Technical Appendix I*) for a discussion of the significance criteria. The methodologies used to determine the significance criteria for noise level and ground borne vibration impacts related to the Project's construction, long-term on-site operations, and long-term off-site traffic are explained below.

Table 4.11-3 Significance Criteria Summary

Analysis	Condition(s)	Significance Criteria	
		Daytime	Nighttime
Off-Site Traffic ¹	If ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase	
	If ambient is 60 - 65 dBA CNEL	≥ 3 dBA CNEL Project increase	
	If ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase	
Operational	Exterior Noise Level Standards ²	55 dBA Leq	50 dBA Leq
	If ambient is < 60 dBA Leq ¹	≥ 5 dBA Leq Project increase	
	If ambient is 60 - 65 dBA Leq ¹	≥ 3 dBA Leq Project increase	
	If ambient is > 65 dBA Leq ¹	≥ 1.5 dBA Leq Project increase	
Construction	Construction activities are restricted within 1,000 feet of residential dwellings other than between the hours of six a.m. and nine p.m. on weekdays, and between eight a.m. and nine p.m. on weekends ³		
	Noise Level Threshold ⁴	80 dBA Leq	70 dBA Leq
	Vibration Level Threshold ⁵	0.3 PPV (in/sec)	

¹ FICON, 1992 and the Metropolitan Bakersfield General Plan Noise Element Standards

² Metropolitan Bakersfield Noise Element Table VII-2 Noise Level Performance Standards.

³ City of Bakersfield Municipal Code Section 9.22.050[A].

⁴ Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual. ⁵ Caltrans Transportation and Construction Vibration Manual, April 2020 Table 19. "Daytime" = 7:00 a.m. to 7:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

(Urban Crossroads, 2022, Table 4-1)

B. Construction Noise Standards

To control noise impacts associated with construction, which would include construction of the proposed Project, Section 9.22.050 of the City's Municipal Code limits construction hours to between 6:00 a.m. and 9:00 p.m. on weekdays, and between 8:00 a.m. and 9:00 p.m. on weekends when construction occurs within 1,000 feet of a residential dwelling. The Municipal Code does not set a maximum noise level that is considered significant. Therefore, for purposes of analysis herein, the Federal Transit Administration (FTA) provides guidelines that can be considered reasonable criteria for construction noise assessment. The FTA considers a daytime exterior construction noise level of 80 dBA Leq as a reasonable threshold for noise sensitive residential land use with a nighttime exterior construction noise level of 70 dBA Leq (Urban Crossroads, 2022, p. 16).

C. Vibration Standards

Construction activity can result in varying degrees of ground-borne vibration, depending on the equipment and methods used, distance to the affected structures, and soil type. The City of Bakersfield Municipal Code does not identify specific vibration level limits. Therefore, for analysis purposes herein, the *Caltrans Transportation and Construction Vibration Guidance Manual*, Table 19, vibration damage are used to assess potential temporary construction-related impacts at adjacent building locations. The nearest noise sensitive buildings adjacent to the Project site can best be described as "older residential

structures” with a maximum acceptable continuous vibration threshold of 0.3 PPV (in/sec) (Urban Crossroads, 2022, pp. 16-17).

D. Operational Noise Standards

Following is a summary of the methodology used to evaluate Project-related operational noise impacts. Refer to Section 9 of *Technical Appendix I* for a complete discussion of the methodology and modeling inputs and assumptions.

To evaluate noise level increases under CEQA, consideration must be given to the magnitude of the increase, the existing baseline ambient noise levels, and the location of noise-sensitive receivers, to determine if a noise increase represents a significant adverse environmental impact. This approach recognizes that there is no single noise increase that renders the noise impact significant. This is primarily because of the wide variation in individual thresholds of annoyance and differing individual experiences with noise. Thus, an important way of determining a person’s subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted – the so-called ambient environment. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will typically be judged (Urban Crossroads, 2022, p. 19).

The Federal Interagency Committee on Noise (FICON) developed guidance to be used for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average-daily noise level (CNEL) and equivalent continuous noise level (Leq). For purposes of analysis herein, a *readily perceptible* 5 dBA or greater Project-related noise level increase is considered a significant impact when the without Project noise levels are below 60 dBA. Per the FICON, in areas where the without Project noise levels range from 60 to 65 dBA, a 3 dBA *barely perceptible* noise level increase appears to be appropriate for most people. When the without Project noise levels already exceed 65 dBA, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact if the noise criteria for a given land use is exceeded, since it likely contributes to an existing noise exposure exceedance. The FICON guidance provides an established source of criteria to assess the impacts of substantial temporary or permanent increase in baseline ambient noise levels. Based on the FICON criteria, the amount to which a given noise level increase is considered acceptable is reduced when the without Project (baseline) noise levels are already shown to exceed certain land-use specific exterior noise level criteria. The specific levels are based on typical responses to noise level increases of 5 dBA or *readily perceptible*, 3 dBA or *barely perceptible*, and 1.5 dBA depending on the underlying without Project noise levels for noise-sensitive uses. These levels of increases and their perceived acceptance are consistent with the General Plan Noise Element *Standards for Project Noise Impacts for Mobile Sources*, guidance provided by both the Federal Highway Administration and Caltrans (Urban Crossroads, 2022, pp. 19-20).

4.11.5 IMPACT ANALYSIS

Threshold 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?*

The analyses below evaluate three components of the Project that would generate noise – the construction process, on-site operational activities, and off-site traffic.

A. Construction Noise

The Project Applicant anticipates that the Project's construction would occur in two phases, with the warehouse facility and associated infrastructure including public road improvements to Berkshire Road and South H Street constructed first followed by development of the commercial uses in a second phase. A reasonable expectation of construction for purposes of analysis in this EIR is construction of the warehouse facility, retention basin, and associated site improvements and on- and off-site infrastructure between approximately March 2023 and December 2024. Next, the commercial uses would be constructed occur over a period of years depending on market demand and studied in this EIR as occurring between January 2025 and December 2029. Project-related construction noise would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction

Noise generated by the Project's construction equipment would include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. The number and mix of construction equipment are expected to occur in the following stages: site preparation, grading, building construction, paving, architectural coating (Urban Crossroads, 2022, p. 63). See Section 3.0, *Project Description*, for more detail about the Project's construction characteristics.

1. Reference Noise Levels – Daytime Activities

To describe peak construction noise activities, the construction noise analysis was prepared using reference noise level measurements published in the *Update of Noise Database for Prediction of Noise on Construction and Open Sites* by the Department for Environment, Food and Rural Affairs (DEFRA). The DEFRA database provides the most recent and comprehensive source of reference construction noise levels. Table 4.11-4, *Construction Reference Noise Levels* provides a summary of the DEFRA construction reference noise level measurements expressed in hourly average dBA L_{eq} using the estimated FHWA Roadway Construction Noise Model (RCNM) usage factors to describe the construction activities for each stage of Project construction (Urban Crossroads, 2022, p. 63).

2. Reference Noise Levels - Nighttime Concrete Pour Activities

Nighttime concrete pouring activities would occur as a part of the Project's construction activities. Pouring concrete at night instead of during the day is often required because cooler air temperatures at night allow concrete to cure at a stronger strength than during the heat of the day. If nighttime concrete pours would occur within 1,000 feet of residential homes during the restricted City of Bakersfield

Municipal Code Section 9.22.050[A] hours of 6:00 a.m. and 9:00 p.m. on weekdays, and between 8:00 a.m. and 9:00 p.m. on weekends, the construction contractor would be required to obtain authorization for nighttime work from the City of Bakersfield. Any nighttime construction noise activities are evaluated against the FTA nighttime exterior construction noise level threshold of 70 dBA L_{eq} for noise sensitive residential land use (Urban Crossroads, 2022, p. 67).

To estimate the noise levels due to nighttime concrete pour activities, sample reference noise level measurements were taken during a nighttime concrete pour at the Prologis Redlands Distribution Center construction site. Urban Crossroads, Inc. collected short-term nighttime concrete pour reference noise

Table 4.11-4 Construction Reference Noise Levels

Construction Stage	Reference Construction Activity ¹	Reference Noise Level @ 50 Feet (dBA L_{eq}) ¹	Combined Noise Level (dBA L_{eq}) ²
Site Preparation	Crawler Tractors	77	79
	Hauling Trucks	71	
	Rubber Tired Dozers	71	
Grading	Graders	79	79
	Excavators	64	
	Compactors	67	
Building Construction	Cranes	67	74
	Tractors	72	
	Welders	65	
Paving	Pavers	70	74
	Paving Equipment	69	
	Rollers	69	
Architectural Coating	Cranes	67	72
	Air Compressors	67	
	Generator Sets	67	

¹ Update of Noise Database for Prediction of Noise on Construction and Open Sites by the Department for Environment, Food and Rural Affairs (DEFRA) expressed in hourly average L_{eq} based on estimated usage factors from the FHWA Roadway Construction Noise Model (RCNM).

² Represents the combined noise level for all equipment assuming they operate at the same time consistent with FTA Transit Noise and Vibration Impact Assessment guidance for general construction noise assessment.

(Urban Crossroads, 2022, Table 10-1)

level measurements during the noise-sensitive nighttime hours between 1:00 a.m. to 2:00 a.m. at 27334 San Bernardino Avenue in the City of Redlands. The reference noise levels describe the expected concrete pour noise sources that may include concrete mixer truck movements and pouring activities, concrete paving equipment, rear mounted concrete mixer truck backup alarms, engine idling, air brakes, generators, and workers communicating/whistling (Urban Crossroads, 2022, p. 67).

To describe the nighttime concrete pour noise levels associated with the construction of the proposed Project, the noise analysis relies on reference noise levels of 67.7 dBA L_{eq} at 50 feet with a noise source height of 6 feet. While the Project noise levels will depend on the actual duration of activities and specific equipment fleet in use at the time of construction, the sample reference noise levels of 67.7 dBA L_{eq} is used to describe the expected Project nighttime concrete pour noise activities (Urban Crossroads, 2022, p. 68).

3. Construction Noise Analysis - Daytime

The limits of Project construction activity include on-site areas and the off-site roadway and utility improvements needed to support the Project's development. Using the reference construction equipment noise levels and the CadnaA noise prediction model, calculations of the Project construction noise level impacts at the nearby sensitive receiver locations were completed. To assess the worst-case construction noise levels, the Project construction noise analysis relies on the highest noise level impacts when multiple pieces of equipment with the highest reference noise level are operating at the closest point from the edge of primary construction activity (Project site boundary) to each receiver location. This methodology likely overstates the noise impact, as it is unlikely that multiple pieces of construction equipment with high noise levels will all be operating in the same location on the boundary of the Project site at the same time (Urban Crossroads, 2022, pp. 63, 65).

As shown on Table 4.11-5, *Construction Noise Level Compliance*, Project-related construction noise levels are expected to range from 53.3 to 68.9 dBA L_{eq} , and the highest construction levels are expected to range from 60.3 to 68.9 dBA L_{eq} at the nearby receiver locations. This includes the additional noise attenuation provided by the existing noise barriers to the east, west, and southwest of the Project site, as depicted on Figure 4.11-2. CadnaA construction noise model inputs are included in Appendix 10.1 of *Technical Appendix I* (Urban Crossroads, 2022, p. 65).

To evaluate whether the proposed Project would generate potentially significant short-term noise levels at the nearest receiver locations, a construction-related daytime noise level threshold of 80 dBA L_{eq} is used as a reasonable threshold to assess the daytime construction noise level impacts. As previously indicated, due to the lack of standardized construction noise thresholds, the FTA provides guidelines that can be considered reasonable criteria for construction noise assessment. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for noise sensitive residential land use with a nighttime exterior construction noise level of 70 dBA L_{eq} . As indicated on Table 4.11-5, the nearest receiver locations would satisfy the reasonable daytime 80 dBA L_{eq} significance threshold during Project construction activities. Therefore, the direct noise impacts due to Project construction noise are considered less than significant at all receiver locations (Urban Crossroads, 2022, p. 66).

Table 4.11-5 Construction Noise Level Compliance

Receiver Location ¹	Construction Noise Levels (dBA L _{eq})		
	Highest Construction Noise Levels ²	Threshold ³	Threshold Exceeded? ⁴
R1	60.3	80	No
R2	65.4	80	No
R3	67.2	80	No
R4	68.7	80	No
R5	68.9	80	No
R6	67.9	80	No
R7	64.3	80	No
R8	62.9	80	No
R9	64.0	80	No

¹ Noise receiver locations are shown on Figure 4.11-1.

² Construction noise level calculations based on distance from the construction activity, which is measured from the Project site boundary to the nearest receiver locations. CadnaA construction noise model inputs are included in Appendix 10.1 of the Project's noise study.
(Urban Crossroads, 2022, Table 10-3)

4. Construction Noise Analysis - Nighttime Pour Activities

As shown on Table 4.11-6, *Nighttime Concrete Pour Noise Level Compliance*, the noise levels associated with the nighttime concrete pour activities are estimated to range from 49.0 to 57.6 dBA L_{eq}. This includes the additional noise attenuation provided by the existing noise barriers. The analysis shows that the unmitigated nighttime concrete pour activities would satisfy the FTA 70 dBA L_{eq} nighttime residential noise level threshold at all of the nearest noise sensitive receiver locations. CadnaA nighttime concrete pour noise model inputs are included in Appendix 10.2 of *Technical Appendix I* (Urban Crossroads, 2022, p. 68). Impacts would be less than significant.

B. On-Site Operational Noise

The operational noise analysis is intended to describe noise level impacts associated with the expected typical daytime and nighttime activities at the Project site. Consistent with typical operating characteristics of commercial and warehouse land uses, the Project's business operations would primarily be conducted within the enclosed buildings, except for traffic movement, parking, as well as loading and unloading of trucks at designated loading bays. The on-site Project-related noise sources are expected to include but not be limited to: outdoor loading dock activity, roof-top air conditioning units, drive-through speakerphone activity, trash enclosure activity, parking lot vehicle movements, and truck movements (Urban Crossroads, 2022, p. 53).

Table 4.11-6 Nighttime Concrete Pour Noise Level Compliance

Receiver Location ¹	Concrete Pour Construction Noise Levels (dBA L _{eq})		
	Exterior Noise Levels ²	Threshold ³	Threshold Exceeded? ⁴
R1	49.0	70	No
R2	54.1	70	No
R3	55.9	70	No
R4	57.4	70	No
R5	57.6	70	No
R6	56.6	70	No
R7	53.0	70	No
R8	51.6	70	No
R9	52.7	70	No

¹ Noise receiver locations are shown on Figure 4.11-1.

² Nighttime Concrete Pour noise model inputs are included in Appendix 10.2 of the Project's noise study.

³ Construction noise level thresholds as shown in Table 4.11-3.

⁴ Do the estimated Project construction noise levels exceed the construction noise level threshold?

(Urban Crossroads, 2022, Table 10-4)

1. Reference Noise Levels

To estimate the Project operational noise impacts, reference noise level measurements were collected from similar types of activities to represent the noise levels expected with the development of the proposed Project. Reference noise level measurements shown on Table 4.11-7, *Reference Noise Level Measurements*, were used to estimate the Project operational noise impacts. It is important to note that the projected noise levels assume the worst-case noise environment with outdoor loading dock activity, roof-top air conditioning units, drive-through speakerphone activity, trash enclosure activity, parking lot vehicle movements, and truck movements all operating at the same time. These sources of noise activity will likely vary throughout the day and not all at the same time, so the analysis provided herein likely overstates the expected noise levels (Urban Crossroads, 2022, p. 53).

The reference noise level measurements were collected using Piccolo Type 2 integrating sound level meter and dataloggers. The Piccolo sound level meters were calibrated using a Larson-Davis calibrator, Model CAL 150. All noise meters were programmed in "slow" mode to record noise levels in "A" weighted form. The sound level meters and microphones were equipped with a windscreen during all measurements. All noise level measurement equipment satisfies the American National Standards Institute (ANSI) standard specifications for sound level meters ANSI S1.4-2014/IEC 61672-1:2013 (Urban Crossroads, 2022, p. 53).

Table 4.11-7 Reference Noise Level Measurements

Noise Source ¹	Noise Source Height (Feet)	Min./Hour ²		Reference Noise Level (dBA Leq) @ 50 Feet	Sound Power Level (dBA) ³
		Day	Night		
Outdoor Loading Dock Activity	8'	60	60	64.4	109.7
Roof-Top Air Conditioning Units	5'	39	28	57.2	88.9
Drive-Through Speakerphone Activity	3'	60	60	50.0	84.0
Trash Enclosure Activity	5'	10	10	57.3	89.0
Parking Lot Vehicle Movements	5'	60	60	55.7	87.8
Truck Movements	8'	60	60	59.9	91.6

¹ As measured by Urban Crossroads, Inc.

² Anticipated duration (minutes within the hour) of noise activity during typical hourly conditions expected at the Project site. "Daytime" = 7:00 a.m. - 10:00 p.m.; "Nighttime" = 10:00 p.m. - 7:00 a.m.

³ Sound power level represents the total amount of acoustical energy (noise level) produced by a sound source independent of distance or surroundings. Sound power levels calculated using the CadnaA noise model at the reference distance to the noise source.

(Urban Crossroads, 2022, Table 9-1)

2. *CadnaA Noise Prediction Model*

To fully describe the exterior operational noise levels expected from the proposed Project, Urban Crossroads, Inc. developed a noise prediction model using the CadnaA (Computer Aided Noise Abatement) computer program. Using the ISO 9613-2 protocol, CadnaA calculates the distance from each noise source to the noise receiver locations, using the ground absorption, distance, and barrier/building attenuation inputs to provide a summary of noise level at each receiver and the partial noise level contributions by noise source. The operational noise level calculations provided in the Project's noise study (*Technical Appendix I*) account for the distance attenuation provided due to geometric spreading, when sound from a localized stationary source (i.e., a point source) propagates uniformly outward in a spherical pattern. A default ground attenuation factor of 0.5 was used in the CadnaA noise analysis to account for mixed ground representing a combination of hard and soft surfaces. Appendix 9.1 of *Technical Appendix I* includes the detailed noise model inputs used to estimate the Project operational noise levels (Urban Crossroads, 2022, p. 57).

C. *Operational Noise Impact Analysis - Stationary Noise*

Using the reference noise levels to represent the proposed Project operations that include outdoor loading dock activity, roof-top air conditioning units, drive-through speakerphone activity, trash enclosure activity, parking lot vehicle movements, and truck movements, Urban Crossroads, Inc. calculated the operational source noise levels that are expected to be generated at the Project site and the Project-related noise level increases that would be experienced at each of the sensitive receiver locations. To demonstrate compliance with local noise regulations, the Project-only operational noise levels are evaluated against exterior noise level thresholds based on the City of Bakersfield exterior

noise level standards at nearby noise-sensitive receiver locations. As shown on Table 4.11-8, *Operational Noise Level Compliance*, the operational noise levels associated with the proposed Project would satisfy the City of Bakersfield daytime and nighttime exterior noise level standards. Therefore, the operational noise impacts would be less than significant at the nearby noise-sensitive receiver locations (Urban Crossroads, 2022, pp. 58-59).

Table 4.11-8 Operational Noise Level Compliance

Receiver Location ¹	Project Operational Noise Levels (dBA Leq) ²		Noise Level Standards (dBA Leq) ³		Noise Level Standards Exceeded? ⁴	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	36.8	36.6	55	50	No	No
R2	43.4	43.4	55	50	No	No
R3	46.0	45.9	55	50	No	No
R4	48.1	48.1	55	50	No	No
R5	47.7	47.6	55	50	No	No
R6	41.7	41.5	55	50	No	No
R7	39.1	39.0	55	50	No	No
R8	40.5	40.4	55	50	No	No
R9	41.8	41.7	55	50	No	No

¹ See Figure 4.11-2 for the receiver locations.

² Proposed Project operational noise levels.

³ City of Bakersfield Noise Element Table VII-2 Noise Level Performance Standards (Table 4.11-2).

⁴ Do the estimated Project operational noise source activities exceed the noise level standards?

"Daytime" = 7:00 a.m. - 10:00 p.m.; "Nighttime" = 10:00 p.m. - 7:00 a.m.

(Urban Crossroads, 2022 Table 9-4)

1. Operational Noise Level Increases

To describe the Project operational noise level increases, the Project operational noise levels are combined with the existing ambient noise levels measurements for the nearby receiver locations potentially impacted by Project operational noise sources. The difference between the combined Project and ambient noise levels describes the Project noise level increases to the existing ambient noise environment. Noise levels that would be experienced at receiver locations when Project-source noise is added to the daytime and nighttime ambient conditions (Urban Crossroads, 2022, p. 59).

As indicated in Table 4.11-9, *Daytime Project Operational Noise Level Increases*, the Project would generate daytime operational noise level increases ranging from 0.0 to 1.8 dBA L_{eq} at the nearest receiver locations. As indicated in Table 4.11-10, *Nighttime Operational Noise Level Increases*, the Project would generate nighttime operational noise level increases ranging from 0.0 to 1.2 dBA L_{eq} at the nearest receiver locations. Because the Project-related operational noise level increases would satisfy the operational noise level increase significance criteria presented in Table 4.11-3, the increases at the sensitive receiver locations would be less than significant (Urban Crossroads, 2022, p. 60).

Table 4.11-9 Daytime Project Operational Noise Level Increases

Receiver Location ¹	Total Project Operational Noise Level ²	Measurement Location ³	Reference Ambient Noise Levels ⁴	Combined Project and Ambient ⁵	Project Increase ⁶	Increase Criteria ⁷	Increase Criteria Exceeded?
R1	36.8	L1	58.3	58.3	0.0	5.0	No
R2	43.4	L2	46.4	48.2	1.8	5.0	No
R3	46.0	L3	60.9	61.0	0.1	3.0	No
R4	48.1	L4	59.8	60.1	0.3	5.0	No
R5	47.7	L5	60.8	61.0	0.2	3.0	No
R6	41.7	L6	65.8	65.8	0.0	1.5	No
R7	39.1	L7	53.6	53.8	0.2	5.0	No
R8	40.5	L8	53.8	54.0	0.2	5.0	No
R9	41.8	L9	63.3	63.3	0.0	3.0	No

¹ See Figure 4.11-2 for the receiver locations.

² Total Project daytime operational noise.

³ Reference noise level measurement locations as shown on Figure 4.11-1.

⁴ Observed daytime ambient noise levels as shown on Table 4.11-1.

⁵ Represents the combined ambient conditions plus the Project activities.

⁶ The noise level increase expected with the addition of the proposed Project activities.

⁷ Significance increase criteria as shown on Table 4.11-3.

(Urban Crossroads, 2022, Table 9-5)

D. Off-Site Traffic Noise Analysis

1. FHWA Traffic Noise Prediction Model

The expected roadway noise level increases from vehicular traffic were calculated by Urban Crossroads, Inc. using a computer program that replicates the FHWA Traffic Noise Prediction Model- FHWA-RD-77-108. This methodology is commonly used to describe the off-site traffic noise levels throughout California and is consistent with the City of Bakersfield General Plan Noise Element (Urban Crossroads, 2022, p. 27).

The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). In California the national REMELs are substituted with the California Vehicle Noise (Calveno) Emission Levels. Adjustments are then made to the REMEL to account for: the roadway classification (e.g., collector, secondary, major or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks,

Table 4.11-10 Nighttime Operational Noise Level Increases

Receiver Location ¹	Total Project Operational Noise Level ²	Measurement Location ³	Reference Ambient Noise Levels ⁴	Combined Project and Ambient ⁵	Project Increase ⁶	Increase Criteria ⁷	Increase Criteria Exceeded?
R1	36.6	L1	57.7	57.7	0.0	5.0	No
R2	43.4	L2	48.3	49.5	1.2	5.0	No
R3	45.9	L3	61.9	62.0	0.1	3.0	No
R4	48.1	L4	60.2	60.5	0.3	3.0	No
R5	47.6	L5	59.3	59.6	0.3	5.0	No
R6	41.5	L6	65.0	65.0	0.0	1.5	No
R7	39.0	L7	56.0	56.1	0.1	5.0	No
R8	40.4	L8	55.1	55.2	0.1	5.0	No
R9	41.7	L9	63.0	63.0	0.0	3.0	No

¹ See Figure 4.11-2 for the receiver locations.

² Total Project daytime operational noise.

³ Reference noise level measurement locations as shown on Figure 4.11-1.

⁴ Observed nighttime ambient noise levels as shown on Table 4.11-1.

⁵ Represents the combined ambient conditions plus the Project activities.

⁶ The noise level increase expected with the addition of the proposed Project activities.

⁷ Significance increase criteria as shown on Table 4.11-3.

(Urban Crossroads, 2022, Table 9-6)

and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or "soft" relates to the absorption of the ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period. Research conducted by Caltrans has shown that the use of soft site conditions is appropriate for the application of the FHWA traffic noise prediction model used in this analysis (Urban Crossroads, 2022, p. 27).

2. Traffic Noise Contours

To assess the off-site transportation CNEL noise level impacts associated with development of the proposed Project, noise contours were developed based on the Project's Traffic Study (*Technical Appendix J*). Noise contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway (Urban Crossroads, 2022, p. 35).

Noise contours were used to assess the Project's incremental traffic-related noise impacts at land uses adjacent to roadways conveying Project traffic. The noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway for the 70, 65, and 60 dBA noise levels. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels. In addition, because the noise contours reflect modeling of vehicular noise on area roadways, they appropriately do not reflect noise contributions from the surrounding

stationary noise sources within the Project study area. A summary of the exterior traffic noise levels for each traffic condition are included in Tables 7-1 through 7-8 of *Technical Appendix I* and traffic noise level contours worksheets are included in Appendix 7.1 of *Technical Appendix I* (Urban Crossroads, 2022, p. 35).

3. Existing Plus Project Traffic Noise Level Increases

The scenario in which Project traffic is added to existing traffic volumes would not actually occur, as both the commercial and distribution warehouse components of the Project would not be fully constructed and operated until 2029 conditions. Thus, this scenario is provided for information purposes only in order to fully analyze all of the traffic scenarios identified in the Project's Traffic Study (EIR *Technical Appendix J*). As shown in Table 4.11-11, *Existing with Project Traffic Noise Level Increases*, with the addition of Project traffic to existing traffic levels, Project off-site traffic noise level increases would range from 0.0 to 2.7 dBA CNEL on the study area roadway segments. Based on the significance criteria for off-site traffic noise presented in Table 4.11-3, existing sensitive land uses adjacent to the study area roadway segments would experience noise level increases that are below the identified thresholds of significance. While the analysis shows that Berkshire Road west of S. H Street (Segment #13) would experience a noise level increase of 2.7 dBA CNEL, the land to the south is represented by the Project and the land to the north is vacant and is owned by Kaiser Permanente for possible medical facility development. Therefore, the off-site traffic noise level increase of 2.7 dBA CNEL on Berkshire Road west of S. H Street (Segment #13) is not considered a significant noise level impact since there are no existing adjacent noise sensitive receivers that would experience this increase. As such, Project-related traffic noise impacts under Existing with Project conditions would be less than significant (Urban Crossroads, 2022, pp. 42-43).

4. 2024, 2029, and 2042 Traffic Noise Level Increases

As shown in Table 4.11-12, *2024 With Project Traffic Noise Level Increases*, the Project off-site traffic noise level increases would range from 0.0 to 2.5 dBA CNEL under 2024 traffic conditions. As shown in Table 4.11-13, *2029 With Project Traffic Noise Level Increases*, the Project off-site traffic noise level increases would range from 0.0 to 2.4 dBA CNEL under 2029 traffic conditions. As shown in Table 4.11-14, *2042 With Project Traffic Noise Level Increases*, the Project off-site traffic noise level increases would range from 0.0 to 2.4 dBA CNEL under 2042 traffic conditions (Urban Crossroads, 2022, pp. 43-44).

Table 4.11-11 Existing with Project Traffic Noise Level Increases

ID	Road	Segment	CNEL at Receiving Land Use (dBA) ¹			Incremental Noise Level Increase Threshold ²	
			No Project	With Project	Project Addition	Limit	Exceeded?
1	S. H St.	n/o Fairview Rd.	72.7	72.8	0.1	1.5	No
2	S. H St.	n/o Panama Ln.	71.6	71.9	0.3	1.5	No
3	S. H St.	s/o Panama Ln.	70.3	71.2	0.9	1.5	No
4	S. H St.	n/o Hosking Av.	62.7	65.4	2.7	3.0	No
5	S. H St.	s/o Hosking Av.	61.1	61.1	0.0	3.0	No
6	S. H St.	n/o Taft Hwy.	61.1	61.2	0.1	3.0	No
7	Panama Ln.	w/o Akers Rd.	76.1	76.2	0.1	1.5	No
8	Panama Ln.	w/o Wible Rd.	75.8	75.8	0.0	1.5	No
9	Panama Ln.	e/o Wible Rd.	76.9	76.9	0.0	1.5	No
10	Panama Ln.	w/o Colony St.	75.6	75.8	0.2	1.5	No
11	Panama Ln.	w/o S. H St.	75.6	75.7	0.1	1.5	No
12	Panama Ln.	e/o S. H St.	73.2	73.3	0.1	1.5	No
13	Berkshire Rd.	w/o S. H St.	71.0	73.7	2.7	_ ³	_ ³
14	Berkshire Rd.	e/o S. H St.	71.0	71.0	0.0	1.5	No
15	Berkshire Rd.	e/o Monitor St.	71.0	71.1	0.1	1.5	No
16	Hosking Av.	w/o Akers Rd.	70.6	70.8	0.2	1.5	No
17	Hosking Av.	w/o Wible Rd.	71.3	71.6	0.3	1.5	No
18	Hosking Av.	e/o Wible Rd.	72.7	73.0	0.3	1.5	No
19	Hosking Av.	w/o S. H St.	72.9	73.8	0.9	1.5	No
20	Hosking Av.	e/o S. H St.	72.4	72.5	0.1	1.5	No

¹ The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

² Does the Project create an incremental noise level increase exceeding the significance criteria?

³ Off-site traffic noise level increase threshold is limited to existing noise-sensitive land uses (General Plan Noise Element Standards for Project Noise Impacts for Mobile Sources, p. VII-13).
(Urban Crossroads, 2022, Table 7-9)

Table 4.11-12 2024 With Project Traffic Noise Level Increases

ID	Road	Segment	CNEL at Receiving Land Use (dBA) ¹			Incremental Noise Level Increase Threshold ²	
			No Project	With Project	Project Addition	Limit	Exceeded?
1	S. H St.	n/o Fairview Rd.	72.7	72.9	0.2	1.5	No
2	S. H St.	n/o Panama Ln.	71.9	72.1	0.2	1.5	No
3	S. H St.	s/o Panama Ln.	70.9	71.7	0.8	1.5	No
4	S. H St.	n/o Hosking Av.	63.3	65.7	2.4	3.0	No
5	S. H St.	s/o Hosking Av.	62.6	62.7	0.1	3.0	No
6	S. H St.	n/o Taft Hwy.	61.3	61.3	0.0	3.0	No
7	Panama Ln.	w/o Akers Rd.	76.3	76.4	0.1	1.5	No
8	Panama Ln.	w/o Wible Rd.	76.0	76.0	0.0	1.5	No
9	Panama Ln.	e/o Wible Rd.	76.9	76.9	0.0	1.5	No
10	Panama Ln.	w/o Colony St.	75.7	75.9	0.2	1.5	No
11	Panama Ln.	w/o S. H St.	75.7	75.8	0.1	1.5	No
12	Panama Ln.	e/o S. H St.	73.4	73.4	0.0	1.5	No
13	Berkshire Rd.	w/o S. H St.	71.6	74.1	2.5	_ ³	_ ³
14	Berkshire Rd.	e/o S. H St.	71.4	71.4	0.0	1.5	No
15	Berkshire Rd.	e/o Monitor St.	71.5	71.5	0.0	1.5	No
16	Hosking Av.	w/o Akers Rd.	71.3	71.5	0.2	1.5	No
17	Hosking Av.	w/o Wible Rd.	72.1	72.3	0.2	1.5	No
18	Hosking Av.	e/o Wible Rd.	73.4	73.6	0.2	1.5	No
19	Hosking Av.	w/o S. H St.	73.7	74.5	0.8	1.5	No
20	Hosking Av.	e/o S. H St.	73.1	73.1	0.0	1.5	No

¹ The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

² Does the Project create an incremental noise level increase exceeding the significance criteria?

³ Off-site traffic noise level increase threshold is limited to existing noise-sensitive land uses (General Plan Noise Element Standards for Project Noise Impacts for Mobile Sources, p. VII-13). (Urban Crossroads, 2022, Table 7-10)

Table 4.11-13 2029 With Project Traffic Noise Level Increases

ID	Road	Segment	CNEL at Receiving Land Use (dBA) ¹			Incremental Noise Level Increase Threshold ²	
			No Project	With Project	Project Addition	Limit	Exceeded?
1	S. H St.	n/o Fairview Rd.	72.7	72.9	0.2	1.5	No
2	S. H St.	n/o Panama Ln.	72.0	72.3	0.3	1.5	No
3	S. H St.	s/o Panama Ln.	71.0	71.8	0.8	1.5	No
4	S. H St.	n/o Hosking Av.	63.4	65.8	2.4	3.0	No
5	S. H St.	s/o Hosking Av.	63.0	63.0	0.0	3.0	No
6	S. H St.	n/o Taft Hwy.	61.3	61.3	0.0	3.0	No
7	Panama Ln.	w/o Akers Rd.	76.5	76.5	0.0	1.5	No
8	Panama Ln.	w/o Wible Rd.	76.1	76.2	0.1	1.5	No
9	Panama Ln.	e/o Wible Rd.	76.9	76.9	0.0	1.5	No
10	Panama Ln.	w/o Colony St.	75.8	76.0	0.2	1.5	No
11	Panama Ln.	w/o S. H St.	75.8	75.9	0.1	1.5	No
12	Panama Ln.	e/o S. H St.	73.4	73.5	0.1	1.5	No
13	Berkshire Rd.	w/o S. H St.	71.7	74.1	2.4	_ ³	_ ³
14	Berkshire Rd.	e/o S. H St.	71.7	71.8	0.1	1.5	No
15	Berkshire Rd.	e/o Monitor St.	71.9	71.9	0.0	1.5	No
16	Hosking Av.	w/o Akers Rd.	71.8	72.0	0.2	1.5	No
17	Hosking Av.	w/o Wible Rd.	72.6	72.8	0.2	1.5	No
18	Hosking Av.	e/o Wible Rd.	73.9	74.0	0.1	1.5	No
19	Hosking Av.	w/o S. H St.	74.2	74.9	0.7	1.5	No
20	Hosking Av.	e/o S. H St.	73.6	73.6	0.0	1.5	No

¹ The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

² Does the Project create an incremental noise level increase exceeding the significance criteria?

³ Off-site traffic noise level increase threshold is limited to existing noise-sensitive land uses (General Plan Noise Element Standards for Project Noise Impacts for Mobile Sources, p. VII-13).
(Urban Crossroads, 2022, Table 7-11)

Table 4.11-14 2042 With Project Traffic Noise Level Increases

ID	Road	Segment	CNEL at Receiving Land Use (dBA) ¹			Incremental Noise Level Increase Threshold ²	
			No Project	With Project	Project Addition	Limit	Exceeded?
1	S. H St.	n/o Fairview Rd.	72.8	72.9	0.1	1.5	No
2	S. H St.	n/o Panama Ln.	72.6	72.8	0.2	1.5	No
3	S. H St.	s/o Panama Ln.	71.4	72.1	0.7	1.5	No
4	S. H St.	n/o Hosking Av.	63.7	66.0	2.3	3.0	No
5	S. H St.	s/o Hosking Av.	64.0	64.1	0.1	3.0	No
6	S. H St.	n/o Taft Hwy.	61.4	61.4	0.0	3.0	No
7	Panama Ln.	w/o Akers Rd.	77.1	77.1	0.0	1.5	No
8	Panama Ln.	w/o Wible Rd.	76.6	76.6	0.0	1.5	No
9	Panama Ln.	e/o Wible Rd.	76.8	76.9	0.1	1.5	No
10	Panama Ln.	w/o Colony St.	75.9	76.2	0.3	1.5	No
11	Panama Ln.	w/o S. H St.	76.0	76.1	0.1	1.5	No
12	Panama Ln.	e/o S. H St.	73.7	73.7	0.0	1.5	No
13	Berkshire Rd.	w/o S. H St.	71.9	74.3	2.4	. ³	. ³
14	Berkshire Rd.	e/o S. H St.	72.8	72.8	0.0	1.5	No
15	Berkshire Rd.	e/o Monitor St.	73.2	73.2	0.0	1.5	No
16	Hosking Av.	w/o Akers Rd.	73.4	73.5	0.1	1.5	No
17	Hosking Av.	w/o Wible Rd.	74.2	74.3	0.1	1.5	No
18	Hosking Av.	e/o Wible Rd.	75.5	75.6	0.1	1.5	No
19	Hosking Av.	w/o S. H St.	75.7	76.3	0.6	1.5	No
20	Hosking Av.	e/o S. H St.	75.2	75.3	0.1	1.5	No

¹ The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

² Does the Project create an incremental noise level increase exceeding the significance criteria?

³ Off-site traffic noise level increase threshold is limited to existing noise-sensitive land uses (General Plan Noise Element Standards for Project Noise Impacts for Mobile Sources, p. VII-13). (Urban Crossroads, 2022, Table 7-12)

Based on the significance criteria for off-site traffic noise presented in Table 4.11-3, land uses adjacent to the study area roadway segments would experience noise level increases due to the unmitigated Project-related traffic noise levels that are below the identified thresholds of significance under 2024, 2029, and 2042 traffic conditions. While the analysis shows that Berkshire Road west of S. H Street (Segment #13) would experience noise level increases ranging from 2.5 dBA CNEL under 2024 conditions to 2.4 dBA CNEL under 2029 and 2042 conditions, the land to the south is represented by the Project and the land to the north is vacant and is owned by Kaiser Permanente for possible medical facility development. Therefore, the off-site traffic noise level increase of 2.4 dBA CNEL on Berkshire Road west of S. H Street (Segment #13) is not considered a significant noise level impact since there

are no existing adjacent noise sensitive receivers that will experience this increase over time. As such, Project-related traffic noise impacts under 2024, 2029, and 2042 traffic conditions would be less than significant (Urban Crossroads, 2022, pp. 43-44).

Threshold b: *Would the Project generate excessive groundborne vibration or groundborne noise levels?*

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods employed. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Reference ground vibration levels associated with various types of construction equipment are summarized in Table 4.11-15, *Vibration Source Levels for Construction Equipment*. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential for human response (annoyance) and building damage using the following vibration assessment methods defined by the FTA (Urban Crossroads, 2022, p. 68).

Table 4.11-15 Vibration Source Levels for Construction Equipment

Equipment	PPV (in/sec) at 25 feet
Small bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089

Federal Transit Administration, Transit Noise and Vibration Impact
Assessment Manual
(Urban Crossroads, 2022, Table 10-5)

Table 4.11-16, *Project Construction Vibration Levels*, presents the expected Project-related vibration levels at the nearby receiver locations. At distances ranging from 187 to 1,447 feet from Project construction activities, construction vibration velocity levels are estimated to range from 0.000 to 0.004 in/sec PPV. Based on maximum acceptable continuous vibration threshold of 0.3 PPV (in/sec), the typical Project construction vibration levels would fall below the building damage thresholds at all the noise sensitive receiver locations. Therefore, the Project-related vibration impacts are considered less than significant during typical construction activities at the Project site. Moreover, the vibration levels reported at the sensitive receiver locations are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating adjacent to the Project site perimeter (Urban Crossroads, 2022, p. 69). Impacts would be less than significant.

Table 4.11-16 Project Construction Vibration Levels

Receiver ¹	Distance to Const. Activity (Feet) ²	Typical Construction Vibration Levels PPV (in/sec) ³					Thresholds PPV (in/sec) ⁴	Thresholds Exceeded? ⁵
		Small bulldozer	Jackhammer	Loaded Trucks	Large bulldozer	Highest Vibration Level		
R1	192'	0.000	0.002	0.004	0.004	0.004	0.3	No
R2	1,415'	0.000	0.000	0.000	0.000	0.000	0.3	No
R3	199'	0.000	0.002	0.003	0.004	0.004	0.3	No
R4	195'	0.000	0.002	0.003	0.004	0.004	0.3	No
R5	196'	0.000	0.002	0.003	0.004	0.004	0.3	No
R6	187'	0.000	0.002	0.004	0.004	0.004	0.3	No
R7	1,447'	0.000	0.000	0.000	0.000	0.000	0.3	No
R8	875'	0.000	0.000	0.000	0.000	0.000	0.3	No
R9	301'	0.000	0.001	0.002	0.002	0.002	0.3	No

¹ Receiver locations are shown on Exhibit 10-A of the Noise and Vibration Impact Analysis (*Technical Appendix I*)

² Distance from receiver location to Project construction boundary.

³ Based on the Vibration Source Levels of Construction Equipment

⁴ Caltrans Transportation and Construction Vibration Guidance Manual, April 2020, Tables 19, p. 38.

⁵ Does the peak vibration exceed the acceptable vibration thresholds? "PPV" = Peak Particle Velocity (Urban Crossroads, 2022s, Table 10-6)

Threshold 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?

The closest airport to the Project site is the Bakersfield Municipal Airport located approximately 2.5 miles northeast of the Project site. Therefore, because the Project site is not located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, or within two miles of a public airport or public use airport, implementation of the proposed Project would not expose people residing or working in the Project area to excessive noise levels related to a private airstrip, airport land use plan or public airport or public use airport. Impacts would be less than significant and no mitigation is required (Urban Crossroads, 2022, p. 20).

4.11.6 CUMULATIVE IMPACT ANALYSIS

The cumulative study area for the issue of noise includes the Project vicinity as well as areas adjacent to roadways evaluated by the Project's Traffic Study (*Technical Appendix J*). Areas outside of the cumulative study area are too far away to be adversely impacted by noise and ground-borne vibration generated as a result of the proposed Project.

A. Construction Noise

The analysis under Threshold a. indicates that the proposed Project would not generate substantial amounts of construction-related noise that could adversely affect nearby sensitive receptors. Construction activities associated with the proposed Project and other construction projects in the area may overlap, resulting in cumulative periodic noise increases in the local area. However, construction noise impacts primarily affect the areas immediately adjacent to a construction site.

Although there are other projects in the area that may be undergoing construction at the same time as the proposed Project, short-term noise resulting from simultaneous construction on the Project site and other project sites would not be cumulatively considerable in consideration of the less-than-significant noise levels from Project-related construction activities. It is not reasonably foreseeable that combined cumulative construction noise levels of multiple concurrent projects would exceed the reasonable daytime 80 dBA L_{eq} significance threshold at the nearby receiver locations. In addition, City Municipal Code Section 9.22.050[A] limits the days and hours of construction activity to avoid disturbances during the noise sensitive nighttime hours. Although nighttime concrete pouring activities may occur on the Project site, other nearby projects have not requested to conduct construction activities at night within 1,000 feet of the same residential uses. Because construction activities are typically limited to weekdays, during daylight hours, the direct and cumulative construction noise impacts are considered a nuisance or annoying, rather than a significant impact upon surrounding land uses (Urban Crossroads, 2022, p. 68).

B. Stationary Noise

The analysis presented for Threshold a. addresses the Project's contribution of noise to existing cumulative noise sources (i.e., ambient noise) in the Project area. As previously shown in Table 4.11-9 and Table 4.11-10, the Project's noise contribution would not be perceptible to noise-sensitive receptors in the Project area during daytime or nighttime hours. Therefore, the Project's permanent stationary noise impacts would not be cumulatively-considerable.

C. Traffic Noise

The analysis presented under Threshold a. evaluates the Project's traffic noise contribution along study area roadways under the Existing, Year 2024, Year 2029, and Year 2042 with Project traffic conditions. As previously shown in Table 4.11-11 through Table 4.11-14, the Project's traffic noise increases would be below the thresholds of significance previously identified in Table 4.11-3 under Existing, 2024, 2029, and 2042 traffic conditions. While the analysis shows that Berkshire Road west of S. H Street (Segment #13) would experience noise level increases ranging from 2.7 dBA CNEL under Existing conditions to 2.4 dBA CNEL under 2029 and 2042 conditions, the land to the south is represented by the Project and the land to the north is vacant and is owned by Kaiser Permanente for possible medical facility development. Therefore, the off-site traffic noise level increases of up to 2.7 dBA CNEL on Berkshire Road west of S. H Street (Segment #13) is not considered a significant noise level impact since there are no existing adjacent noise sensitive receivers that would experience this increase over time. Additionally, it should be noted that the analysis of Existing, 2024, 2029, and 2042 traffic conditions,

as presented in Table 4.11-11 through Table 4.11-14, accounts for traffic associated with existing and cumulative developments as identified by the Project's Traffic Study (*Technical Appendix J*). Accordingly, Project-related traffic impacts would be less than significant on a cumulatively-considerable basis under Existing, 2024, 2029, and 2042 traffic conditions.

D. Groundborne Vibration and Noise

During construction, the Project's peak vibration impacts would occur during the grading phase when large pieces of equipment, like bulldozers, are operating on-site. (During the non-grading phases of Project construction, when smaller pieces of equipment are used on-site, the Project's vibration would be minimal.) As previously presented Table 4.11-16, the typical Project construction vibration levels would fall below the building damage thresholds at all the noise sensitive receiver locations. Therefore, the Project-related vibration impacts are considered less than significant during typical construction activities at the Project site. Moreover, the vibration levels reported at the sensitive receiver locations are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating adjacent to the Project site perimeter.

Under long-term conditions, the Project would not include or require equipment or activities that would result in perceptible groundborne vibration beyond the Project site. Trucks would travel to and from the Project site along local roadways; however, vibration levels for heavy trucks operating at the posted speed limits on paved surfaces are not perceptible beyond the roadway. The Project would not cumulatively-contribute to the exposure of persons to excessive groundborne vibration or noise levels during long-term operation.

E. Airport Noise

The Project would not involve the construction, operation, or use of any public airports or public use airports. There are no conditions associated with implementation of the Project that would contribute airport noise or exposure of additional people to unacceptable levels of airport noise. Accordingly, the Project would have no potential to cumulatively-contribute to impacts associated with noise from a public airport, public use airport, or private airstrip. Additionally, the Project site and the immediately surrounding area are not subject to substantial airport-or air traffic-related noise. Accordingly, there is no potential for cumulative development to expose persons residing or working in the Project area to excessive airport-related noise levels.

4.11.7 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less-than-Significant Impact. Noise levels generated by the Project's short-term construction would be less than significant at the nearest sensitive receptor. On-site operational noise levels would be less than significant at the nearest sensitive receptor. In addition, Project-related traffic noise increases would be below the identified thresholds of significance under Existing, 2024, 2029, and 2042 traffic conditions. Accordingly, the Project would not 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, and impacts would be less than significant.

Threshold b: Less than Significant Impact. The Project's construction and operational activities would not result in a perceptible groundborne vibration or noise that exceed thresholds of significance.

Threshold c: Less than Significant Impact. The Project site is not located within the vicinity of a private airstrip, is not located in an airport land use plan, and is not located within two miles of a public airport or public use airport. Therefore, the Project would not expose people residing or working in the Project area to excessive noise levels related to a private airstrip, airport land use plan or public airport or public use airport.

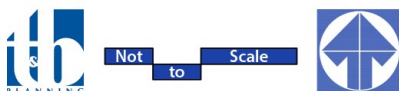
4.11.8 MITIGATION

Impacts would be less than significant; therefore, mitigation measures are not required.



Source(s): Urban Crossroads (05-26-2022)

Figure 4.11-1



Noise Measurement Locations

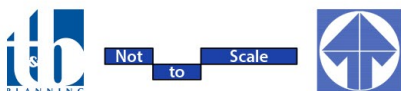
Lead Agency: City of Bakersfield

SCH No. 2022030196

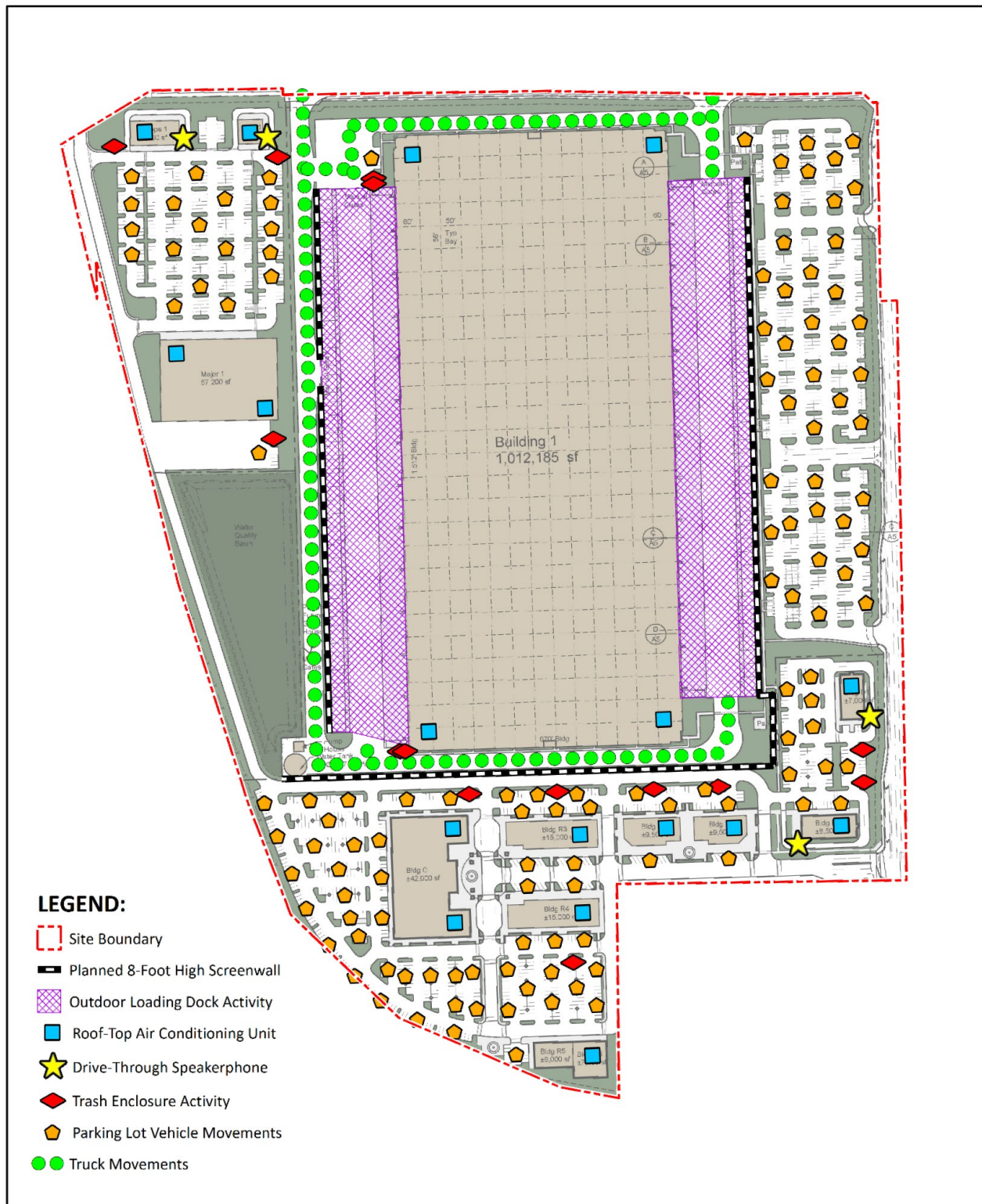


Source(s): Urban Crossroads (05-05-2022)

Figure 4.11-2

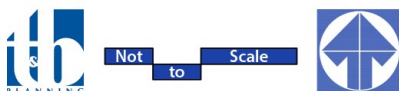


Sensitive Receiver Locations



Source(s): Urban Crossroads (05-05-2022)

Figure 4.11-3



Operational Noise Source Locations

4.12 POPULATION AND HOUSING

The following analysis in this Subsection 4.12 discloses existing population and housing data for the City of Bakersfield and assesses the potential for the Majestic Gateway Project to result in direct or indirect impacts on population and housing. The analysis in this Subsection is based, in part, on information contained within the Metropolitan Bakersfield General Plan and population and housing projections from the Kern County Association of Governments (Kern COG). All references used in this Subsection are listed in EIR Section 7.0, *References*.

4.12.1 EXISTING CONDITIONS

The Project site is located within the southern portion of the City of Bakersfield in Kern County, California. According to U.S. Census data, Kern County had a population of 909,235 as of April 1, 2020 (USCB, 2020a). The U.S. Census Bureau defines an “urbanized area” as a densely settled core of census tracts and/or census blocks that have 50,000 or more residents and meet minimum requirements while also being adjacent to areas containing non-residential urban land uses. The Project site is located within the boundaries of the Census-defined Bakersfield urbanized area.

The Project site is vacant and undeveloped. Land uses in the immediate vicinity of the Project site are depicted in Section 2.0, *Environmental Setting*. In summary, to the north of the Project site is Berkshire Road, north of which is vacant land and commercial development. To the west of the Project site is State Route 99 (SR-99) and to the southwest is the Hosking Avenue/SR-99 interchange. To the south is Hosking Avenue and vacant land at the northwest corner of Hosking Avenue and South H Street. South of Hosking Avenue and west of South H Street is vacant, undeveloped land planned for commercial development. To the east of the Project site is South H Street. Immediately east of South H Street is the Kern Island Canal, east of which is a solid wall, behind which is a residential neighborhood of single-family residential homes. Horizon Elementary School and Golden Valley High School are both located in the easterly portion of the neighborhood at the intersection of Hosking Avenue and Monitor Street. Monitor Street is approximately 0.5-mile east of the Project site.

A. Demographics

According to U.S. Census data, Kern County had a population of 909,235 as of April 1, 2020 (USCB, 2020a). The City of Bakersfield had a population of approximately 403,455 people in 2020 and according to the City of Bakersfield community profile statistics, the total population was 398,517 in 2021 (USCB, 2020b) (City of Bakersfield, 2021).

The *Kern Council of Governments (Kern COG) Regional Transportation Plan* cites a 2020 census population of 598,428 for Metro Bakersfield with a population growth forecast of 700,600 for 2035 and 772,800 for 2046. (Kern COG, 2022, Table 3-2, p. 3-7)

Kern COGs Draft 6th Cycle *Regional Housing Needs Allocation Plan* projects a household growth of 12,713 for years 2023-2031 for Bakersfield, a 64.98% share of household growth among the jurisdictions in Kern County. (Kern GOG, 2022, p. 6)

B. Land Use and Zoning Designations

The Metropolitan Bakersfield General Plan (MBGP) designates the land use of the Project site as General Commercial (GC). The “GC” land use designation is intended for retail and service facilities providing a broad range of goods and services which serve the day-to-day needs of nearby residents (Bakersfield, 2007, p. II-7). The Project site is zoned Regional Commercial-Planned Commercial Development Combining (C-2/PCD). According to the City of Bakersfield Municipal Code, the “C-2/PCD” combining zone is typically for larger commercial centers that contain a mix of larger scale stores and smaller retail outlets (Bakersfield, 2022, Title 17). The “GC” land use designation and the “C-2/PCD” zoning classification do not permit the construction of housing units by right, although housing can be requested in the C-2 PCD zone through the submittal and approval of a Conditional Use Permit

4.12.2 REGULATORY SETTING

A. Federal Plans, Policies, and Regulations

1. Fair Housing Act

The Fair Housing Act is the federal law regulating anti-discrimination of housing. The federal Fair Housing Act protects people from discrimination when they are renting or buying a home, getting a mortgage, seeking housing assistance, or engaging in other housing-related activities. Additional protections apply to federally-assisted housing (HUD, n.d.).

2. U.S. Census Bureau

The U.S. Census Bureau is the leading source of statistical information about the nation’s people. Population statistics come from decennial censuses, which count the entire U.S. population every ten years, along with several other surveys. The American Community Survey (ACS) is an ongoing annual survey intended to help communities decide where to target services and resources. Demographic surveys measure income, poverty, education, health insurance coverage, housing quality, crime victimization, computer usage, and many other subjects. Economic surveys are conducted monthly, quarterly, and yearly, and cover selected sectors of the nation’s economy (USCB, n.d.).

B. State and Regional Plans, Policies, and Regulations

1. State Housing Law

The State law regulating residential occupancies is entitled the “State Housing Law” and is found in Division 13, Part 1.5 of the California Health and Safety Code (HSC), Sections 17910 to 17998.3 Regulations implementing the State Housing Law mandate statewide residential building standards for new construction, which are found in the California Code of Regulations, Title 24, also referred to as the California Green Building Standards Code (CalGreen) (CA Legislative Info, n.d.).

2. Fair Employment and Housing Act (FEHA)

The Department of Fair Employment and Housing (DFEH) is the state agency charged with enforcing California’s civil rights laws. The mission of the DFEH is to protect the people of California from unlawful

discrimination in employment, housing, businesses, and state-funded programs, and from bias-motivated violence and human trafficking. DFEH also is responsible for enforcing state laws that make it illegal to discriminate against a job applicant or employee because of a protected characteristic (DFEH, n.d.).

3. *Kern Council of Governments (Kern COG)*

Kern Council of Governments (COG) is a federally designated Metropolitan Planning Organization (MPO) and State designated Regional Transportation Planning Agency (RTPA). The preparation of a Regional Transportation Plan (RTP) is one of the primary statutory responsibilities of Kern COG under federal and State law (Kern COG, 2018, pp. ES-1). However, Kern COG also is responsible for determining regional housing need allocations for the County and its constituent cities.

4. *Regional Housing Needs Assessment (RHNA)*

State Housing Law (California Government Code Article 10.6, Sections 65580-65590) mandates that local governments, through COGs, identify existing and future housing needs in a Regional Housing Needs Assessment (RHNA). The RHNA provides recommendations and guidelines to identify housing needs within counties and cities to adequately plan to meet the housing needs of everyone in the community across four income categories, which are defined in terms of area median household income.

The City of Bakersfield addresses its RHNA allocation through the Housing Element of the Metropolitan Bakersfield General Plan. For the period 2015 to 2023, the City of Bakersfield's RHNA allocation required to the City to plan for the accommodation of 36,290 new housing units (Bakersfield, 2022, p. 109).

In August 2021, the California Department of Housing and Community Development (HCD) communicated to Kern COG, Kern County's mandated regional share of the State's existing and projected housing needs for the planning period of 2022-2031 as 57,650 housing units needed. Kern GOG is then responsible for determining how each of its jurisdictions will participate to provide these housing units by 2031. Kern COG's Draft 6th Cycle RHNA Plan for the planning period of June 2023-December 2031 was released for public review on April 22, 2022. The 6th Cycle RHNA Plan is not approved and subject to change, but for information disclosure purposes, it calls for the City of Bakersfield to plan for an additional 37,461 housing units, with 18,211 units in the very-low and low-income categories and 19,250 units in the moderate and above-moderate income categories for the planning period through year 2031 (Kern GOG, 2022). When the RHNA Plan is approved by Kern COG, the City of Bakersfield will then need to update its Housing Element to comply.

5. *Senate Bill 330 (Housing Crisis Act of 2019) and Senate Bill 8 (2021)*

On October 9, 2019, California Governor Gavin Newsom signed the Housing Crisis Act of 2019 (HCA) into law, commonly known as Senate Bill (SB) 330 (Chapter 654, Statutes of 2019) to respond to the California housing crisis. On September 16, 2021, Gov. Newsom also signed SB 8 (Chapter 161, Statutes of 2021), which is an extension of the HCA. The HCA aims to increase residential unit development, protect existing housing inventory, and expedite permit processing. Under this legislation, municipal and county agencies are restricted in ordinances and policies that can be applied to residential development. For example, State law now prohibits a local agency from disapproving, or conditioning approval in a manner that renders infeasible, a housing

development project for very low, low-, or moderate-income households or an emergency shelter unless the local agency makes specified written findings based on a preponderance of the evidence in the record. SB 330 requires a local agency that proposes to disapprove a housing development project that complies with applicable, objective general plan and zoning standards and criteria that were in effect at the time the application was deemed to be complete, or to approve it on the condition that it be developed at a lower density, to base its decision upon written findings supported by substantial evidence on the record that specified conditions exist, and places the burden of proof on the local agency to that effect (CA Legislative Info, n.d.).

C. City Plans, Policies, and Regulations

1. Metropolitan Bakersfield General Plan Housing Element

The current State-certified Metropolitan Bakersfield General Plan Housing Element (2015-2021) was approved and adopted by the Bakersfield City Council in January 2016. For the period 2015 to 2023, the Housing Element presents a plan to accommodate 36,290 new housing units in the City (Bakersfield, 2022, p. 109). Five goals are presented: 1) To provide housing opportunities and increase the availability of permanent housing for all economic segments in the City; 2) To provide and maintain an adequate supply of sites for the development of affordable new housing; 3) To preserve, rehabilitate, and enhance existing housing and neighborhoods; 4) To promote equal opportunity to secure safe, sanitary, and affordable housing for all members of the community...; and 5) To encourage sustainable development patterns and promote infill with sufficient and sustainable affordable housing with access to transit, employment opportunities, community facilities and services, and amenities (Bakersfield, 2022, pp. 111-112).

4.12.3 BASIS FOR DETERMINING SIGNIFICANCE

Section XIV of Appendix G to the CEQA Guidelines addresses typical adverse effects associated with population and housing, and includes the following threshold questions to evaluate the Project's impacts on population and housing (OPR, 2019):

- 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);*
- b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere;*

4.12.4 IMPACT ANALYSIS

Threshold 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)?*

A. Employment Generation

Because the end-users of the Project are not yet known, for purposes of analysis in this EIR, employment estimates were provided by the Project Applicant based on their experience in the real estate industry and

expectations for the proposed Project's range of building users and tenants. The Project Applicant expects that that the proposed warehouse building operator would employ up to 1,200 persons, assuming the building operates on three shifts per day, and the commercial component of the project would generate up to approximately 300 jobs using a factor of 600 s.f. of building space per employee (187,500 s.f. of building space ÷ 600 s.f./employee = 312 jobs).

This information provided by the Project Applicant for the warehouse building is consistent with average employment density factors provided in a Commercial Real Estate Development Association (formerly National Association of Industrial and Office Properties (NAIOP)) research study titled "Logistics Trends and Specific Industries that will Drive Warehouse and Distribution Growth and Demand for Space." According to data from NAIOP, non-refrigerated warehouses employ on average one (1) worker for every 2,574 square feet (s.f.) of building area, while refrigerated warehouses employ an average of one (1) worker for every 1,910 s.f. of building area. Development of the warehouse building as analyzed in this EIR assumes 910,966.5 s.f. of non-refrigerated building area and 101,218.5 s.f. of refrigerated building space. Based on these estimated employment generation rates, the warehouse is expected to create approximately 406 jobs [(910,966.5 s.f. ÷ 2,574 s.f./employee = 354 employees) + (101,218.5 s.f. ÷ 1,910 s.f./employee = 53 employees) = 407 total employees] for one shift (NAIOP, 2010, p. 15). Conservatively assuming that the Project's warehouse would operate at three shifts per day, 407 employees x 3 shifts = 1,221 jobs. Although the actual number of jobs could be lower, the Project Applicant's estimate of 1,200 jobs appears reasonable as a high-end estimate for the warehouse operations.

B. Induced Population Growth Analysis

As shown in Table 4.12-1, *Growth Trends for Kern County and Bakersfield*, for Metro Bakersfield, Kern COG forecasts 229,300 jobs for 2035 and 239,500 jobs for 2046, an average rate of growth of 0.5% from years 2020 to 2046, resulting in an increase of 1,077 jobs annually on average.

Table 4.12-1 Growth Trends for Kern County and Bakersfield

								1980-2020		2020-2046		
								Historic Growth		Forecast Growth		
Community		Census	Census	Census	Census	Census	Forecast	Forecast	Average Annual		Average Annual	
	Year	1980	1990	2000	2010	2020	2035	2046	Rate	Increase	Rate	Increase
Kern County												
Population		403,089	543,477	661,653	839,600	909,235	1,076,000	1,186,600	2.0%	12,421	1.0%	10,565
Group Quarters		8,385	15,148	29,970	36,575	28,704	32,490	28,680	3.0%	499	0.0%	-1
Households		139,881	181,480	208,655	254,610	281,498	318,180	350,720	1.7%	3,475	0.8%	2,637
Employment		166,901	214,668	232,461	274,900	334,800	374,780	395,110	1.7%	4,120	0.6%	2,298
Metro Bakersfield												
Population		228,000	329,100	409,800	578,300	598,428	700,600	772,800	2.3%	9,090	1.0%	6,643
Group Quarters		2,000	3,100	4,400	3,900	5,240	5,900	5,200	2.3%	80	0.0%	-2
Households		89,500	120,000	134,100	176,600	187,362	209,000	229,200	1.8%	2,402	0.8%	1,594
Employment		99,200	136,700	158,500	183,700	211,235	229,300	239,500	1.8%	2,749	0.5%	1,077

(Kern COG, 2022, Table 3-2)

In 2014, the jobs to housing ratio in Kern County was estimated at 1.22. Kern COG's forecast indicates that Kern County will experience a slight reduction in jobs per household, declining to 1.13 in 2035 and 1.06 in 2042 (Kern COG, 2018, p. 3-6).

The Project's labor demand is not expected to draw substantial numbers of new, unplanned residents to the area. The proposed Project would provide job opportunities closer to home for existing and future residents in the nearby area, which would subsequently help achieve a better job-to-housing balance. Also, the Project would help to diversify job opportunities in the area. According to Kern County's 2021 Comprehensive Economic Development Strategy (CEDS), the County recognizes constraints related to upskilling 91,000 struggling County workers who do not have any post-secondary education. As stated in the CEDS, these gaps emphasize the importance of prioritizing economic development centered on middle-skill, middle-income job creation in Kern County (Kern County, 2021, p. 8).

Based on the foregoing, the proposed Project is not expected to be a catalyst for any substantial, unplanned population increase. There are no components of the proposed Project that would remove obstacles to development in the local area (and result in indirect unplanned population growth). Furthermore, as part of the Project's proposed VTPM No. 12438, the Project Applicant would dedicate 5.92 acres of right-of-way to the City of Bakersfield for the widening of South H Street and Berkshire Road. Utilities are site adjacent in these roads. The proposed Project would connect to site-adjacent existing and planned infrastructure and would not construct new infrastructure or increase the capacity of existing infrastructure. Therefore, none of the proposed Project's physical improvements would remove any development obstacles/barriers and that could result in unplanned growth. The Project site is already surrounded by urban development as shown on Figure 2-3, *Surrounding Land Uses*, in Section 2.0, *Environmental Setting*.

Based on the foregoing analysis, neither the proposed Project or any Project-related component would directly or indirectly result in substantial unplanned population growth that would cause a significant impact to the environment. Impacts would be less-than-significant.

<p><i>Threshold b: Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?</i></p>
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The Project site does not contain any housing units under existing conditions and the Project site's General Plan land use designation of General Commercial (GC) and zoning classification of Regional Commercial-Planned Commercial Development Combining (C-2/PCD) do not allow housing units to be built by right on the property, although housing can be requested through a Conditional Use Permit in the C-2/PCD Zone. Because no housing units exist on the Project site, the Project would not directly displace people or housing units and thus there would be no need to construct replacement housing elsewhere. As such, no direct impact would occur.

Public comments made in response to this EIR's NOP requested that the City consider the potential that some residents living near the Project site might choose to relocate if they don't want to live near the proposed Project should it be approved and constructed. First, the potential that households will voluntarily move due the Project is speculative. Second, there would be an equal speculative assumption that other households would

choose to move closer to the Project site should the Project be approved and constructed due to the availability of shopping and employment opportunities at the site. The planning principle of locating housing opportunities near shopping and job opportunities is inherent in State Senate Bill 743, which promotes the reduction of greenhouse gas emissions by reducing vehicle miles traveled, which in part promotes diverse land uses and infill development to reduce the distances that people drive in vehicles on a daily basis. With existing housing being located close to the Project site to the east, east of South H Street, there would be opportunities for residents to walk and bike to the Project site, and should they choose to drive, the distance would be short. In addition, Goal 5 of the Metropolitan Bakersfield General Plan Housing Element aims to encourage sustainable development patterns in part by providing housing with access to employment opportunities and services (Bakersfield, 2022, p. 112).

Should any existing residents decide to move due to the Project, it is reasonable to assume that the housing unit being vacated would be reoccupied given the Statewide housing shortage (refer above to the description of SB 220 and SB 8, the Housing Crisis Act of 2019). It is also reasonable to assume that residents choosing to relocate, if any, would not be substantial in number to the extent that new unplanned replacement housing would need to be constructed. Based on Kern COG's Draft 6th Cycle RHNA Plan for the planning period of June 2023-December 2031, which was released for public review on April 22, 2022, the City of Bakersfield needs to plan for an additional 37,461 housing units, with 18,211 units in the very-low and low-income categories and 19,250 units in the moderate and above-moderate income categories for the planning period through year 2031 (Kern COG, 2022). As such, there is adequate planning for housing needs in the City across all income categories, including for the accommodation of any residents that may decide to move from their current house to a different house. There is no evidence to suggest that the Project would cause substantial numbers of people to decide to move, and trigger the need for new unplanned housing to be built elsewhere to accommodate those households, particularly in light of the City already planning to accommodate 37,461 housing units (based on Kern COG's Draft 6th Cycle RHNA Plan) through year 2031. Indirect impacts related to the speculative potential of replacement housing would be less than significant.

4.12.5 CUMULATIVE IMPACT ANALYSIS

The proposed Project would not lead to substantial unplanned population growth or remove any housing that would require the construction of replacement housing elsewhere. As such, the proposed Project would not contribute to a cumulatively significant impact associated with the need to construct unplanned housing units. The proposed Project would supply employment opportunities for existing residents in the Project area. Population growth resulting from the employment opportunities offered by the proposed Project is not expected because the Projects' employees are expected to already live in the local area. The creation of employment opportunities by the proposed Project would benefit the City and Kern County by helping to achieve a better jobs-to-housing balance, and encouraging residents to work locally instead of commuting outside of the City for work. As such, the proposed Project's contribution to unplanned housing and population growth would not be cumulatively considerable.

4.12.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less-than-Significant Impact. The estimated 1,500 jobs that could be generated by the Project are expected to be filled by a labor force that already resides in the region. Accordingly, the Project would not induce substantial unplanned population growth.

Threshold b: Less-than-Significant Impact. No residences are located on the Project site and no direct displacements of housing or people would occur. Any indirect influences that the Project may have on existing households' decisions to move further from the Project site or closer to the Project site, if any, are speculative and nonetheless would not result in the need to construct new homes caused by Project-related displacement of people.

4.12.7 MITIGATION

Impacts would be less than significant; therefore, mitigation is not required.

4.13 TRANSPORTATION

The analysis in this Subsection is based in part on a technical report prepared by Ruettggers & Schuler Civil Engineers (R&S), entitled, “Traffic Study for A Proposed Industrial/Warehouse and Retail Commercial Land Development at South H Street and Hosking Avenue, Bakersfield California” (herein, “TIA”), dated April 25, 2022, and included as *Technical Appendix J* to this EIR (R&S, 2022).

On December 28, 2018, updates to the California Environmental Quality Act (CEQA) Guidelines were approved by the Office of Administrative Law (OAL). As part of the updates to the CEQA Guidelines, thresholds of significant for evaluation of impacts to transportation have changed. As required by Senate Bill (SB) 743, new Threshold b. of the CEQA Guidelines for Transportation requires an evaluation of impacts due to Vehicle Miles Traveled (VMT), which replaced the Level of Service (LOS) criteria (i.e., automobile delay) that has been utilized in the past to evaluate potential effects to transportation under CEQA. Pursuant to CEQA Guidelines Section 15064.3(a), “...a project’s effect on automobile delay shall not constitute a significant environmental impact.”

4.13.1 EXISTING CONDITIONS

A. Existing Vehicle Miles Traveled (VMT)

The regional transportation model, maintained by the Kern Council of Governments (Kern COG), was used to estimate baseline VMT within Kern County. The Kern COG model is developed for use in adoption of the Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS). The Kern COG model contains “gateway” points to State transportation model data and the VMT scripts within the Kern COG model account for Statewide travel, to assure that the model does not terminate at TAZ or jurisdictional boundaries. The current model baseline year is 2018. The output from the Kern COG model provides a detailed breakdown of the number of employees and trips and VMT by trip purpose by TAZ county-wide. Existing total VMT, total employment, and VMT per employee for industrial uses are summarized in Table 4.13-1, *Kern County Existing Industrial Employment and VMT*. Total VMT for retail commercial uses is summarized in Table 4.13-2, *Kern County Existing Retail Commercial Overall VMT* (R&S, 2022, pp. 8-10).

Table 4.13-1 Kern County Existing Industrial Employment and VMT

	<u>Baseline</u>		
<u>Year</u>	<u>VMT Home-to-work</u>	<u>Employees</u>	<u>VMT per Employee</u>
2018	5,899,656	307,783	19.17

(R&S, 2022, Table 1)

Table 4.13-2 Kern County Existing Retail Commercial Overall VMT

<u>Model scenario</u>	<u>Overall VMT (Countywide)</u>
2018 Baseline	24,064,856

(R&S, 2022, Table 3)

B. Study Area Description

The operational analysis study area for the analysis of traffic is generally bounded by White Lane on the north, Taft Highway on the south, Cottonwood Road on the east, and Gosford Road on the west. The study area boundary was set based upon a threshold of 50 PM peak hour Project trips. The scope of the study was developed in association with the City of Bakersfield Traffic Department. A total of 45 intersections are included in the operational analysis, of which 10 are unsignalized and 35 are signalized. The study area, along with the turn movement volumes at the studied intersections, is shown in Figures 4 through 33 of the Project's TIA (*Technical Appendix J*) (R&S, 2022, p. 11).

C. Existing Traffic

Weekday AM and PM peak hour turning movements were field measured in July 2021. Traffic counts were conducted between the hours of 7:00 to 9:00 AM and 4:00 to 6:00 PM. Traffic counts were reviewed and compared to pre-COVID-19 count data from 2018 and 2014, as well as Kern COG Average Daily Traffic (ADT) data for the years prior to 2020 and recent counts published for 2021 for the purpose of assessing appropriateness of the data with respect to potential temporary declines in traffic due to COVID-19. In general, the daily counts from the Kern COG ADT data for 2021 indicate that most of the streets are operating in the pre-2020 range. However, for Hosking Avenue at the SR-99 ramps and along intersections to the west of SR-99, the 2021 counts were measurably less than 2018 count data. Therefore, 2018 data was used at the SR-99 ramp intersections and count data was adjusted upward accordingly for east-west through movements along Hosking Avenue west of SR-99. Peak hour turning movement volumes for 2021, with these noted adjustments, are shown in Figure 8 and 9 of the Project's TIA (*Technical Appendix J*) (R&S, 2022, pp. 17-18). It should be noted that the use of 2018 data may be conservative insofar as many companies and businesses have not returned to a one hundred percent "return to the office policy," therefore 2018 conditions may overstate existing baseline traffic.

4.13.2 APPLICABLE REGULATORY REQUIREMENTS

A. State Regulations

1. Assembly Bill 1358 (AB 1358) – Complete Streets Act

In September 2008, Governor Schwarzenegger signed into law Assembly Bill 1358 (AB 1358), the Complete Streets Act. AB 1358 requires that the legislative body of a city or county, upon any substantive revision of the circulation element of the general plan, modify the circulation element to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that

is suitable to the rural, suburban, or urban context of the general plan. By requiring new duties of local officials, AB 1358 imposes a State-mandated local program. AB 1358 required the Office of Planning and Research (OPR) to prepare or amend guidelines for a legislative body to accommodate the safe and convenient travel of users of streets, roads, and highways in a manner that is suitable to the rural, suburban, or urban context of the general plan, and in doing so to consider how appropriate accommodation varies depending on its transportation and land use context. AB 1358 authorized OPR, in developing these guidelines, to consult with leading transportation experts, including, but not limited to, bicycle transportation planners, pedestrian planners, public transportation planners, local air quality management districts, and disability and senior mobility planners (CA Legislative Info, n.d.).

2. *Statewide Transportation Improvement Program (STIP)*

The Statewide Transportation Improvement Program (STIP) is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the Transportation Investment Fund and other funding sources. STIP programming generally occurs every two years. The programming cycle begins with the release of a proposed fund estimate in July of odd-numbered years, followed by California Transportation Commission (CTC) adoption of the fund estimate in August (odd years). The fund estimate serves to identify the amount of new funds available for the programming of transportation projects. Once the fund estimate is adopted, Caltrans and the regional planning agencies prepare transportation improvement plans for submittal by December 15th (odd years). Caltrans prepares the Interregional Transportation Improvement Plan (ITIP) and regional agencies prepare Regional Transportation Improvement Plans (RTIPs). Public hearings are held in January (even years) in both northern and southern California. The STIP is adopted by the CTC by April (even years) (Caltrans, n.d.).

3. *Senate Bill 743 (SB 743)*

Senate Bill 743 (SB 743, Steinberg, 2013), which was codified in Public Resources Code Section 21099, required changes to the implementing State CEQA Guidelines regarding the analysis of transportation impacts. As one appellate court explained: “During the last 10 years, the Legislature has charted a course of long-term sustainability based on denser infill development, reduced reliance on individual vehicles and improved mass transit, all with the goal of reducing greenhouse gas emissions. Section 21099 is part of that strategy...” (*Covina Residents for Responsible Development v. City of Covina* (2018) 21 Cal.App.5th 712, 729.) Pursuant to Section 21099, the criteria for determining the significance of transportation impacts must “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” (*Id.*, subd. (b)(1); see generally, adopted State CEQA Guidelines, § 15064.3, subd. (b) [Criteria for Analyzing Transportation Impacts].) To that end, in developing the criteria, OPR has proposed, and the California Natural Resources Agency (CRNA) has certified and adopted, changes to the State CEQA Guidelines that identify VMT as the most appropriate metric to evaluate a project’s transportation impacts. With the CRNA’s certification and adoption of the changes to the State CEQA Guidelines, automobile delay, as measured by LOS and other similar metrics, generally no longer constitutes a significant environmental effect under CEQA as of July 1, 2020. (Public Resources Code § 21099, subd. (b)(3)) (OPR, 2018b).

4. *Senate Bill 325 (SB 325) - Transportation Development Act (TDA, Mills-Alquist-Deddeh Act)*

The Mills-Alquist-Deddeh Act (SB 325) was enacted by the California Legislature to improve existing public transportation services and encourage regional transportation coordination. Known as the Transportation Development Act (TDA) of 1971, this law provides funding to be allocated to transit and non-transit related purposes that comply with regional transportation plans. TDA established two funding sources; the Local Transportation Fund (LTF), and the State Transit Assistance (STA) fund. Providing certain conditions are met, counties with a population under 500,000 (according to the 1970 federal census) may also use the LTF for local streets and roads, construction, and maintenance. The STA funding can only be used for transportation planning and mass transportation purposes (Caltrans, n.d.).

5. *Road Repair and Accountability Act of 2017 (Senate Bill 1 (SB 1))*

On April 28, 2017, Governor Brown signed Senate Bill 1 (SB 1) (Chapter 5, Statutes of 2017), known as the Road Repair and Accountability Act of 2017. SB 1 augments the base of the State Transit Assistance program essentially doubling the funding for this program. To provide for SB 1 reporting and transparency, transit agencies are asked to work with Caltrans to report on planned expenditures for these augmented funds (Caltrans, n.d.).

B. Regional Regulations

1. *Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)*

In August 2018, the Kern Council of Governments (COG) adopted the “2018 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS).” The Regional Transportation Plan (RTP) is a 24-year blueprint that establishes a set of regional transportation goals, policies, and actions intended to guide development of the planned multimodal transportation systems in Kern County. Included in the 2018 RTP is the Sustainable Communities Strategy (SCS) required by California’s Sustainable Communities and Climate Protection Act, of Senate Bill (SB) 375 (Kern COG, 2018. p. ES-1).

Through the RTP process Kern COG has placed an emphasis on sustainability and integrated planning. The intent of the SCS is to achieve the State’s emissions reduction targets for automobiles and light trucks. The SCS will also provide opportunities for a stronger economy, healthier environment, and safer quality of life for community members in Kern County. The RTP SCS seeks to: improve economic vitality, improve air quality, improve the health of communities, improve transportation and public safety, promote the conservation of natural resources and undeveloped land, increase regional access to community services, increase regional and local energy independence and increase opportunities to help shape our community’s future (Kern COG, 2018. p. ES-2).

4.13.3 BASIS FOR DETERMINING SIGNIFICANCE

According to Section XVII of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to transportation and traffic if the Project or any Project-related component would (OPR, 2019)

- a) *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;*
- b) *Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b);*
- c) *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);*
- d) *Result in inadequate emergency access.*

Regarding threshold b), which relates to VMT, the criterion for significance for the commercial component of the Project is whether or not the overall VMT for the region would increase above current baseline overall VMT with the addition of the Project. For the warehouse distribution component of the Project, the significance criterion for passenger vehicles is whether or not the Project would generate VMT per employee exceeding 15% below the existing average VMT per employee for Kern County. For trucks, the significance criterion also is whether or not the Project would generate truck VMT exceeding 15% below the existing average VMT per employee for Kern County.

4.13.4 IMPACT ANALYSIS

Threshold a: Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The only applicable programs, plans, ordinances, or policies addressing the circulation system are the Metropolitan Bakersfield General Plan and City of Bakersfield ordinances.

Although the Project is not consistent with the site's existing General Plan land use designation of "General Commercial (GC)," the Project Applicant is proposing General Plan Amendment/Zone Change (GPA/ZC) No. 21-0184 to change the land use designation on ±55.65 acres from GC to "Light Industrial (LI)." With approval of GPA/ZC No. 21-0184, the Project would be fully consistent with the General Plan Land Use Element.

Policies related to the circulation system are primarily contained in the General Plan Circulation Element. As described in EIR Subsection 3.5.4.D, the Project Applicant would be responsible for the following improvements:

- **Berkshire Road.** Along the Project site's frontage with Berkshire Road, the Project Applicant would be responsible for dedicating right-of-way and improving the road to include 45 feet of

total right-of-way on the south side of the centerline, including 34 feet of pavement and an 11-foot parkway inclusive of a new 7-foot-wide sidewalk. The Project Applicant also would be required to assure the installation of a traffic signal at the intersection of Berkshire Road and Colony Street.

- South H Street. Along the Project site's frontage with South H Street and extending beyond the frontage continuing between the southeast corner of the Project site to the intersection of South H Street and Hosking Avenue, the Project Applicant would be responsible for dedicating right-of-way and ensuring dedication of right-of-way by the off-site property owner to the south of the Project site to widen and improve South H Street to provide a minimum of 55 feet of right-of-way on the west side of the centerline, with additional widening as South H Street approaches and meets the Hosking Avenue intersection. When complete, South H Street would be improved to full arterial roadway width from Berkshire Road to Hosking Avenue, providing 6-lane roadway capacity. South H Street would be improved to include a new raised center median and the western side of the road would be improved to include new pavement and a curb-adjacent sidewalk, with 7 feet of the sidewalk in the public right-of-way and 1 foot of the sidewalk in a pedestrian easement. Two new traffic signals would be installed at the Project's proposed access driveways, where median breaks would occur to allow for full turning movements.
- South H Street/Hosking Avenue Intersection. The Project Applicant also would be required to assure the installation of improvements to the northwest corner of the South H Street/Hosking Avenue intersection, to include dual southbound left turn lanes, three through lanes in each direction and dual southbound right turn lanes, along with associated traffic signal.

The above-described improvements are fully consistent with all goals and policies of the City's General Plan Circulation Element, as well as the requirements of the City's Municipal Code. In addition, the Circulation Element indicates that the City's desired Level of Service (LOS) is LOS C. As indicated in the Project's TIA (*Technical Appendix J*), although the Project would contribute to projected LOS deficiencies and the need for signalization of study area facilities, the Project would be conditioned to construct improvements, pay fees pursuant to the City's Transportation Impact Fee ("TIF"; Chapter 15.84 of the City's Municipal Code), and pay fair-share contributions towards improvements not included in any existing fee programs. The improvements to be constructed as part of the Project, as part of the City's TIF programs, or as the result of Project fair-share contributions would ensure that the Project is fully consistent with the General Plan Circulation Element policies related to streets and roadways.

The General Plan Circulation Element also includes goals and policies related to transit, bikeways, parking, and airports. With respect to transit, bus service is currently available along Hosking Avenue via Golden Empire Transit District (GETD) Route 62, along Panama Lane via Routes 41, 42, 47, and 62, and at the Kern Delta Park and Ride near the intersection of McKee Road and South H Street via Route X-92 (GETD, 2022). Existing bus stops in the area are adequate for these existing routes, and no new bus stops are required along the Project site's frontage with Hosking Avenue. The Project

would not conflict with any of the goals or policies identified in the General Plan Circulation Element related to transit.

According to the Bikeway Master Plan included in the General Plan Circulation Element, no bicycle facilities are planned along the Project site's frontage with Hosking Avenue, while a "Class 3 (Bike Route)" is planned along the Project site's frontage with South H Street. This designation also is consistent with the Kern County 2012 Bicycle Master Plan. Class 3 bike lanes are generally referred to as a "bike route" and provides for shared use with bicycle or motor vehicle traffic and uses only signage identification. Appropriate signage along the Project site's frontage would be installed in conjunction with Project improvements to South H Street. Additionally, all roadway improvements proposed as part of the Project (and described above) would be in full compliance with the City of Bakersfield "Bicycle & Pedestrian Safety Plan." Accordingly, the Project would be fully consistent with the General Plan Circulation Element goals and policies related to bikeways (Kern County, 2012b, p. 53, and Figure 5-4; Bakersfield, 2013).

The Project would not conflict with any of the goals or policies included in the General Plan Circulation Element related to parking. The warehouse distribution portion of the Project is required to accommodate a total of 495 passenger vehicle parking spaces, while a total of 740 passenger vehicle parking spaces are provided. Although based on a conceptual design for the commercial component of the Project, 1,236 passenger vehicle parking spaces are shown in the conceptual design, and the actual number of parking spaces to be provided for the commercial component of the Project will be assured by the City through verification of compliance with Municipal Code Section 17.58.110 "Parking Space Requirements by Land Use" when a final commercial development plan is considered by the City Council at a future date.

The Project site is not located within two miles of a public airport or within an airport land use plan. The closest airport is the Bakersfield Municipal Airport located approximately 2.5 southwest of the Project site. According to Figure 4-1 of the *Kern County Airport Land Use Compatibility Plan* (ALUCP), the Project site is located outside of the compatibility zones for the Bakersfield Municipal Airport, indicating the Project site is not subject to airport-related hazards (Kern County, 2012a, Figure 4-1). Accordingly, the Project has no potential to conflict with the General Plan Circulation Element goals and policies related to airports.

With respect to the City's Municipal Code, the Project would be required to comply with all applicable provisions of Municipal Code Title 10 (Vehicles and Traffic). Specifically, the Project Applicant would be required to contribute transportation impact fees pursuant to Chapter 15.84 of the City's Municipal Code (Transportation Impact Fee) to help provide for acceptable LOS within the City. Project-related roadway improvements also would be required to comply with Chapter 10.12 (Traffic-Control Devices) of the City's Municipal Code, which requires the City to provide for orderly and safe traffic conditions within the City and to have installed and maintained such signals and other devices as may be necessary to effectively carry out such purposes. There are no components of the proposed Project that would conflict with any of the provisions of Municipal Code Title 10.

Accordingly, and based on the foregoing analysis, the proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, and impacts would be less than significant.

<p><i>Threshold b: Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?</i></p>
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In 2013, the State of California approved legislation (SB 743) to change the primary basis of evaluation of traffic impacts in CEQA from LOS to VMT. CEQA Guidelines Section 15064.3 was approved in December 2018, and became effective in early 2019. Section 15064.3 required agencies to implement the new VMT requirement no later than July 1, 2020. The Governor’s Office of Planning and Research (OPR) released a *Technical Advisory on Evaluating Transportation Impacts in CEQA* (“Technical Advisory”) in December 2018, which provides guidelines and recommendations for VMT evaluation and thresholds. At the time this EIR was prepared, the City of Bakersfield had not adopted any policies or methodologies for VMT analysis, therefore the OPR Technical Advisory was used as the basis for the analysis of the Project’s consistency with CEQA Guidelines Section 15064.3 (R&S, 2022, p. 8).

The Technical Advisory provides initial screening criteria and thresholds of significance for the VMT evaluation. The VMT evaluation is limited to automobiles and light trucks. For retail commercial land uses with building areas above 50,000 square feet, the criterion for significance is whether or not the overall VMT for the region would increase above current baseline overall VMT with the addition of the Project.

No specific recommendations are provided in the Technical Advisory for distribution warehouse land uses; however, a 15% reduction in VMT per employee is recommended for office land uses. For the warehouse component of the Project, most of the passenger vehicle trips are generated by employees, such as an office use; therefore, an assessment consistent with office employees was appropriately used for evaluating the passenger vehicle VMT for the warehouse distribution component of the Project. For the warehouse distribution component of the Project, the focus of the per employee evaluation is the home-based work trips. Despite the fact that the OPR Technical Advisory does not recommend an evaluation of long-haul truck trips, the Project’s truck-related VMT also has been evaluated in an effort to provide a conservative analysis of the Project’s impacts (R&S, 2022, p. 8). For the warehouse distribution component of the Project, the significance criterion for passenger vehicles is whether or not the Project would generate VMT per employee exceeding 15% below the existing average VMT per employee for Kern County. For trucks, the significance criterion also is whether or not the Project would generate truck VMT exceeding 15% below the existing average VMT per employee for Kern County.

The regional transportation model, maintained by Kern COG, was used to estimate baseline VMT and Project VMT for existing and future cumulative scenarios. The Kern COG model is developed for use in adoption of the RTP/SCS. The Kern COG model contains “gateway” points to State transportation model data and the VMT scripts within the Kern COG model account for Statewide travel, to assure that the model does not terminate at the Traffic Analysis Zone (TAZ) or jurisdictional boundaries. The

current model baseline year is 2018. The model run for the cumulative future year for the RTP/SCS is 2042. Model runs were prepared by Kern COG with and without the retail and warehouse portions of the Project at buildout for the years 2018 and 2042, which allow the differentiation of traffic from each of the Project elements within the TAZ and the region. The output from the Kern COG model provides a detailed breakdown of the number of employees and trips and VMT by trip purpose by TAZ county wide (R&S, 2022, pp. 8-9).

For the commercial component of the Project, Table 4.13-3, *Retail Commercial VMT Evaluation*, shows the comparison of the 2018 baseline and the with-Project value for overall Countywide VMT. As shown in Table 4.13-3, the overall VMT with the Project is less than the baseline; therefore, the Project's commercial retail related traffic VMT impact would represent a less-than-significant impact. The reduction of overall VMT with the addition of the Project's retail area is due to the reduced trip length for retail services for the surrounding residential areas (R&S, 2022, p. 10).

Table 4.13-3 Retail Commercial VMT Evaluation

<u>Model scenario</u>	<u>Overall VMT (Countywide)</u>
2018 Baseline	24,064,856
2018 + Project retail	24,022,967
Difference	41,889 less

(R&S, 2022, Table 3)

For the warehouse component of the Project, the employment and associated VMT for home-to-work trips for Kern County and corresponding significance threshold are shown in Table 4.13-4, *County Employment, VMT, and VMT Threshold*, and the Project values are shown in Table 4.13-5, *Project's Warehouse Employment and VMT*. Although the warehouse is expected to generate approximately 1,200 employees, the calculation in Table 4.13-5 uses 2,000 employees as a conservative calculation. It should be noted that the Technical Advisory does not identify any thresholds of significance for long-haul truck trips; thus, long-haul truck trips are not included in the analyses presented in Table 4.13-4 and Table 4.13-5. Impacts due to long-haul truck trips are discussed separately, below (R&S, 2022, p. 9).

Table 4.13-4 County Employment, VMT, and VMT Threshold

	<u>Baseline</u>			<u>Significant Threshold (85%)</u>
<u>Year</u>	<u>VMT Home-to-work</u>	<u>Employees</u>	<u>VMT per Employee</u>	<u>VMT per Employee</u>
2018	5,899,656	307,783	19.17	16.29

(R&S, 2022, Table 1)

Table 4.13-5 Project's Warehouse Employment and VMT

<u>Year</u>	<u>Employees</u>	<u>VMT Home-to-work</u>	<u>VMT per Employee</u>
2018	2,000	19,671	9.84
2042	2,000	18,294	9.15

(R&S, 2022, Table 2)

As shown in Table 4.13-5, the Project VMT/employee compared to the 2018 baseline of 19.17 miles is 51.33% (9.84 miles) and 47.73% (9.15 miles) for 2018 and 2042 respectively (R&S, 2022, p. 9). These values are below (less than) the 15% OPR Technical Advisory recommendations; therefore, VMT associated with the Project's future warehouse employees would represent a less-than-significant impact.

The State CEQA Guidelines and the OPR Technical Advisory omit heavy duty trucks from the VMT analysis and consideration regarding thresholds of significance. However, an estimate of the daily VMT associated with trucks from the warehouse portion of the Project is provided as follows. The San Joaquin Valley Air Pollution Control District (SJVAPCD) has established a default value of 50 miles/trip for trucks operating at warehouse facilities within the San Joaquin Valley. This default is used for the air quality analysis of the Project. The estimated daily truck volume for the Project is 580 trucks. Therefore, the daily VMT associated with the warehouse trucks would be 29,000 miles/day. Although there is no baseline and no threshold values defined by the State for comparison with the Project truck VMT estimate (R&S, 2022, p. 10), out of an abundance of caution in drawing conservative conclusions, VMT impacts associated with Project-related heavy truck traffic are treated similarly to employee trip lengths and considered significant by this EIR if truck trip lengths exceed 16.29 miles (85% of the 19.17 mile baseline shown in Table 4.13-4). Because the truck trip length is assumed to be 50 miles, it would exceed the 16.29-mile significance threshold and the impact related to truck VMT would be a direct and cumulatively-considerable impact of the proposed Project.

It should be noted that VMT has a direct relation to greenhouse gas (GHG) emissions because a majority of the Project's air quality and GHG emissions are related to mobile sources (vehicle tailpipe emissions). Pursuant to EIR Mitigation Measure AIR MM-1, the Project Applicant is required to enter into a Voluntary Emission Reduction Agreement (VERA) with the SJVAPCD, which would require a fee payment to fund SJVAPCD emission reduction projects, which would serve to off-set the Project's vehicular-related air quality and GHG emissions. With the VERA, air quality impacts would be mitigated to below a level of significance while GHG emissions would remain significant and unavoidable.

Threshold 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)?*

Roadway improvements proposed as part of the Project are described in EIR Subsection 3.5.4.D and summarized above under the analysis of Threshold a. All of the proposed improvements would be

implemented in a manner consistent with Chapter 13.12 (Development Improvements Standards and Specifications) of the City's Municipal Code, which requires compliance with a number of standard manuals. The purposes of Municipal Code Chapter 13.12 are intended to protect the health, safety and general welfare of the citizens of the City by establishing standards and specifications related to a number of public improvements, including roadway improvements. With respect to heavy truck movements, the Project's application materials include exhibits demonstrating that Project driveways as well as intersections that would be improved as part of the Project have adequate turning capacity to accommodate large trucks. Additionally, the Project's proposed improvements have been reviewed by the City for compliance with the provisions of Chapter 13.12, and have determined that the Project's proposed improvements are in full compliance with the City's requirements as well as Municipal Code Chapter 13.12. Accordingly, the Project would not substantially increase hazards due to a geometric design feature, and impacts would be less than significant.

The Project Applicant proposes to develop the Project site with a 1,012,185 s.f. cross-dock speculative warehouse building and 187,500 s.f. of commercial retail building area. Lands to the north and south of the Project site are designated by the General Plan for development with "General Commercial" land uses, and traffic associated with the Project's proposed commercial retail land uses would be consistent with both existing and planned commercial development in the area, as well as with existing residential neighborhoods to the east of the Project site. With respect to the proposed warehouse building, according to the Project's TIA (*Technical Appendix J*), the Project is anticipated to generate approximately 580 truck trips per day, including 18 truck trips during the morning peak hour and 24 truck trips during the evening peak hour. Although truck trips associated with the Project have the potential to conflict with traffic from nearby commercial retail and residential uses, the Project's TIA indicates that 100% of truck trips heading to and from the Project site would access SR-99 via South H Street and Hosking Avenue. The main entrances for the existing residential developments to the east, northeast, and southeast are along Berkshire Road and Hosking Avenue, east of South H Street. Thus, Project truck traffic would be directed directly to SR-99 and would be directed away from residential streets, and would only intermix with residential-related traffic along a short segment of Hosking Avenue between South H Street and the on- and off-ramps for SR-99.

Technical Appendix J includes a queue length analysis and safety discussion for the Panama Lane and Hosking Avenue ramps at SR-99, which would be used by Project traffic (R&S, 2022, p. 63). R&S concluded that the freeway ramps have adequate capacity to accommodate the Project's traffic without extending into the freeway mainline. A queue length analysis was conducted at all freeway off ramps within the study area to evaluate the adequacy of the existing storage lengths. Table 4.13-6 and Table 4.13-7 show the existing storage lengths, as well as the 95th percentile queue length determined for each traffic scenario analyzed. As shown the queue lengths would be shorter than the 400-foot ramp length. As such, the Project would not result in increased hazards to transportation on Caltrans facilities as a result of incompatible uses, and impacts due to incompatible uses would be less than significant.

Table 4.13-6 SR-99 AM Queue Length Analysis

Intersection	Panama Ln & SR 99 SB Off Ramp		Panama Ln & SR 99 NB Off Ramp		Hosking Ave & SR 99 SB Off Ramp		Hosking Ave & SR 99 NB Off Ramp	
Movement	SBL	SBR	NBL	NBR	SBLR	SBR	NBLR	NBR
Ramp Length	400		320		400		400	
2021	162	66	109	31	183	125	34	-
2024	221	67	104	35	184	171	47	10
2024+Warehouse	189	63	113	52	220	184	44	17
2024 Cumulative+ Full Project	227	61	114	53	228	176	48	23
2029 Cumulative	205	59	163	56	225	190	71	-
2029 Cumulative+ Full Project	215	54	140	62	227	176	66	29
2042 Cumulative	197	76	131	55	205	184	60	15
2042 Cumulative+ Full Project	224	58	147	59	258	207	77	28

SBL = Southbound Left
SBR = Southbound Right
SBLR = Southbound Left Right

NBL = Northbound Left
NBR = Northbound Right
NBLR = Northbound Left Right

Source: *Technical Appendix J*, Table 9B.

Table 4.13-7 SR-99 PM Queue Length Analysis

Intersection	Panama Ln & SR 99 SB Off Ramp		Panama Ln & SR 99 NB Off Ramp		Hosking Ave & SR 99 SB Off Ramp		Hosking Ave & SR 99 NB Off Ramp	
Movement	SBL	SBR	NBL	NBR	SBLR	SBR	NBLR	NBR
Ramp Length	400		320		400		400	
2021	241	123	207	78	244	210	121	21
2024	301	105	193	89	234	200	64	26
2024+Warehouse	323	119	153	81	272	217	133	21
2024 Cumulative+ Full Project	345	120	199	98	312	326	106	13
2029 Cumulative	343	216	179	100	267	258	86	30
2029 Cumulative+ Full Project	281	129	169	128	326	264	111	36
2042 Cumulative	267	125	187	11	281	250	95	42
2042 Cumulative+ Full Project	266	152	183	120	283	257	102	41

SBL = Southbound Left
SBR = Southbound Right
SBLR = Southbound Left Right

NBL = Northbound Left
NBR = Northbound Right
NBLR = Northbound Left Right

Source: *Technical Appendix J*, Table 9B.

Threshold d: Would the Project result in inadequate emergency access?

During construction of the proposed Project, Project construction contractors would be required to maintain adequate emergency access routes on site. Additionally, the Project's plans have been reviewed by the Bakersfield Fire Department (BFD), which has determined that the Project's design would provide for adequate access for emergency vehicles under long-term operations. Furthermore, the Project would be subject to the requirements of Section 15.65.190 (Appendix D, Section D103.5 Fire apparatus access road gates – Amended), which identifies requirements associated with emergency access. Accordingly, the Project would not result in inadequate emergency access, and impacts would be less than significant.

4.13.5 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development within the study area identified by the Project's TIA (*Technical Appendix J*). This study area was selected because areas outside of the study area would experience fewer than 50 peak hour trips from the proposed Project, indicating that areas outside of the study area would only experience nominal impacts as a result of the proposed Project.

As indicated under the analysis of Threshold a., with the issuance of the Project entitlements, the Project would be fully consistent with the City of Bakersfield General Plan and City of Bakersfield ordinances. As other cumulative developments likewise would be required to comply with the City's General Plan and ordinances, or the general plan and ordinances of surrounding jurisdictions, the Project would result in less-than-significant impacts on a cumulatively-considerable basis due to a conflict with a program, plan, ordinance, or policy addressing the circulation system.

As indicated under the analysis of Threshold b., for the commercial component of the Project, the overall VMT with the Project is less than the baseline, resulting in a less-than-significant impact. For the warehouse component of the Project, VMT/employee for the proposed warehouse use compared to the 2018 baseline of 19.17 miles is 51.33% and 47.73% below the baseline for 2018 and 2042 respectively, which meets the requirement to reduce VMT by at least 15% below the baseline resulting in a less-than-significant impact. Although the Project would be well below the significance threshold of 16.29 VMT/employee for the warehouse use and the Project's commercial retail component would result in a net decrease in overall VMT within Kern County by 41,889 miles, the daily VMT associated with the Project's warehouse trucks inclusive of long-haul trucks would be 29,000 miles/day and 50 miles per truck. Although there is no baseline and no threshold values defined by the State for comparison with the Project truck VMT estimate, out of an abundance of caution in drawing conservative conclusions, VMT impacts associated with Project-related heavy truck traffic are treated similarly to employee trip lengths. Because the truck trip length is assumed to be 50 miles, it would exceed the 16.29-mile significance threshold and the impact related to truck VMT would be a direct and cumulatively-considerable impact of the proposed Project due to a potential conflict or inconsistency with CEQA Guidelines Section 15064.3, Subdivision (b).

All roadway improvements proposed as part of the Project would be constructed to City standards, and there are no other large developments that generate a substantial amount of truck traffic in the local area. Other cumulative developments within the cumulative study area likewise would be required to demonstrate that there would be no geometric design feature hazards or impacts due to incompatible risks. Additionally, due to the short distance between the Project site and SR 99, Project truck traffic would not result in impacts due to incompatible land uses. As such, the Project would not substantially increase hazards due to a geometric design feature or incompatible use, and impacts would be less than significant on a cumulatively-considerable basis.

During Project construction and operations, the Project Applicant would be required to maintain adequate access for emergency vehicles, as required by the BFD and the City's Municipal Code. Other cumulative developments similarly would be required to maintain adequate emergency access. Accordingly, cumulative impacts due to inadequate emergency access would be less than significant.

4.13.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less-than-Significant Impact. The Project is consistent with the Metropolitan Bakersfield General Plan, including the goals and policies of the General Plan Circulation Element, and also would be required to comply with all applicable requirements of the City's Municipal Code. As there are no other applicable programs, plans, ordinances, or policies addressing the circulation system, Project impacts due to a conflict with a program, plan, ordinance or policy addressing the circulation system would be less than significant.

Threshold b: Significant Direct and Cumulatively-Considerable Impact. For the commercial component of the Project, the overall VMT with the Project is less than the baseline. The Project VMT/employee for the proposed warehouse use would comply with the threshold of significance to reduce VMT by at least 15% below the baseline. However, the daily VMT associated with the Project's warehouse trucks would be 29,000 miles/day and 50 miles per truck, which exceeds the significance threshold established by this EIR of 16.29 miles per day. Thus, VMT impacts associated with Project-related long-haul truck trips are concluded to be a significant direct and cumulatively-considerable impact.

Threshold c: Less-than-Significant Impact. With mandatory compliance with City design standards, including standards contained within the City's Municipal Code, the Project would not substantially increase hazards due to a geometric design feature. Additionally, due to the short distance between the Project site and the on- and off-ramps at SR 99, and because Project truck traffic would be directed directly to SR-99, the Project would not result in increased hazards to transportation as a result of incompatible uses, and impacts due to incompatible uses would be less than significant.

Threshold d: Less-than-Significant Impact. The Project Applicant would be required to maintain adequate emergency access during both construction and long-term operation, in accordance with City of Bakersfield and BFD requirements. Accordingly, the Project would not result in inadequate emergency access, and impacts would be less than significant.

4.13.7 MITIGATION

Although the OPR Technical Advisory does not require an analysis of potential VMT impacts from long-haul truck trips in an effort to be conservative, the Project's VMT impacts due to heavy truck trips are determined to be a significant impact. Mitigation is not available to reduce the Project's VMT associated with large truck trips. This is because the destination of Project-related truck trips would consist of fixed locations (e.g., ports, last-mile delivery facilities, etc.), and it would not be feasible for the Project Applicant or the City of Bakersfield to mandate a reduction in the distance the large trucks must travel to their destination. As such, mitigation measures are not available to reduce the Project's significant and unavoidable VMT impacts associated with large truck trips.

4.13.8 DESIGN FEATURES AND REGULATORY REQUIREMENTS

The City of Bakersfield is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Transportation, which include the following regulatory requirements.

- TRN RR-1 Prior to issuance of building permits, the Project Applicant shall pay appropriate Traffic Impact Fee (TIF) fees at the rates then in effect in accordance with Chapter 15.84 of the City's Municipal Code.
- TRN RR-2 All off-site roadway improvements shall comply with applicable provisions of City of Bakersfield Municipal Code Title 10 (Vehicles and Traffic) and Chapter 13.12 (Development Improvements Standards and Specifications).
- TRN DF-3 Prior to issuance of a certificate of occupancy for the warehouse building, the facility operator(s) shall establish and submit for approval to the Development Services Director a Truck Routing Plan to and from SR-99 using the Hosking Avenue ramps, which will apply to trucks owned and operated by the warehouse building user. The plan shall include measures, such as signage, pavement markings, and enforcement mechanisms for preventing truck queuing, circling, stopping, and parking on public streets. The facility operator shall be responsible for enforcement of the plan.

4.13.9 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold b: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. Although the Project's impacts to VMT from the proposed commercial retail uses and warehouse employees would not exceed the identified thresholds of significance, Project-related truck traffic would generate approximately 29,000 miles/day and 50 miles per truck, which exceeds the significance threshold established by this EIR of 16.29 miles per truck. Mitigation is not available to reduce this impact, as the destination of Project-related truck trips would consist of fixed locations (e.g., ports, last-mile delivery facilities, etc.), and it would not be feasible for the Project Applicant or the City of Bakersfield to mandate a reduction in the distance the large trucks must travel to their destination. As such, the

Project's truck-related VMT is a significant and unavoidable impact of the proposed Project on both a direct and cumulatively-considerable basis.

4.14 TRIBAL CULTURAL RESOURCES

The analysis in this Subsection 4.14 documents the results of the City's efforts to consult with local Native American Tribes regarding the proposed Project. No tribes responded to the City's offers to consult. Communications between Native American tribes and the City of Bakersfield is considered confidential in respect to places that have traditional tribal cultural significance (Gov. Code § 65352.4), and although relied upon in part to inform the preparation of this EIR Subsection, those communications are treated as confidential and are not available for public review. Under existing law, environmental documents must not include information about the location of archeological sites or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records Act (Cal. Code Regs. § 15120(d)).

4.14.1 EXISTING CONDITIONS

Refer to EIR Subsection 4.4.1 for a complete description of the cultural setting, existing site conditions, and the archaeological resources assessment for the Project site.

4.14.2 REGULATORY SETTING

The following is a brief description of the State environmental laws and related regulations addressing Tribal Cultural Resources (TCRs). Refer also to EIR Subsection 4.4.2 for a complete description of federal, State, and local environmental laws and regulations governing the protection of cultural resources.

A. Traditional Tribal Cultural Places Act (Senate Bill 18, "SB 18")

Senate Bill 18 (SB 18) requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places ("cultural places") through local land use planning. SB 18 also requires the Governor's Office of Planning and Research (OPR) to include in the General Plan Guidelines advice to local governments for how to conduct these consultations (OPR, 2005).

The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level land use decisions are made by a local government (OPR, 2005).

SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code § 65300 et seq.) and specific plans (defined in Government Code § 65450 et seq.). Although SB 18 does not specifically mention consultation or notice requirements for adoption or amendment of specific plans, existing state planning law requires local governments to use the same processes for adoption and amendment of specific plans as for general plans (see Government Code § 65453).

Therefore, where SB 18 requires consultation and/or notice for a general plan adoption or amendment, the requirement extends also to a specific plan adoption or amendment (OPR, 2005).

B. Assembly Bill 52 (AB 52)

California Assembly Bill 52 (AB 52) (2014) Chapter 532 amended Section 5097.94 of, and added Sections 21073, 21074, 21080.3.1, 21080.3.2, 21802.3, 21083.09, 21084.2 and 21084.3 to the California Public Resources Code, relating to Native Americans. AB 52 was approved on September 25, 2014. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process (OPR, 2017b).

The Public Resources Code now establishes that “[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.” (Pub. Resources Code, § 21084.2.) To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project (Pub. Resources Code, § 21080.3.1.) (OPR, 2017b).

If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Public Resources Code § 21084.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources. These rules apply to projects that have a notice of preparation for an environmental impact report or negative declaration or mitigated negative declaration filed on or after July 1, 2015 (OPR, 2017b).

§ 21074 of the Public Resources Code defines “tribal cultural resources.” In brief, in order to be considered a “tribal cultural resource,” a resource must be either:

- (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or
- (2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource.

In the latter instance, the lead agency must determine that the resource meets the criteria for listing in the state register of historic resources. In applying those criteria, a lead agency must consider the value of the resource to the tribe (OPR, 2017b).

4.14.3 BASIS FOR DETERMINING SIGNIFICANCE

Section XVIII of Appendix G to the CEQA Guidelines addresses typical adverse effects on tribal cultural resources, and includes the following threshold question to evaluate the Project's impacts to tribal cultural resources (OPR, 2018a). The Project would result in a significant impact to tribal cultural resources if the Project or any Project-related component would:

1. *Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 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).*
 - 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

4.14.4 IMPACT ANALYSIS

Threshold a: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

No prehistoric resource sites, features, places, or landscapes were identified on the Project site that are either listed or eligible for listing in the California Register of Historic Places. To be eligible for the Register, (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852), a resource must include the following:

- (A) *Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;*
- (B) *Is associated with the lives of persons important in our past;*

(C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

(D) Has yielded, or may be likely to yield, information important in prehistory or history.

No resources were identified on the Project site that meet any of the four criteria listed above to be eligible for the California Register and no prehistoric resource sites or isolates were found on the Project site based on the cultural records search and pedestrian survey of the Project site (refer to EIR Subsection 4.4, *Cultural Resources*). Furthermore, no substantial evidence was presented to or found by the City of Bakersfield that led to the identification of any resources on the Project site that in the City's discretion had the potential to be considered a tribal cultural resource.

As part of the SB 18/AB 52 consultation process required by State law, the City of Bakersfield sent notification of the Project to Native American tribes with possible traditional or cultural affiliation to the Project area. No tribes responded.

Because no tribal cultural resources exist on the Project site under existing conditions, implementation of the proposed Project would not impact such resources. However, it is possible (although unlikely due to the disturbed nature of the site) that previously undiscovered tribal cultural resources may be present beneath the site's subsurface, and may be impacted by ground-disturbing activities associated with Project construction. If any tribal cultural resources are unearthed during Project construction that meet the definition of a significant tribal cultural resource and are disturbed/damaged by Project construction activities, impacts to those tribal cultural resources would be significant.

4.14.5 CUMULATIVE IMPACT ANALYSIS

The Project site is located within a traditional use area of the Tejon Indian Tribe. Other development projects within this traditional use area would have a similar potential as the Project to adversely affect tribal cultural resources. Thus, implementation of the Project has the potential to result in a cumulatively considerable impact to tribal cultural resources for which mitigation is required.

4.14.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Significant Direct and Cumulatively-Considerable Impact. The Project site does not contain any known tribal cultural resources. Nonetheless, Project construction activities have the potential to unearth and adversely impact tribal cultural resources that may be buried or masked at the Project site.

4.14.7 MITIGATION

Mitigation Measures CR MM-1 through CR MM-3 shall apply.

4.14.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a: Less-than-Significant with Mitigation Incorporated. Implementation of CR MM-1 through CR-MM 3 would ensure the proper identification and subsequent treatment of any significant tribal cultural resources that may be encountered during ground-disturbing activities associated with Project development. With implementation of the required mitigation, the Project's potential impact to significant tribal cultural resources would be reduced to less-than-significant.

4.15 UTILITIES AND SERVICE SYSTEMS

This Subsection 4.15 addresses the topics of water service and supply, wastewater collection and treatment, stormwater drainage facilities, dry utilities, and solid waste collection and disposal. The information contained herein is based on two technical reports that were prepared for the Project. The first report addresses water supply, was prepared by Cornerstone Engineering, Inc. (herein, “Cornerstone”), and is entitled “Majestic Hosking Project Water Supply Assessment” (herein, “WSA”). The WSA is dated September 28, 2021, and is included as *Technical Appendix M* to this EIR. (Cornerstone, 2021c) The second report addresses sewer capacity, was prepared by Cornerstone, and is entitled, *Sewer Capacity Study for Warehouse/Commercial Development, NW Corner of Hoskings and South ‘H’ Street*. The Sewer Capacity Study is dated October 15, 2021, and is included as *Technical Appendix L* to this EIR. (Cornerstone, 2021b) The information in this Subsection also is based in part on publicly available information provided by local service providers and State oversight agencies. A complete list of references can be found in EIR Section 7.0, *References*.

4.15.1 EXISTING CONDITIONS

The Project site is located within the service boundaries of the Greenfield County Water District (GCWD) for water service. The Bakersfield Department of Public Works (BDPW), Wastewater Division, provides sewer service in the local area, while the BDPW, Solid Waste Division, provides solid waste collection services in the Project area. Electricity and natural gas in the local area are provided by Pacific Gas and Electric (PG&E).

A. Water Service and Supply

Water service for the proposed Project would be provided by the GCWD. The GCWD service area is approximately 3.3 square miles and is bound by the Arvin-Edison Intake Canal to the north, Cottonwood Road to the east, Di Giorgio Road to the south and SR-99 to the west. The total land within the GCWD sphere of influence is approximately 6 square miles, a good portion of which is undeveloped and mostly farmland. The GCWD does not supply water to agricultural customers in this undeveloped area (Cornerstone, 2021c, p. 3).

GCWD’s service area population is approximately 10,801, with an estimated 97% of their 3,273 water service connections being residential. The remaining connections are for commercial and industrial usage. Current (2020) water demand is 835 million gallons/yr, or approximately 2,564 acre-feet per year. Projected demand in the year 2045 is 1,069 million gallons/yr, or approximately 3,287 acre-feet per year (Cornerstone, 2021c, pp. 3-4).

The sole source of water supply to the GCWD is groundwater; no raw or recycled water is supplied. No potable water is purchased from any other source; however, the GCWD does purchase Kern Island Canal seepage water from the Kern Delta Water District. This water supply is characterized as seepage that has passed through the GCWD service area and has become groundwater. Additionally, the GCWD does not use surface, storm, waste, recycled, or desalinated water. Per the GCWD’s Urban

Water Management Plan (UWMP), they also do not enter into water exchanges or transfers from other water suppliers for direct use (Cornerstone, 2021c, p. 4).

Under existing conditions, the Project site is vacant and undeveloped, and the Project site does not generate a demand for water resources under existing conditions. Water lines are installed beneath Berkshire Road and South H Street, abutting the Project site.

B. Wastewater Service

Wastewater service for the Project site is provided by the BDPW, Wastewater Division. BDPW provides wastewater treatment service to the City of Bakersfield from two treatment plants, Plant No. 2 and Plant No. 3. The Project site is within the service boundary of Water Treatment Plant No. 3 (WTP No. 3), located at 6901 McCutchen Road, approximately 2.8 miles west of the Project site (Google Earth, 2021).

Cornerstone Engineering analyzed the WTP No. 3 data and found that with City of Bakersfield population growth that has occurred over the last 15 years, which increased from approximately 309,000 to 389,000, the flow rate to Plant 3 increased from 15.4 mgd to 17.8 million gallons per day (mgd), which is an increase of only 16 percent. The WTP No. 3 has a total capacity of 32 mgd (Cornerstone, 2021b, p. 7; Bakersfield, n.d.).

There are currently no major trunk lines that traverse the Project site under existing conditions. An existing 12-inch sewer line occurs along the Project's frontage within Berkshire Road, while a 15-inch sewer line occurs within South H Street along the site's frontage. Both the 15-inch and 12-inch sewer lines connect to a 36-inch trunk line within Hosking Avenue along the Project's frontage, which conveys wastewater to WTP No. 3.

C. Stormwater Conveyance Facilities

Under existing conditions, the Project site is vacant and undeveloped, and does not contain any stormwater facilities.

D. Dry Utilities

The Project site is located in the service area of PG&E for both natural gas and electricity. The gas supply for the project site would come from the Kern River Corridor, which receives gas from suppliers in the Rocky Mountains. A natural gas pipeline and regulator station is located near the corner of Ashe Road and Berkshire Road, 2.6 miles east of the Project site. The electrical power that PG&E distributes is primarily derived from the company's generating plants, which use hydropower, gas-fired steam, or nuclear energy. Power lines are already located in the vicinity of the Project site, including overhead lines along South H Street at the Project site's frontage. Land line phone service is provided by AT&T and cable and fiber service is provided by Brighthouse Network.

E. Solid Waste Collection and Disposal

BDPW, Solid Waste Division provides solid waste collection services (residential and commercial) within Bakersfield and in the Project area. All solid waste generated at the Project site would be disposed of at the Bakersfield Metropolitan (Bena) Sanitary Landfill, which is operated by the Kern County Waste Management Department. The facility is approximately 14 miles east of the Project area at 2951 Neumarkel Road in Caliente, California (Google Earth, 2021). The Bena Landfill encompasses approximately 2,285 acres, and has a maximum throughput of 4,500 tons per day (tpd), a maximum permitted capacity of 53,000,000 cubic yards (cy), and a remaining capacity of 32,808,260 cy as of July 2013 (CalRecycle, 2019c).

4.15.2 REGULATORY SETTING

The following is a brief description of the federal, state, and local environmental laws and related regulations related to utilities and service systems.

A. Federal Regulations

1. Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) was established to protect the quality of drinking water in the U.S. This law focuses on all waters actually or potentially designed for drinking use, whether from above ground or underground sources. The Act authorizes EPA to establish minimum standards to protect tap water and requires all owners or operators of public water systems to comply with these primary (health-related) standards. The 1996 amendments to SDWA require that EPA consider a detailed risk and cost assessment, and best available peer-reviewed science, when developing these standards. State governments, which can be approved to implement these rules for EPA, also encourage attainment of secondary standards (nuisance-related). Under the Act, EPA also establishes minimum standards for state programs to protect underground sources of drinking water from endangerment by underground injection of fluids (EPA, 2021i).

B. State Plans, Policies, and Regulations

1. Water Conservation in Landscaping Act

The Water Conservation in Landscaping Act was established to ensure adequate water supplies are available for future uses. To promote the conservation and efficient use of water, the Act requires local agencies to adopt a water efficient landscape ordinance. When such an ordinance is not adopted, a finding explaining why an ordinance was not necessary. In the absence of such an ordinance or findings, the policies and requirements contained in the “model” ordinance drafted by the State of California shall apply within the affected jurisdiction (CA Legislative Info, n.d.).

2. Urban Water Management Planning Act

The Urban Water Management Planning Act (UWMP Act) was adopted to ensure that water planning is conducted at the local level, as the State of California recognized that two water agencies in the same region could have very different impacts from a drought. The UWMP Act requires water agencies to

develop Urban Water Management Plans (UWMPs) over a 20-year planning horizon, and further required UWMPs to be updated every five years. UWMPs are exempt from compliance with CEQA (DWR, 2016, p. 1-2).

The UWMPs provide a framework for long term water planning and inform the public of a supplier's plans for long-term resource planning that ensures adequate water supplies for existing and future demands. This part of the California Water Code (CWC) requires urban water suppliers to report, describe, and evaluate:

- Water deliveries and uses;
- Water supply sources;
- Efficient water uses;
- Demand management measures; and
- Water shortage contingency planning.

The UWMP Act has been modified over the years in response to the State's water shortages, droughts, and other factors. A significant amendment was made in 2009, after the drought of 2007-2009 and as a result of the governor's call for a statewide 20 percent reduction in urban water use by the year 2020. This was the Water Conservation Act of 2009, also known as SB X7-7. This Act required agencies to establish water use targets for 2015 and 2020 that would result in statewide savings of 20 percent by 2020 (DWR, 2016, p. 1-2).

3. California Senate Bill 610

The California Water Code (Water Code) §§ 10910 through 10915 were amended by the enactment of SB 610 in 2002. SB 610 requires an assessment of whether available water supplies are sufficient to serve the demand generated by a proposed project, as well as the reasonably foreseeable cumulative demand in the region over the next 20 years under average normal year, single dry year, and multiple dry year conditions. Under SB 610, water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code 10912 [a]) subject to CEQA (DWR, 2003; CA Legislative Info, n.d.). For the purposes of SB 610, "project" is defined and includes commercial uses employing more than 1,000 persons or having more than 250,000 square feet of floor space, and industrial facilities planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area (DWR, 2003; CA Legislative Info, n.d.). Because the Project proposes approximately 1,199,685 square feet of building area for industrial and commercial uses, the Project meets the definition of a "project" pursuant to SB 610. A WSA is required for the Project and is included as *Technical Appendix M*.

4. CA. Water Code § 10610 et seq. (Senate Bill 901)

Signed into law on October 16, 1995, Senate Bill (SB) 901 required every urban water supplier to identify as part of its urban water management plan, the existing and planned sources of water available to the supplier over a prescribed 5-year period. The code requires the water service purveyor to assess the projected water demand associated with a proposed project under environmental review. Later

provisions of SB 901 required compliance in the event that the proposed project involved the adoption of a specific plan, amendment to, or revision of the land use element of a general plan or specific plan that would result in a net increase in the state population density. Upon completion of the water assessment, cities and counties may agree or disagree with the conclusions of the water service purveyors, but cannot approve projects in the face of documented water shortfalls without first making certain findings (CA Legislative Info, n.d.).

5. *Executive Order B-37-16*

Signed on May 9, 2016, EO B-37-16 established a new water use efficiency framework for California. The order bolstered the state's drought resilience and preparedness by establishing longer-term water conservation measures that include permanent monthly water use reporting, new urban water use targets, reducing system leaks and eliminating clearly wasteful practices, strengthening urban drought contingency plans, and improving agricultural water management and drought plans (SWRCB, 2020).

6. *Executive Order B-40-17*

Signed on April 7, 2017, EO B-40-17 ended the drought state of emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne, where emergency drinking water projects continued to help address diminished groundwater supplies. It maintained water reporting requirements and prohibitions on wasteful practices. The order was built on actions taken in Executive Order B-37-16, which remains in effect. In a related action, state agencies, including the Department of Water Resources (DWR), released a plan to continue making water conservation a way of life (SWRCB, 2020).

7. *Senate Bill 606 (SB 606)*

SB 606 would require an urban retail water supplier to calculate an urban water use objective no later than November 1, 2023, and by November 1 every year thereafter, and its actual urban water use by those same dates. SB 606 would authorize the State Water Resources Control Board to issue information orders, written notices, and conservation orders to an urban retail water supplier that does not meet its urban water use objective, as specified.

8. *Assembly Bill 1668 (AB 1668)*

AB 1668 requires the State Water Resources Control Board, in coordination with the Department of Water Resources, to adopt long-term standards for the efficient use of water, as provided, and performance measures for commercial, industrial, and institutional water use on or before June 30, 2022. The bill, until January 1, 2025, establishes 55 gallons per capita daily as the standard for indoor residential water use. Beginning January 1, 2025, the bill establishes the greater of 52.5 gallons per capita daily or a standard recommended by the State Water Resources Control Board and beginning January 1, 2030, the bill establishes the greater of 50 gallons per capita daily or a standard recommended by the State Water Resources Control Board. AB 1668 imposes civil liability for a violation of an order or regulation issued pursuant to these provisions, as specified (SWRCB, n.d.).

9. *California Plumbing Code*

Title 24, Part 5 of the California Code of Regulations establishes the California Plumbing Code. The California Plumbing Code sets forth efficiency standards (i.e., maximum flow rates) for all new federally-regulated plumbing fittings and fixtures, including showerheads and lavatory faucets. The 2019 California Plumbing Code, which is based on the 2018 Uniform Plumbing Code, was published by the California Building Standards Commission and went into effect on January 1, 2019 (BCS, n.d.).

10. *California Code of Regulations (CCR) Title 20 and 24*

Title 20 includes state and federal minimum efficiency requirements for energy and water use in regulated appliances. These appliances include, but are not limited to, water heaters, furnaces, heat pumps, air conditioners, refrigerators, pumps, lamps and ballasts, computers, spray sprinkler bodies and showerheads. Manufacturers are responsible for certifying regulated appliances to the California Energy Commission's Modernized Appliance Efficiency Database System. This serves as the manufacturer's claim that it has met all applicable requirements, including testing, and marking products (Westlaw, n.d.).

Title 24 of the California Code of Regulations is a broad set of requirements for energy conservation, green design, construction and maintenance, fire and life safety, and accessibility that apply to the structural, mechanical, electrical, and plumbing systems in a building. Title 24 was published by the California Building Standards Commission and applies to all buildings in California. Title 24 receives updates every three years with the latest revisions being in 2019. Title 24 compliance requirements apply to new construction and any new installations or retrofits in existing buildings. Older buildings do not have to upgrade their systems, but if they choose to renovate, their new systems must meet Title 24 standards (BCS, n.d.).

11. *California Water Plan*

The California Water Plan is the State's strategic plan for sustainably managing and developing water resources for current and future generations. Required by Water Code Section 10005(a), it presents the status and trends of California's water-dependent natural resources; water supplies; and agricultural, urban, and environmental water demands for a range of plausible future scenarios. The plan is updated every five years; provides a way for various groups to collaborate on findings and recommendations and make informed decisions regarding California's water future.

California Water Plan Update 2018 (Update 2018) provides recommended actions, funding scenarios, and an investment strategy to bolster efforts by water and resource managers, planners, and decision-makers to overcome California's most pressing water resource challenges. It reaffirms State government's unique role and commitment to sustainable, equitable, long-term water resource management; it also introduces implementation tools to inform sound decision-making. The plan's broad and diverse portfolio of recommended actions address California's critical, systemic, and institutional challenges (DWR, 2018).

12. *California Water Action Plan*

The California Water Action Plan is a roadmap for the State's journey towards sustainable water management. The first California Water Action Plan was released in January 2014 under Governor Brown's administration and updated in 2016. The California Water Action Plan discusses the challenges to water in California: uncertain water supplies, water scarcity/drought, declining groundwater supplies, poor water quality, declining native fish species and loss of wildlife habitat, floods, supply disruptions, and population growth and climate change further increasing the severity of these risks (CDFW, n.d.).

13. *California Solid Waste Integrated Waste Management Act (AB 939, 1989)*

The Integrated Waste Management Act (IWMA) established an integrated waste management hierarchy to guide the California Integrated Waste Management Board (CIWMB) and local agencies in implementation, in order of priority: (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation and land disposal (it should be noted that the CIWMB no longer exists, and its duties have been assumed by CalRecycle). As part of the IWMA, the CIWMB was given a purpose to mandate the reduction of disposed waste. (CalRecycle, 2018a) The IWMA also required, among other items, each county to prepare, adopt, and submit to the Board an Integrated Waste Management Plan (IWMP) and each city or county plan to include an implementation schedule which shows diversion of 50 percent of all solid waste by January 1, 2000 through source reduction, recycling, and composting activities (CalRecycle, 2018a).

14. *Waste Reuse and Recycling Act (AB 1327)*

The Waste Reuse and Recycling Act (WRRRA) required the CIWMB to approve a model ordinance for adoption by any local government for the transfer, receipt, storage, and loading of recyclable materials in development projects by March 1, 1993. The WRRRA also required local agencies to adopt a local ordinance by September 1, 1993 or allow the model ordinance to take effect. The WRRRA requires all development projects that are commercial, industrial, institutional, or marina in nature and where solid waste is collected and loaded, to provide an adequate area for collecting and loading recyclable materials over the lifetime of the project. The area is required to be provided before building permits are issued (CalRecycle, 2018b).

15. *Mandatory Commercial Recycling Program (AB 341)*

Assembly Bill (AB) 341 (Chapter 476, Statutes of 2011 [Chesbro, AB 341]) directed CalRecycle to develop and adopt regulations for mandatory commercial recycling. CalRecycle initiated formal rulemaking with a 45-day comment period beginning October 28, 2011. The final regulation was approved by the Office of Administrative Law on May 7, 2012. AB-341 was designed to help meet California's recycling goal of 75% by the year 2020. AB 341 requires all commercial businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. In addition, multi-family apartments with five or more units are also required to form a recycling program (CalRecycle, 2020).

16. *2019 California Green Building Standards Code (CalGreen, Part 11 of Title 24, California Code of Regulations)*

The most recent edition of CalGreen became effective January 1, 2020, and is applicable to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout the State of California (including residential structures and elementary schools). CalGreen Section 5.408.3 requires that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on-site until the storage site is developed (CBSC, 2020).

17. *Assembly Bill 1826 (AB 1826)*

AB 1826 requires jurisdictions to implement an organic waste recycling program for businesses, including outreach, education, and monitoring of affected businesses. Additionally, each jurisdiction is to identify a multitude of information, including barriers to siting organic waste recycling facilities, as well as closed or abandoned sites that might be available for new organic waste recycling facilities. Commencing January 1, 2019, businesses that generate 4 cubic yards or more of commercial solid waste per week are required to arrange for organic waste recycling services (CA Legislative Info, n.d.).

18. *Zero Waste California*

Zero Waste California is a state program launched by CalRecycle in 2002 to promote a new vision for the management of solid waste by maximizing existing recycling and reuse efforts, while ensuring that products are designed for the environment and have the potential to be repaired, reused, or recycled. The Zero Waste California program promotes the goals of market development, recycled product procurement, and research and development of new and sustainable technologies.(CalRecycle, n.d.).

C. *Local Plans, Policies, and Regulations*

1. *GCWD Urban Water Management Plan*

The 2020 Urban Water Management Plan (UWMP) is the UWMP for the GCWD and is herein incorporated by reference and is available for public review at 551 Taft Highway, Bakersfield, CA 93307. The UWMP provides a framework for long-term water planning and informs the public of the GCWD's long-term resource planning to ensure adequate water supplies for existing and future demands. As concluded by the UWMP, GCWD anticipates that it will be able to meet projected demand for water within its service boundaries until at least the year 2040 in all types of climate situations, including normal, dry, and multiple consecutive dry weather years (GCWD, 2020, Tables 7-2 through 7-4).

A Water Shortage Contingency Plan is included in the UWMP, which GCWD is to implement in cases of future water deficiencies caused by limitations on supply or the GCWD's delivery system. At the time of long- or short-term drought conditions, or other emergencies, GCWD would inform their customers of the need to conserve water and impose penalties for non-compliance with mandatory water use reductions. Compliance with mandatory water use reductions would ensure that GCWD has

the ability to meet present and projected demand within its service area during dry years (GCWD, 2020, p. 54).

2. City of Bakersfield Municipal Code

The City of Bakersfield Municipal Code Sections 8.32.010 to 8.32.220, comprise the City's regulations for *Solid Waste/Recyclable Materials/Organic Waste*. Commercial businesses are required to provide containers for the collection of source-separated organic materials, recyclable materials, and solid waste in all indoor and outdoor areas where discarded materials containers are provided for customers, for materials generated by that business, in accordance with the City's discarded materials collection system and applicable collection agreement(s) (Bakersfield, 2022).

The City of Bakersfield Municipal Code Sections 14.02.010 to 14.02.045, *Water and Sewers*, address limitations on the use of outside irrigation to water ornamental landscapes or turf with potable water pursuant to the rules and regulations promulgated by the State Water Resources Control Board relative to water usage. Municipal Code Sections 17.61.010 to 17.61.060, *Landscape Standards*, require adherence to the Model Water Efficient Landscaping Ordinance known and designated as California Code of Regulations, Title 23, Chapter 2.7 (Bakersfield, 2022).

4.15.3 BASIS FOR DETERMINING SIGNIFICANCE

According to Section XIX of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to utilities and service systems if the Project or any Project-related component would (OPR, n.d.):

- 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;*
- b) *Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;*
- c) *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;*
- 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;*
- e) *Fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste.*

4.15.4 IMPACT ANALYSIS

Threshold 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?

A. Water Service and Facilities

Under existing conditions, existing 12-inch water lines occur within Berkshire Road and South H Street along the Project site's frontages with these roadways. As part of the proposed Project, 6- to 8-inch water lines would be constructed on site, which would connect directly to the existing water lines within Berkshire Road and South H Street. In addition, a 56-foot diameter by 37½-foot high water tank with pump house is proposed near the southwestern portion of the warehouse facility to service the warehouse and provide adequate fire flow.

Impacts associated with the construction of Project-related water facilities are inherent to the Project's construction phase, and impacts have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project's impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project's proposed water improvements. As such, with the mitigation measures specified in this EIR, Project impacts due to water improvements would be less than significant.

B. Wastewater and Wastewater Treatment Facilities

An existing 12-inch sewer line occurs along the Project's frontage within Berkshire Road and a 15-inch sewer line occurs within South H Street along the site's frontage. Both the 15-inch and 12-inch sewer lines connect to a 36-inch trunk line within Hosking Avenue along the Project's frontage, which conveys wastewater to WTP No. 3. As part of the Project, a series of sewer lines measuring between 6 to 8 inches in size would be constructed on site. Sewer flows from the northwest portions of the Project site would connect to the existing 12-inch sewer main within Berkshire Road, while sewer flows from the northeast and southern portions of the Project site would connect to the existing 15-inch sewer line within South H Street. Based on the Project's Sewer Capacity Study (*Technical Appendix L*), the existing sewer facilities have adequate capacity to handle sewer flows generated by the Project, and the Project would not require any expansion of the existing off-site sewer facilities.

Impacts associated with the construction of Project-related sewer facilities are inherent to the Project's construction phase, and impacts have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project's impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project's proposed sewer improvements. As such, with the mitigation measures specified in this EIR, Project impacts due to sewer improvements would be less than significant.

In addition, wastewater generated by the Project would be conveyed to the BDPW WTP No. 3, which has a total capacity of 32 mgd and currently receives flows of approximately 17.8 mgd (Bakersfield, n.d.). Based on the Project's Sewer Capacity Study (*Technical Appendix L*), the Project is expected to generate an average of 132,000 gallons per day (gpd), with peak daily flows estimated at 243,000 gpd (Cornerstone, 2021b, p. 3). The Project's peak daily wastewater generation would represent only a small fraction (1.7%) of the total 14.2 mgd excess daily wastewater treatment capacity at BDPW WTP No. 3. Accordingly, no expansion to the BDPW WTP No. 3 would be required to serve the Project, and no impacts would occur associated with wastewater treatment capacity.

C. Stormwater Drainage Facilities

As part of the Project's construction, the existing drainage pattern on the site would be altered and managed by an on-site stormwater drainage system. Storm drain facilities would include curbs, gutters, inlets, underground pipes, and a surface retention basin. The proposed retention basin that also would serve water quality functions is proposed in the west-central portion of the Project site between SR-99 and the proposed warehouse building. The basin would jointly serve the commercial development and the warehouse development for storm water and water quality purposes. The retention basin is designed to Kern County standards (which are more conservative (strict) than City standards), requiring the basin to have capacity for a 5-day/10-year storm event. The capacity of the retention basin meets this requirement. (Cornerstone, 2021a). With installation of the retention basin, there would be adequate capacity in downstream storm drainage facilities to accommodate runoff generated on site, with no off-site improvements required for drainage facility capacity.

Impacts associated with the construction of Project-related drainage facilities are inherent to the Project's construction phase, and impacts have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project's impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project's proposed drainage improvements. As such, with the mitigation measures specified in this EIR, Project impacts due to drainage improvements would be less than significant.

D. Dry Utilities (Electrical Power, Natural Gas, and Telecommunications)

Electricity, natural gas, and telecommunications facilities are available within roadways abutting the Project site. Connections to these facilities would be made along the Project's frontages with abutting roadways. The existing overhead lines along South H Street adjacent to the Project's frontage would be undergrounded concurrent with the Project's construction. Impacts associated with the construction of Project-related utilities are inherent to the Project's construction phase, and impacts have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project's impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project's proposed utility

improvements. As such, with the mitigation measures specified in this EIR, Project impacts due to utility improvements would be less than significant.

E. Conclusion

Based on the foregoing analysis, the proposed Project would result in less-than-significant impacts associated with the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, and impacts would be less than significant.

Threshold 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?

The GCWD would provide potable water service to the Project. Present and future water supplies available to the GCWD to provide water service to the Project include water produced solely from District-owned groundwater wells within the Kern County Subbasin and purchased seepage water from the Kern Island Canal and Central Canal. (GCWD, 2020, p. 8)

A WSA was prepared to assess the Project's effect on the GCWD's ability to provide adequate water service to its customers during normal, dry, and multiple dry years. The WSA, which is provided as *Technical Appendix M* to this EIR, was prepared in accordance with Senate Bill (SB) 610 and SB 221 (Cornerstone, 2021c, p. 1).

Table 4.15-1, *Project Water Demand Estimate*, shows the Project's anticipated water demand, inclusive of a 10% contingency for planning purposes. As shown, the Project is estimated to generate a demand for approximately 42.2 million gallons per year (MG/yr) of water, or approximately 129.4 acre-feet per year (AFY). Table 4.15-2, *GCWD Projected Total Water Demand with Proposed Project*, shows the GCWD's total estimated water demand, including water demands for the proposed Project, through year 2045. As shown, by 2045 the total water demand within the GCWD service area is estimated to be 3,410 MG/yr.

Table 4.15-1 Project Water Demand Estimate

Land Use	Building/Irrigated Area		Estimated Water Flow (gpd/1,000 sq ft)	Water Demand	
	Square Feet	Acres		(MG/yr)	(acre-feet per yr)
RETAIL ¹	182,500	4.19	346	23.0	70.7
RESTAURANT ²	5,000	0.11	1,075	2.0	6.0
INDUSTRIAL ³	<u>1,012,185</u>	<u>23.24</u>	28	10.3	<u>31.7</u>
Subtotal Building Area =	1,199,685	27.5			108.4
LANDSCAPING ⁴	369,912	8.49		6.2	19.1
CONTINGENCY ⁵	10%			0.6	1.9
TOTAL =	1,569,597	36.0		42.2	129.4

Notes:

Square footages from Site Plan Review application submittal to City of Bakersfield, May 20, 2021

¹ Used water demand factors for "Shopping Centers" in the GCWD Calculation of Single-Family Residence Equivalents for Water Service.

² Assumed restaurants would occupy approximately 5,000 sq ft of total retail space; actual occupancy to be determined.

³ Used water demand factors for "Warehousing" in the GCWD Calculation of Single-Family Residence Equivalents for Water Service.

⁴ Used calculations from "Guidelines for Estimating Unmetered Landscaping Water Use" from the Office of Energy Efficiency & Renewable Energy. Based on "intense exposure" with low water requirements and medium irrigation system efficiency in a desert climate.
<https://www.energy.gov/eere/femp/downloads/guidelines-estimating-unmetered-landscaping-water-use>

⁵ A 10% contingency is included at this point in planning.

(Cornerstone, 2021c, Table 1)

Table 4.15-2 GCWD Projected Total Water Demand with Proposed Project

	2025	Projected Water Use (MG/yr)			
		2030	2035	2040	2045
Greenfield CWD Projected Water Demand (from Table 4)	881	927	972	1,020	1,069
Majestic Hosking Project (from Table 2)	13.8	42.2	42.2	42.2	42.2
Total, MG/yr	895	969	1,015	1,062	1,111
Total, acre-feet per yr	2,746	2,974	3,116	3,260	3,410

(Cornerstone, 2021c, Table 5)

The adequacy of water supply is to be evaluated for a normal year, single-year drought, and multi-year drought in 5-year increments over a 20-year planning period. Table 6-9 of the GCWD UWMP projects its estimated supply capacity (i.e. 3,168 MG/yr or 9,722 acre-feet per year) to remain constant throughout 2045 (GCWD, 2020, Table 6-9). Thus, in the year 2045, projected water demand including the Project would be an estimated 4% higher than the projection stated in GCWD's 2020 UWMP (Cornerstone, 2021c, p. 6).

As documented in the Project's WSA (*Technical Appendix M*), the GCWD UWMP forecasts 9,722 acre-feet of reliable supply for a normal year, single-year drought, and multi-year drought in 5-year increments over a 20-year planning period, which is nearly three times the forecasted water demand over the planning period, even accounting for the Project's increase in water demand. Similarly, the Kern River Groundwater Sustainability Plan estimates groundwater safe yield combined with other sources of supply and supplemental supply projects which combined "fully mitigate potential future overdraft" (Cornerstone, 2021c, p. 8).

Water supply and demand comparison over varying hydrologic conditions, taking into account the water demand of the proposed Project, is presented in Table 4.15-3, *GCWD Projected Water Demand and Supplies with Proposed Project*. As shown, the GCWD has more than adequate groundwater supplies to meet water demand through the year 2045 within its service area, including the added demand associated with the proposed Project (Cornerstone, 2021c, pp. 8-9).

In summary, estimated water demand associated with the proposed Project represents an additional 129.4 AFY demand on the GCWD delivery system. The GCWD's 2020 UWMP forecasts more than adequate groundwater supplies to reliably meet customer demands, including demand associated with the proposed Project, under various drought scenarios, over a 20-year planning period. Accordingly, the GCWD would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years, and impacts would therefore be less than significant (Cornerstone, 2021c, p. 9).

Table 4.15-3 GCWD Projected Water Demand and Supplies with Proposed Project

			Projected Water Use (acre-feet/yr)				
			2025	2030	2035	2040	2045
Projected	Reliable	Supply	9,722	9,722	9,722	9,722	9,722
(from UWMP Table 6-9)							
Greenfield	CWD	Projected					
Water	Demand	including the					
Majestic	Hosking	Project					
(from Table 5)			2,746	2,974	3,116	3,260	3,410
Surplus	Supply	Available,					
AFY=			6,976	6,748	6,606	6,462	6,312

(Cornerstone, 2021c, Table 7)

Threshold 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?

Wastewater generated by the Project would be treated at the BPDW WTP No. 3. For the warehouse portion of the Project site, the flow rate for "Offices" was used to calculate the average daily gallons per day of wastewater generated. The office category fits the function of a warehouse such as the one proposed for the Project that would be utilized more for the sorting and distribution of goods. Assuming 10 gallons per day per employee and 1,200 employees provides an average of 24,000 gpd of wastewater

generated or 0.074 cubic feet per second (cfs). For the commercial portion of the Project, an effluent factor is 0.0056 cfs/gross acre is used to calculate the average daily wastewater generated. The commercial portion of the Project site is 29.8 gross acres, so the average daily wastewater flow rate would be 0.17 cfs or 108,000 gpd. Therefore, the entire Project would be expected to generate an average of 132,000 gallons of wastewater per day or 0.20 cfs, with peak daily flows of 243,000 gpd or 0.37 cfs (Cornerstone, 2021b, p. 3).

Three segments of sewer line were analyzed between the Project site and WTP No. 3 as part of the Project's Sewer Capacity Study (*Technical Appendix L*). The analysis shows that all three segments have excess capacity available to serve the Project under current and future tributary buildout conditions. (Cornerstone, 2021b, p. 14) As such, the existing sewer lines have adequate capacity to convey Project-generated wastewater to WTP No. 3, resulting in a less-than-significant impact.

In addition, and as discussed above under the analysis of Threshold a., the BDPW WTP No. 3 has a total capacity of 32 mgd and currently receives flows of approximately 17.8 mgd (Bakersfield, n.d.). As noted above, the Project is expected to generate an average of 132,000 gallons per day (gpd), with peak daily flows estimated at 243,000 gpd (Cornerstone, 2021b, p. 3). The Project's peak daily wastewater generation would represent only a small fraction (1.7%) of the total 14.2 mgd excess daily wastewater treatment capacity at BDPW WTP No. 3. Accordingly, the BDPW WTP No. 3 would have adequate capacity to serve the Project, in addition to its existing and planned commitments.

Based on the foregoing analysis, the proposed Project would not result in a determination by the BDPW that it has inadequate capacity to serve the Project's projected demand in addition to the BDPW's existing commitments, and impacts would be less than significant.

Threshold 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?

The Project would be required to comply with mandatory waste reduction requirements of the California Integrated Waste Management Act (AB 939), the California Solid Waste Reuse and Recycling Act of 1991 (Cal Pub Res. Code Section 42911), California's Green Building Standards Code (CALGreen), and the Chapter 8.32, *Refuse, Solid Waste, and Recycling*, of the City of Bakersfield Municipal Code. Notwithstanding, construction and operation of the Project would result in the generation of solid waste requiring disposal at a landfill. Each is discussed below.

A. Construction Impact Analysis

Waste would be generated by the Project construction process, primarily comprising discarded materials and packaging. The Project's building construction would occur in two phases. Phase 1 of construction is anticipated to commence in March of 2023, and would take 22 months (440 working days). Phase 2 of construction is anticipated to commence in January of 2025, and is estimated to take 59 months (1,180 working days). Phase 1 of the Project would entail construction of the proposed 1,012,185 s.f. cross-dock speculative warehouse building, while Phase 2 would consist of the

construction of the 12 commercial buildings collectively having a maximum of 187,500 s.f. of building space. Based on a total building area of 1,199,685 s.f. and a construction waste generation factor of 4.34 pounds per square foot (EPA, 2009, p. 10), approximately 4,392,883 pounds (2,196 tons) of construction waste would be generated during Phase 1 of the Project construction ($1,012,185 \text{ s.f.} \times 4.34 \text{ pounds/s.f.} = 4,392,883 \text{ pounds}$), while approximately 813,750 pounds (407 tons) would be generated during Phase 2 of Project construction ($187,500 \times 4.34 \text{ pounds/s.f.} = 813,750 \text{ pounds}$).

CALGreen requires builders/owners to divert 65 percent of construction waste from landfills (by recycling, reusing, and other waste reduction strategies), consistent with the State's solid waste reduction goals; therefore, the Project is estimated to generate a total of approximately 768.6 tons of construction waste during Phase 1 of Project construction, and a total of 142 tons of construction waste during Phase 2 of Project construction. Thus, during Phase 1 of the Project, the Project would generate approximately 1.75 tpd of solid waste requiring disposal at local landfills ($768.6 \text{ tons} \div 440 \text{ days} = 1.75 \text{ tpd}$), while during Phase 2 of Project construction the Project would generate approximately 0.12 tpd requiring disposal at local landfills ($142 \text{ tons} \div 1,180 \text{ days} = 0.12 \text{ tpd}$).

Non-recyclable demolition debris and construction waste generated by the Project would be disposed of at the Bakersfield Metropolitan (Bena) Sanitary Landfill, which is operated by the Kern County Public Works Department. The Bakersfield Metropolitan (Bena) Sanitary Landfill has a permitted daily capacity of 4,500 tpd. The maximum average daily volume of solid waste generated during Project construction (1.75 tpd) would represent only 0.04% of the daily disposal capacity at the Bakersfield Metropolitan (Bena) Sanitary Landfill. Accordingly, it can be concluded that the Project would not generate construction-related solid waste in excess of the existing daily disposal capacity at the Bakersfield Metropolitan (Bena) Sanitary Landfill. Furthermore, the Bakersfield Metropolitan (Bena) Landfill is not expected to reach its total maximum permitted disposal capabilities during the Project's construction period. Therefore, during construction the Project would not generate solid waste in excess of the capacity of local infrastructure, and impacts would be less than significant.

Additionally, and as noted above, the Project would be subject to CALGreen requirements to divert from local landfills a minimum of 65% of waste generated construction activities. The Project also would be subject to compliance with applicable construction-related provisions of Chapter 8.32, *Refuse, Solid Waste, and Recycling*, of the City's Municipal Code. As such, the Project would not generate solid waste in excess of State or local standards or otherwise impair the attainment of solid waste reduction goals, and impacts would be less than significant.

B. Operational Impact Analysis

Based on a daily waste generation factor of 1.42 pounds of waste per 100 square feet for the industrial/warehouse building area portion of the Project (CalRecycle, 2019b), long-term operation of the industrial/warehouse portion of the Project would generate approximately 7.2 tons of solid waste per day ($[1,012,185 \text{ s.f.} \times 1.42 \text{ lbs/} 100 \text{ s.f.}] \div 2,000 \text{ lbs/ton} = 7.2 \text{ tons}$). Based on a daily waste generation factor of 0.046 pounds of waste per square foot for the commercial building area portion of the Project (CalRecycle, 2019b), long-term operation of the commercial portion of the Project would

generate approximately 4.3 tons of solid waste per day ($[187,500 \text{ s.f.} \times 0.046 \text{ lbs}] \div 2,000 \text{ lbs/ton} = 4.3 \text{ tons}$). The combined total of daily waste generated by both the industrial/warehouse portion and the commercial portion of the Project would be 11.5 tons. A minimum of 50% of all solid waste would be required to be recycled pursuant to AB 939, consistent with the State's solid waste reduction goals; therefore, Project operation would generate approximately 5.8 tpd of solid waste requiring disposal at a landfill.

Non-recyclable waste generated by Project operations would be disposed at the Bakersfield Metropolitan (Bena) Landfill. As indicated above, the Bakersfield Metropolitan (Bena) Sanitary Landfill has a permitted daily capacity of 4,500 tpd. The Project's 5.8 tpd of solid waste would represent only 0.13% of the total daily disposal capacity at this landfill. Because the Project would generate a relatively small amount of solid waste per day, as compared to the permitted daily capacity for the Bakersfield Metropolitan (Bena) Landfill, it is anticipated that the landfill facility would have sufficient daily capacity to accept solid waste generated by the Project. As such, because the Bakersfield Metropolitan (Bena) Landfill would have adequate capacity to handle solid waste generated by the Project's operational phase, impacts would be less than significant.

The Project's long-term solid waste generation also would not be in excess of State or local disposal standards. As indicated above, the Project would be subject to compliance with the provisions of AB 939 to divert a minimum of 50% of solid waste from landfills. In addition, the Project would be required to comply with the provisions of Chapter 8.32, *Refuse, Solid Waste, and Recycling*, of the City's Municipal Code. Accordingly, long-term operation of the Project would not generate solid waste in excess of State or local standards, and would not otherwise impair the attainment of solid waste reduction goals. Thus, impacts would be less than significant.

<p><i>Threshold e: Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?</i></p>

The California Integrated Waste Management Act (AB 939), signed into law in 1989, established an integrated waste management system that focused on source reduction, recycling, composting, and land disposal of waste. The bill also established a 50 percent waste reduction requirement for cities and counties by the year 2000, along with a process to ensure environmentally safe disposal of waste that could not be diverted. In addition, CALGreen requires builders/owners to divert 65 percent of construction waste from landfills (by recycling, reusing, and other waste reduction strategies).

As indicated under the analysis of Threshold d., the Project would be subject to the requirements of CALGreen, including the requirement to divert a minimum of 65 percent of the solid waste generated by the Project's construction phase from local landfills. In addition, and in order to assist the City of Bakersfield in achieving the mandated goals of the Integrated Waste Management Act, under long-term operations the Project's building occupant(s) would be required to work with future refuse haulers to develop and implement feasible waste reduction programs, including source reduction, recycling, and composting. Additionally, in accordance with the California Solid Waste Reuse and Recycling Act of 1991 (Cal Pub Res. Code Section 42911), the Project is required to provide adequate areas for

collecting and loading recyclable materials where solid waste is collected. The collection areas are required to be shown on construction drawings and be in place before occupancy permits are issued. (CA Legislative Information, 2005) Further, in compliance with AB 341 (Mandatory Commercial Recycling Program), the future occupant(s) of the proposed Project would be required to arrange for recycling services, if the occupant generates four (4) or more cubic yards of solid waste per week (CA Legislative Information, 2011). The implementation of these mandatory requirements would reduce the amount of solid waste generated by the Project and diverted to landfills, which in turn will aid in the extension of the life of affected disposal sites. The Project would be required to comply with all applicable solid waste statutes and regulations; as such, impacts related to solid waste statutes and regulations would be less than significant.

4.15.5 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis for utilities and service systems considers development of the Project site in conjunction with other development projects in the vicinity of the Project site as well as full General Plan buildout in the City of Bakersfield and other jurisdictions in the region.

Relocation or Construction of New or Expanded Utilities

The Project would require the installation of water, sewer, stormwater, electric power, and telecommunications facilities to provide utility service to the Project site. Cumulative effects associated with the Project's proposed water, sewer, stormwater drainage, and utility connections have been evaluated throughout this EIR, and where necessary mitigation measures have been identified to reduce impacts by the maximum feasible extent. There are no components of the Project's water, sewer, stormwater drainage, or utility connections that would result in cumulatively-considerable impacts not already evaluated by this EIR. Accordingly, Project impacts due to new or expanded water, wastewater treatment, stormwater drainage, and utility connections would be less-than-cumulatively considerable.

Water Supplies

The analysis in the Project's WSA (*Technical Appendix M*), which is based on the GCWD's 2020 UWMP, demonstrates that with implementation of the Project and other cumulative developments, the GCWD would have adequate water supplies during normal, dry, and multiple dry years. Therefore, cumulatively-considerable impacts due to water supply would be less than significant.

Wastewater Treatment Capacity

As indicated under the analysis of Threshold c., sewer lines that would convey Project-generated wastewater have adequate capacity to serve the Project under current and future tributary buildout conditions. Additionally, the BDPW WTP No. 3 has an excess capacity of 14.2 mgd, and the Project's generation of wastewater would represent only a small fraction (1.7%) of the excess daily wastewater treatment capacity at BDPW WTP No. 3. Although the Project and other cumulative developments ultimately could contribute to the need for expanded capacity at WTP No. 3, impacts associated with such expansion would be subject to CEQA once plans for such expansion have been prepared by the

City of Bakersfield. As no such plans are currently available, it would be speculative to evaluate potential cumulatively-considerable impacts associated with the proposed expansion (CEQA Guidelines § 15145). As such, Project impacts due to wastewater capacity would be less than significant on a cumulatively-considerable basis.

Solid Waste Generation

As indicated under the analysis of Threshold d., solid waste generated by construction and operation of the Project would represent small proportions of the daily disposal capacities at the Bakersfield Metropolitan (Bena) Landfill. This landfill has a sufficient daily capacity to handle solid waste generated by the Project and other cumulative developments both during construction and long-term operation. The Project's incremental contribution to solid waste generation may contribute to an ultimate need for expanding the solid waste disposal facility that would serve the Project and/or the construction of additional solid waste disposal facilities. Although the Project and other cumulative developments ultimately could contribute to the need for expanded landfill capacity, impacts associated with such expansion would be subject to CEQA once plans for such expansion are available. As no such plans are currently available, it would be speculative to evaluate potential cumulatively-considerable impacts associated with the proposed expansion (CEQA Guidelines § 15145). Therefore, the Project's impacts to solid waste disposal facilities are evaluated as less than significant on a cumulatively-considerable basis.

Compliance with Solid Waste Reduction Requirements

The Project would adhere to regulations set forth by local and State regulations (including CALGreen and AB 939) during both construction and long-term operations. Other cumulative developments also would be required to comply with such regulations. As such, the Project as well as other cumulative developments in the area would not result in cumulative impacts with respect to compliance with federal, State, and local statutes and regulations related to solid wastes. Impacts would be less-than-cumulatively considerable.

4.15.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less-than-Significant Impact. The Project's wet and dry utility infrastructure facilities have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project's impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project's proposed water, sewer, drainage, and dry improvements that have not already been addressed.

Threshold b: Less-than-Significant Impact. Estimated water demand associated with the Project represents an additional 129.4 AFY demand on the GCWD delivery system. The GCWD's 2020 UWMP forecasts more than adequate groundwater supplies to reliably meet customer demands, including demand associated with the proposed Project, under various drought scenarios, over a 20-year planning period. Accordingly, the GCWD would have sufficient water supplies available to serve

the Project and reasonably foreseeable future development during normal, dry, and multiple dry years, and impacts would therefore be less than significant.

Threshold c: Less-than-Significant Impact. Existing sewer lines have adequate capacity to convey Project-generated wastewater to WTP No. 3, resulting in a less-than-significant impact. In addition, the Project's peak daily wastewater generation would represent only a small fraction (1.7%) of the total 14.2 mgd excess daily wastewater treatment capacity at BDPW WTP No. 3. Accordingly, the BDPW WTP No. 3 would have adequate capacity to serve the Project, in addition to its existing and planned commitments. Impacts would be less than significant.

Threshold d: Less-than-Significant Impact. There is adequate capacity available at the Bakersfield Metropolitan (Bena) Landfill to accept the Project's solid waste during both construction and long-term operation. The Project has no potential to generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure to handle the waste. Impacts would be less than significant.

Threshold e: Less-than-Significant Impact. There is no potential for the Project to conflict with applicable federal, State, and local statutes and regulations related to the management and reduction of solid waste and pertaining to waste disposal, reduction, and recycling. Impacts would be less than significant.

4.15.7 MITIGATION

Impacts would be less than significant; therefore, no mitigation is required.

4.15.8 DESIGN FEATURES AND REGULATORY REQUIREMENTS

The City of Bakersfield is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Utilities and Service Systems, which include the following:

- UTL RR-1 During construction, Project construction contractors are required to comply with the requirements of the 2019 California Green Building Standards Code (CalGreen, Part 11 of Title 24, California Code of Regulations), which requires among other items the installation of low water-use appliances and requires that a minimum of 65 percent of the solid waste generated by the Project's construction phase be diverted from local landfills.
- UTL RR-2 The Project is required to comply with the provisions of the California Solid Waste Reuse and Recycling Act (AB 1327) which requires that an adequate area for collecting and loading recyclable materials over the lifetime of the project be provided. The City of Bakersfield shall ensure the provision of this area prior to the issuance of building permits.

- UTL RR-3 The Project Applicant, construction contractors, and operators, shall comply with all applicable provisions of Chapter 8.32, *Solid Waste/Recyclable Materials/Organic Waste*, of the City of Bakersfield Municipal Code.
- UTL RR-4 The Project Applicant, construction contractors, and operators, shall comply with all applicable provisions of Chapter 14.02, *Water and Sewers*, of the City of Bakersfield Municipal Code.
- UTL RR-5 The Project Applicant, construction contractors, and operators, shall comply with all applicable provisions of Chapter 17.61, *Landscape Standards*, of the City of Bakersfield Municipal Code.

5.0 OTHER CEQA CONSIDERATIONS

5.1 SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

The CEQA Guidelines require that an EIR disclose the significant environmental effects of a project which cannot be avoided if the proposed project is implemented (CEQA Guidelines Section 15126(b)). As described in detail in Section 4.0, *Environmental Analysis*, of this EIR, the proposed Project is anticipated to result in two impacts to the environment that cannot be reduced to below a level of significance after the consideration of compliance with applicable laws and regulations, design features proposed by the Project, and the application of feasible mitigation measures. These impacts are as follows:

- Greenhouse Gas Emissions (Threshold a): Significant and Unavoidable Cumulatively-Considerable Impact. Although the Project's GHG emissions would only be a very small fraction of the global GHG emissions that contribute to climate change, the City is using a net-zero threshold. Because the Project would result in a net increase in GHG emissions as compared to existing conditions even with implementation of mitigation measures, the Project's impacts due to GHG emissions would be significant and unavoidable on a cumulatively-considerable basis.
- Transportation (Threshold b): Significant and Unavoidable Direct and Cumulatively Considerable Impact. Although the Project's impacts to VMT from the proposed commercial retail uses and warehouse employees would not exceed the identified thresholds of significance, Project-related truck traffic would generate approximately 29,000 miles/day and 50 miles per truck, which exceeds the significance threshold established by this EIR of 16.29 miles per truck. Mitigation is not available to reduce this impact, as the destination of Project-related truck trips would consist of fixed locations (e.g., ports, last-mile delivery facilities, etc.), and it would not be feasible for the Project Applicant or the City of Bakersfield to mandate a reduction in the distance the large trucks must travel to their destination. As such, the Project's truck-related VMT is a significant and unavoidable impact of the proposed Project on a direct and cumulatively-considerable basis.

5.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE INVOLVED IN THE PROPOSED PROJECT SHOULD IT BE IMPLEMENTED

The CEQA Guidelines require EIRs to address any significant irreversible environmental changes that would be involved in the proposed action should it be implemented (CEQA Guidelines Section 15126.2(c)). An environmental change would fall into this category if: a) the project would involve a large commitment of non-renewable resources; b) the primary and secondary impacts of the project would generally commit future generations to similar uses; c) the project involves uses in which

irreversible damage could result from any potential environmental accidents; or d) the proposed consumption of resources is not justified (e.g., the project results in the wasteful use of energy).

Determining whether the proposed Project may result in significant irreversible environmental changes requires a determination of whether key non-renewable resources would be degraded or destroyed in such a way that there would be little possibility of restoring them. Natural resources, in the form of construction materials and energy resources, would be used in the construction of the proposed Project, but development of the Project site as proposed would have no measurable adverse effect on the availability of such resources, including resources that may be non-renewable (e.g., fossil fuels). Construction and operation of the proposed Project would not involve the use of large sums or sources of non-renewable energy. Additionally, the Project is required by law to comply with the California Green Building Standards Code (CALGreen), compliance with which reduces a building operation's energy volume that is produced by fossil fuels. The Project would be subject to regulations to reduce the Project's reliance on non-renewable energy sources. The Project also would be subject to the Energy Independence and Security Act of 2007, which contains provisions designed to increase energy efficiency and availability of renewable energy. The Project also would be subject to California Energy Code, or Title 24, which contains measures to reduce natural gas and electrical demand, thus requiring less non-renewable energy resources. The Project would avoid the inefficient, wasteful, and unnecessary consumption of energy during Project construction, operation, maintenance, and/or removal. With mandatory compliance to the energy efficiency regulations and mitigation measures, the Project would not involve the use of large sums or sources of non-renewable energy. A more detailed discussion of Project energy consumption is provided in EIR Subsection 4.5, *Energy*.

EIR Subsection 4.8, *Hazards and Hazardous Materials*, provides an analysis of the proposed Project's potential to transport or handle hazardous materials which, if released into the environment, could result in irreversible damage. As concluded in the analysis, compliance with federal, State, and local regulation related to hazardous materials would be required of all contractors working on the property during the Project's construction and of all the future occupants of the Project's buildings. As such, construction and long-term operation of the proposed Project would not have the potential to cause significant irreversible damage to the environment, including damage that may result from upset or accident conditions.

5.3 GROWTH-INDUCING IMPACT OF THE PROPOSED PROJECT

CEQA requires a discussion of the ways in which the proposed Project would be growth inducing. The CEQA Guidelines identify a project as growth inducing if it would foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment (CEQA Guidelines Section 15126.2(d)). New employees and new residential developments represent direct forms of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area.

A project could indirectly induce growth at the local level by increasing the demand for additional goods and services associated with an increase in population or employment and thus reducing or

removing the barriers to growth. This typically occurs in suburban or rural environments where population or employment growth results in increased demand for service and commodity markets responding to the new population of residents or employees. Economic growth would likely take place as a result of the proposed Project's operation as a commercial and warehouse development. The Project's construction- and operational-related employees would purchase goods and services in the region, but any secondary increase in employment associated with meeting these goods and services needs would be marginal, accommodated by existing goods and service providers, and highly unlikely to result in any new physical impacts to the environment. Therefore, while the Project would create economic opportunities caused by introducing new job opportunities to the Project site, this change would not induce substantial new growth in the region.

Under CEQA, growth inducement is not considered necessarily detrimental, beneficial, or of significance to the environment. Typically, growth-inducing potential of a project would be considered significant if it fosters growth or a concentration of population in excess of what is assumed in pertinent master plans, land use plans, or in projections made by regional planning agencies such as the Kern County Association of Governments (Kern COG). Significant growth impacts also could occur if a project provides infrastructure or service capacity to accommodate growth beyond the levels currently permitted by local or regional plans and policies. In general, growth induced by a project is considered a significant impact if it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth significantly affects the environment in some other way.

According to the growth trends included in Kern COGs RTP/SCS, Metropolitan Bakersfield's population is projected to grow by 13,651 residents between 2017 and 2042 (approximately 1.8% annual growth). Over this same time period, employment in Metropolitan Bakersfield is expected to add 3,098 new jobs (approximately 1.3% annual job growth (Kern COG, 2018, Table 3-5). Economic growth would likely take place as a result of the Project's operation as a commercial and warehouse development. The Project's employees (short-term construction and long-term operational) would purchase goods and services in the region, but any secondary increase in employment associated with meeting these goods and services demands is expected to be accommodated by existing goods and service providers and, based on the amount of existing and planned future commercial and retail services available in areas near the Project site, would be highly unlikely to result in any unanticipated, adverse physical impacts to the environment. In addition, the Project would create jobs, approximately 1,200 warehouse employees and 300 commercial employees, a majority of which would likely be filled by residents of the housing units either already built or planned for development within the City of Bakersfield and nearby incorporated and unincorporated areas. Accordingly, because it is anticipated that most of the Project's future employees would already be living in the City of Bakersfield, the Project's introduction of employment opportunities on the Project site would not induce substantial growth in the area.

The area surrounding the Project site consists of undeveloped parcels proposed for future development to the north and south, the Kern Island Canal and residential to the east, and SR-99 and residential to

the west. Development of the Project site is not expected to place short-term development pressure on abutting properties because these areas are already built-out, have approvals for future development, or have proposals for future development under review by the City of Bakersfield. Furthermore, the proposed Project's improvements to the public infrastructure, including roads, drainage infrastructure, and other utility improvements are consistent with the City's General Plan and would not indirectly induce substantial and unplanned population growth in the local area.

Based on the foregoing analysis, the Project would not result in substantial, adverse growth-inducing impacts.

5.4 EFFECTS FOUND NOT TO BE SIGNIFICANT DURING THE EIR SCOPING PROCESS

CEQA Guidelines Section 15128 requires that an EIR "...contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR." The Project's Initial Study and the Notice of Preparation for this EIR, both of which are included in *Technical Appendix A* to this EIR, determined that implementation of the Project for commercial and warehouse development would clearly have no potential to result in significant impacts under six (6) environmental issue areas: agriculture and forestry resources, mineral resources, population and housing, public services, recreation, and wildfire. Based on public comments received by the City on the NOP, the topic of population of housing is analyzed in Subsection 4.12. The other five (5) issue areas were not required to be analyzed in detail in the subsections of EIR Section 4.0, *Environmental Analysis*. A brief analysis of the Project's impacts to agriculture and forestry resources, mineral resources, public services, recreation, and wildfire is presented below.

5.4.1 AGRICULTURE AND FORESTRY RESOURCES

Threshold 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?

According to information available from the Farmland Mapping and Monitoring Program (FMMP), the entire Project site is designated as Grazing Land. Grazing Land is land on which the existing vegetation is suited to the grazing of livestock (CDC, 2021). There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) located on the Project site. Therefore, the Project does not have the potential to directly or indirectly convert Farmland to non-agricultural use, and no impact would occur.

Threshold b: Would the Project conflict with existing zoning for agricultural use, or Williamson Act contract?

According to the California Department of Conservation, the Project site is not located on land that is subject to a Williamson Act contract (CDC, 2021). Under existing conditions, the Project site is zoned

Regional Commercial-Planned Commercial Development Combining (C-2/PCD). As such, the proposed Project has no potential to conflict with existing zoning for agricultural use, or a Williamson Act contract. No land zoned for agricultural use or Williamson Act contract lands are located near the Project site (CDC, 2021). Based on the foregoing, the Project has no potential to impact lands zoned for agricultural use or conflict with any Williamson Act contracts. No impact would occur.

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

The Project site is not located on lands designated as forest lands, timberlands, or Timber Production by the City's General Plan, and none of the surrounding properties are designated as forest lands or timberlands. Accordingly, the proposed Project would not have the potential to 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 Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104(g)). As such, no impact would occur.

Threshold d: Would the Project result in the loss of forest land or conversion of forest land to non-forest use?

As noted above under Threshold (c), the Project site is not located on or near forest land. Therefore, the proposed Project would not result in the loss of any forest land or convert forest land to non-forest use. No impact would occur.

Threshold e: Would the Project involve other changes to 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?

As noted above under Threshold (c), the Project site is not located on or near lands designated Farmland or forest land. There is no Farmland, forest land, or timberland near the Project site. As such, the proposed Project has no potential to 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. Therefore, no impact would occur.

5.4.2 MINERAL RESOURCES

Threshold a: Would the Project result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?

The principal mineral resources extracted within the Metropolitan Bakersfield area are oil, natural gas, sand, and gravel. Areas used for sand and gravel extraction are concentrated primarily along the floodplain and alluvial fan of the Kern River, which is an important resource for construction, development, and other improvements. Because of the Project's location away from any alluvial fans

and the Kern River, it is unlikely that the Project site would contain sand and gravel that would be considered a valuable commodity; therefore, there would be no impact to aggregate resources. In addition, the region is a major oil-producing area, with substantial oil and gas fields existing within the Metropolitan Bakersfield area. However, according to the California Geologic Energy Management Division (Cal-GEM) there are no known oil, gas, or injection wells located within the boundaries of the Project site (Cal-GEM, 2021). Therefore, the proposed Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, and there would be no impact.

Threshold 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?

The Project site is not identified as a locally-important mineral resources recovery site by the Metropolitan Bakersfield General Plan (MBGP) or any other land use plan. As such, the Project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. No impact would occur.

5.4.3 PUBLIC SERVICES

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

i) Fire protection?

The following discusses whether the proposed Project would result in substantial adverse physical impacts to public services. The need for additional public services is generally directly correlated to population growth and the resultant additional population's need for services beyond what is currently available.

Fire protection services for the Metropolitan Bakersfield area are provided through joint implementation measures between the Metropolitan City of Bakersfield and the County of Kern. The nearest fire station is the Kern County Fire Department, Station 52 (Greenfield), at 312 Taft Highway, approximately 1.4 miles southeast from the Project site. Other nearby stations are Bakersfield Fire Department (BFD) Station No. 13, located approximately 1.7 miles to the west, and BFD Station No. 5, located approximately 2.4 miles to the north. Although the Project site is currently vacant, the site is designated by the City's General Plan for commercial development and is planned to be served by existing fire stations. A new fire station or physical alteration of existing fire stations would not be needed to serve the Project. No impact would occur.

Threshold a: *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government 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:*

ii) Police protection?

Police protection services for the Metropolitan Bakersfield area are provided through joint implementation measures between the Metropolitan City of Bakersfield and Kern County. The Project's development would result in an incremental increase in demand for police protection services, but is not anticipated to require or result in the construction of new or physically altered police facilities. The nearest first response police station is located at 1601 Truxton Avenue, which is approximately 5.8 miles from the Project site. Due to the proximity of existing police stations, the Project would not cause the need for the physical construction of a new police station or require physical alteration of an existing station. No impact would occur.

Threshold a: *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government 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:*

iii) Schools?

The proposed Project would not physically affect schools. The Project is a warehouse and commercial development that would not directly generate any additional school children or the need for additional schools or the physical alteration of schools. The Project would provide employment opportunities in the area; however, the proposed uses would not require a highly specialized labor force and are likely to draw employees from the existing population. Therefore, the Project is unlikely to attract into the area a substantial number of new workers with children that would require school services. Therefore, impacts would be less than significant.

Senate Bill 50 (SB 50), the Leroy F. Greene School Facilities Act of 1998, was enacted by the State Legislature in 1998, which amended existing state law governing school fees. In particular, SB 50 amended prior California Government Code (CGC) Section 65995(a) to prohibit state or local agencies from imposing school impact mitigation fees, dedications, or other requirements in excess of those provided in the statute in connection with "any legislative or adjudicative act...by any state or local agency involving...the planning, use, or development of real property...." (CA Legislative Info, n.d.)

The legislation also amended CGC Section 65996(b) to prohibit local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "legislative or adjudicative act [involving] the planning, use or development of real property." Further, SB 50 established the base amount of allowable developer fees: \$1.93 per square foot for residential

construction and \$0.31 per square foot for commercial. Level 1 fees are subject to inflation adjustment every two years. In certain circumstances, school districts can impose fees that are higher than Level 1 fees. (CA Legislative Info, n.d.)

Although the Project would not create a direct demand for public school services, the entities that implement development on the Project site would be required to contribute development impact fees to the Greenfield Union Elementary and Kern High School Districts in compliance with the Leroy F. Greene School Facilities Act of 1998, which allows school districts to collect fees from new developments to offset the costs associated with increasing school capacity needs. Mandatory payment of school fees would be required prior to the issuance of building permits.

Threshold a: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government 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:

iv) Parks?

The Project does not propose any type of residential use or other land use that may generate a population that would result in a demand for parkland resources, and no recreational facilities are proposed as part of the Project. Thus, the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered recreational facilities, or due to the need for new or physically altered recreational facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks and recreational resources. No impact would occur.

Threshold a: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government 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:

v) Other public facilities?

The Project would not directly substantially increase the residential population in the City and therefore is not expected to result in a demand for other public facilities/services, including libraries, community recreation centers, post offices, and animal shelters. As such, implementation of the proposed Project would not adversely affect other public facilities or require the construction of new or modified public facilities and no impact would occur.

5.4.4 RECREATION

Threshold 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?*

The Project does not involve any type of residential use or other land use that may generate a population that would increase the use of existing neighborhood and regional parks or other recreational facilities. Accordingly, implementation of the proposed Project would not result in the increased use or substantial physical deterioration of an existing neighborhood or regional park, and no impact would occur.

Threshold 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?*

The Project does not involve the construction of any new on- or off-site recreation facilities. The Project would not expand any existing off-site recreational facilities. Therefore, no impacts related to the construction or expansion of recreational facilities would occur with implementation of the proposed Project.

5.4.5 WILDFIRE

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

Threshold a: *Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?*

The Project site is not located in or near State responsibility areas or lands classified as very high fire hazard severity zones. Further, the Project is not anticipated to physically impede the existing emergency response plans, emergency vehicle access, or personnel access to the site. Fire protection services to the Project site are and would continue to be provided by the Kern County Fire Department. The Project site is not identified as part of any adopted emergency response plans or emergency evacuation plans, and the Project has no potential to conflict with any such plans. As such, no impacts to adopted emergency response plans or emergency evacuation plans would occur with implementation of the proposed Project.

Threshold b: *Due to slope, prevailing winds, and other factors, would the Project exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

The Project site is not located in or near State responsibility areas or lands classified as very high fire hazard severity zones. Further, given the flat topography of the site, it is not anticipated the Project would expose Project occupants to pollutant concentrations from a wildfire or uncontrolled spread of

a wildfire due to slope, prevailing winds, and other factors. The Project would result in construction and operation of a warehouse building and several commercial buildings with exterior impervious surfaces and irrigated landscaping, which would not result in any exacerbation of fire hazards in the local area. Therefore, the Project has no potential to exacerbate wildfire risks, and thereby exposing people to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant.

Threshold c: 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?

The Project site is not located in or near State responsibility areas or lands classified as very high fire hazard severity zones. Aside from standard building construction requirements, including the installation of fire sprinklers, the provision of fire hydrants, and the use of irrigated landscaping, the Project does not include any fire protection-related infrastructure that could result in temporary or ongoing impacts to the environment. No impact would occur.

Threshold d: 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?

The Project site is not located in or near State responsibility areas or lands classified as very high fire hazard severity zones. The Project site occurs in a portion of the City of Bakersfield that exhibits generally flat topography, and there are no large slopes in the Project vicinity that could be subject to landslide hazards as a result of post-fire slope instability. Additionally, there are no components of the Project that could result in or exacerbate flooding hazards associated with wildland fire hazards. No impact would occur.

6.0 ALTERNATIVES

CEQA Guidelines § 15126.6(a) describes the scope of analysis that is required when evaluating alternatives to proposed projects, as follows:

“An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selection of a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.”

As discussed in Section 4.0 of this EIR, the Project would result in significant adverse environmental effects under two environmental issue area that cannot be mitigated to below a level of significance after the implementation of Project design features, mandatory regulatory requirements, and feasible mitigation measures. The unavoidable significant impacts are as follows:

- Greenhouse Gas Emissions (Threshold a): Significant and Unavoidable Cumulatively-Considerable Impact. Although the Project’s GHG emissions would only be a very small fraction of the global GHG emissions that contribute to climate change, the City is using a net-zero threshold. Because the Project would result in a net increase in GHG emissions as compared to existing conditions even with implementation of mitigation measures, the Project’s impacts due to GHG emissions would be significant and unavoidable on a cumulatively-considerable basis.
- Transportation (Threshold b): Significant and Unavoidable Direct and Cumulatively Considerable Impact. Although the Project’s impacts to VMT from the proposed commercial retail uses and warehouse employees would not exceed the identified thresholds of significance, Project-related truck traffic would generate approximately 29,000 miles/day and 50 miles per truck, which exceeds the significance threshold established by this EIR of 16.29 miles per truck. Mitigation is not available to reduce this impact, as the destination of Project-related truck trips would consist of fixed locations (e.g., ports, last-mile delivery facilities, etc.), and it would not be feasible for the Project Applicant or the City of Bakersfield to mandate a reduction in the distance the large trucks must travel to their destination. As such, the Project’s truck-related VMT is a significant and unavoidable impact of the proposed Project on a direct and cumulatively-considerable basis.

6.1 ALTERNATIVES UNDER CONSIDERATION

CEQA Guidelines Section 15126.6(e) requires that an EIR include an alternative that describes what would reasonably be expected to occur on the Project site in the foreseeable future if the Project were not approved, based on current plans and consistent with available infrastructure and community services (i.e., “No Project” Alternative). For projects that include a revision to an existing land use plan, the “No Project” Alternative may be the continuation of the existing land use plan into the future. For projects other than a land use plan (for example, a development project on an identifiable property), the “No Project” Alternative is considered to be a circumstance under which the project does not proceed (CEQA Guidelines Section 15126(e)(3)(A-B)). Because the Project includes both a land use plan amendment (and change of zone) and a site-specific development proposal, this EIR includes two “No Project” Alternative analyses. The potential scenario where the Project site remains in its current undeveloped condition is considered to be the “No Development Alternative (NDA),” while the potential scenario where the existing General Plan land use plan is implemented is considered to be the “No Project Alternative (NPA).”

In compliance with CEQA Guidelines Section 15126.6(a), an EIR must describe “a range of reasonable alternatives to the project, or to the location of the project which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project.” The EIR need not consider every conceivable alternative; rather it must consider a reasonable range of potentially feasible alternatives to the project, or to the location of the project, which would avoid or substantially lessen significant effects of the project, even if “these alternatives would impede to some degree the attainment of the project objectives, or would be more costly” (CEQA Guidelines Section 15126.6(b)).

The following scenarios are identified by the City of Bakersfield as potential alternatives to implementation of the proposed Project. The Warehouse Only Alternative (WOA) is considered the Environmentally Superior Alternative pursuant to CEQA Guidelines § 15126.6.

6.1.1 NO DEVELOPMENT ALTERNATIVE (NDA)

The No Development Alternative (NDA) considers no development on the Project site beyond what occurs on the site under existing conditions. Under this Alternative, the approximately ±90.58 gross acre site would remain vacant and undeveloped for the foreseeable future. The Project site would be subject to routine maintenance (i.e., discing) for weed abatement. This alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would leave the Project site in its existing condition.

6.1.2 NO PROJECT ALTERNATIVE (NPA)

The No Project Alternative (NPA) considers development of the Project site in accordance with the site’s existing land use designation of “General Commercial (GC)” and the site’s existing zoning classification of “General Commercial/Planned Commercial Development (C-2-PCD).” The “GC” land use designation is intended for retail and service facilities providing a broad range of goods and

services which serve the day-to-day needs of nearby residents. The maximum allowable density is a 1.0 floor area ratio (FAR) and 4 stories tall (Bakersfield, 2007, p. II-7). The “C-2-PCD” combining zone is typically for larger commercial centers that contain a mix of larger scale stores and smaller retail outlets. Any uses permitted in the C-0 and C-1 zones are permitted. (Bakersfield, 2022, Title 17). For purposes of analysis herein, under this alternative it is assumed the Project site would be developed in a manner that is consistent with the previously approved “SR-99/Hosking Commercial Center Project,” which was previously approved for the Project site by the City of Bakersfield City Council in 2015. Thus, under the NPA, the Project site would be developed with up to 800,000 s.f. of leasable commercial space and a four-story hotel with 240 hotel rooms (Bakersfield, 2015, p. 3-1). Table 6-1, *No Project Alternative – Approximate Leasable Commercial Space*, provides a summary of the various commercial uses assumed under the NPA. This alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would allow for buildout of the Project site in accordance with the site’s existing General Plan land use designation and zoning classification.

Table 6-1 No Project Alternative – Approximate Leasable Commercial Space

Commercial Space	Total Area (square feet)	Notes
Anchor	100,000	--
Anchor	110,000	--
Entertainment Anchor	35,000	--
Retail	450,000	Approximately 16 leasable storefront spaces of 4,000 to 60,000 square feet
Restaurant	45,000	Approximately 10 leasable spaces of 3,000 to 8,000 square feet
Theater	60,000	Part of two-story structure that includes retail
Total	800,000	

(Bakersfield, 2015, Table 3-3)

6.1.3 PANAMA LANE TRUCK ROUTING ALTERNATIVE (PLTRA)

Under the Panama Lane Truck Routing Alternative (PLTRA), all Project-related truck traffic accessing the Project site via SR-99 would be restricted to Colony Street and Panama Lane, with no truck trips allowed along South H Street. All other components of the PLTRA would be similar to the proposed Project, as described in EIR Section 3.0, *Project Description*. Although the Project would not result in any localized impacts associated with truck traffic (i.e., health risks or traffic-related noise), this alternative was selected in order to consider an alternative that would avoid routing truck trips along roadways that abut existing residential uses (i.e., existing residential uses located along South H Street).

6.1.4 WAREHOUSE ONLY NET ZERO ALTERNATIVE (WOA)

Under the Warehouse Only Net Zero Alternative (WOA), the Project site would be developed entirely with warehouse uses, with no commercial retail uses proposed. Under the WOA, warehouse uses and surface parking for passenger vehicles, trucks, and trailers would be constructed on approximately

86.11 acres, with approximately 4.48 acres of the Project site consisting of retention basin uses (similar to the proposed Project). For purposes of analysis, it is assumed that warehouse uses would be developed at an intensity similar to the proposed Project, which proposes to develop the warehouse portion of the Project site at a Floor Area Ratio (FAR) of approximately 0.44. Accordingly, under the WOA the Project site would be developed with up to 1,650,419 s.f. of warehouse building area. Consistent with the proposed Project, warehouse uses under the WOA would consist of 90% fulfillment center uses and 10% cold storage uses. As shown in Table 6-2, *Warehouse Only Alternative Trip Generation*, and based on the rates assumed in the Project's Traffic Study (EIR *Technical Appendix J*), the WOA would generate approximately 5,795 average daily trips (ADT), whereas Table 4b of the Project's Traffic Study shows that the proposed Project would generate approximately 12,700 ADT; thus, the WOA would result in an approximate 55% reduction in daily vehicle trips as compared to the proposed Project (R&S, 2022, Table 4b).

Table 6-2 Warehouse Only Alternative Trip Generation

Use Type	Square Footage	Rate	Daily Trips
Warehouse and Cold Storage (Passenger Vehicles)	1,650,419 s.f.	2.939 trips/1,000 s.f.	4,850
Warehouse and Cold Storage (Trucks)	1,650,419 s.f.	0.573 trips/1,000 s.f.	945
Total:	1,650,419 s.f.	--	5,795

(R&S, 2022, Table 4b)

This alternative assumes that the Project Applicant would be able to construct the WOA to prepare for a net zero GHG emissions future and that the building user would be able to implement operational practices to achieve near-zero or net-zero GHG emissions by 2050. Requiring a near-zero or net-zero project on opening day is not feasible because although technological advancements are occurring to reduce GHG emissions across various sectors of the economy, they are not advanced enough to assure that area source, energy source, and mobile source emissions can achieve net-zero in the next 25 years. However, with elimination of the commercial uses (conceptually designed to include 12 buildings) proposed under the Project and only focusing on one large building and its future user(s), it is possible that given the trends in technological advancements that the WOA could have near-zero or net-zero GHG emissions by 2050. The California Air Resources Board (CARB) Draft 2022 Scoping Plan was published on May 10, 2022 and is expected to be adopted later in 2022, and evaluates a path for California to achieve carbon neutrality by 2045 (CARB, 2022a). It should be noted that the WOA is aspirational and it is not known with certainty whether a near-zero or net-zero WOA could actually be fully achieved by 2050 as it is yet unknown how quickly technological advancements will occur that would be feasible for a building operator to implement and for the City of Bakersfield to enforce.

6.1.5 REDUCED PROJECT ALTERNATIVE

Under the Reduced Project Alternative (RPA), the Project site would be developed with approximately 25% less commercial building space and 25% less warehouse building space than proposed under the Project. The RPA thus evaluates development of the Project site with 140,000 s.f. of commercial uses and a 760,000 s.f. warehouse distribution facility. The buildings would occur in the same general arrangement as proposed under the Project, but with smaller building footprints. The areas not covered

by buildings would be used for surface parking for passenger vehicles, trucks, and trailers. As shown in Table 6-3, *Reduced Project Alternative Trip Generation*, and based on the rates assumed in the Project’s Traffic Study (EIR *Technical Appendix J*), the RPA would generate approximately 9,495 average daily trips (ADT), whereas Table 4b of the Project’s Traffic Study shows that the proposed Project would generate approximately 12,700 ADT; thus, the RPA would result in an approximate 25% reduction in daily vehicle trips as compared to the proposed Project (R&S, 2022, Table 4b).

Table 6-3 Reduced Project Alternative Trip Generation

Use Type	Square Footage	Rate	Daily Trips
Warehouse and Cold Storage (Passenger Vehicles)	760,000 s.f.	2.939 trips/1,000 s.f.	2,233
Warehouse and Cold Storage (Trucks)	760,000 s.f.	0.573 trips/1,000 s.f.	435
Stopping Center (assumes pass-by reduction)	140,000 s.f.	48.77 trips/1,000 s.f.	6,827
Total:	1,650,419 s.f.	--	9,495

(R&S, 2022, Table 4b)

6.2 ALTERNATIVES CONSIDERED AND REJECTED

An EIR is required to identify any alternatives that were considered by the Lead Agency but were rejected as infeasible. Among the factors described by CEQA Guidelines Section 15126.6 in determining whether to exclude alternatives from detailed consideration in the EIR are: a) failure to meet most of the basic project objectives, b) infeasibility, or c) inability to avoid significant environmental impacts. With respect to the feasibility of potential alternatives to the Project, CEQA Guidelines Section 15126.6(f)(1) notes:

“Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries...and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site...”

In determining an appropriate range of alternatives to be evaluated in this EIR, one alternative was initially considered and, for a variety of reasons, rejected. The alternative was rejected because either: 1) it could not accomplish the basic objectives of the Project, 2) it would not have resulted in a reduction of significant adverse environmental impacts, or 3) it was considered infeasible to construct or operate. A summary of the alternative that was considered but rejected is described below.

6.2.1 ALTERNATIVE SITES

CEQA does not require that an analysis of alternative sites be included in an EIR. However, if the surrounding circumstances make it reasonable to consider an alternative site, then an alternative sites analysis should be considered and analyzed in the EIR. In making the decision to include or exclude an analysis of an alternative site, the “key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in

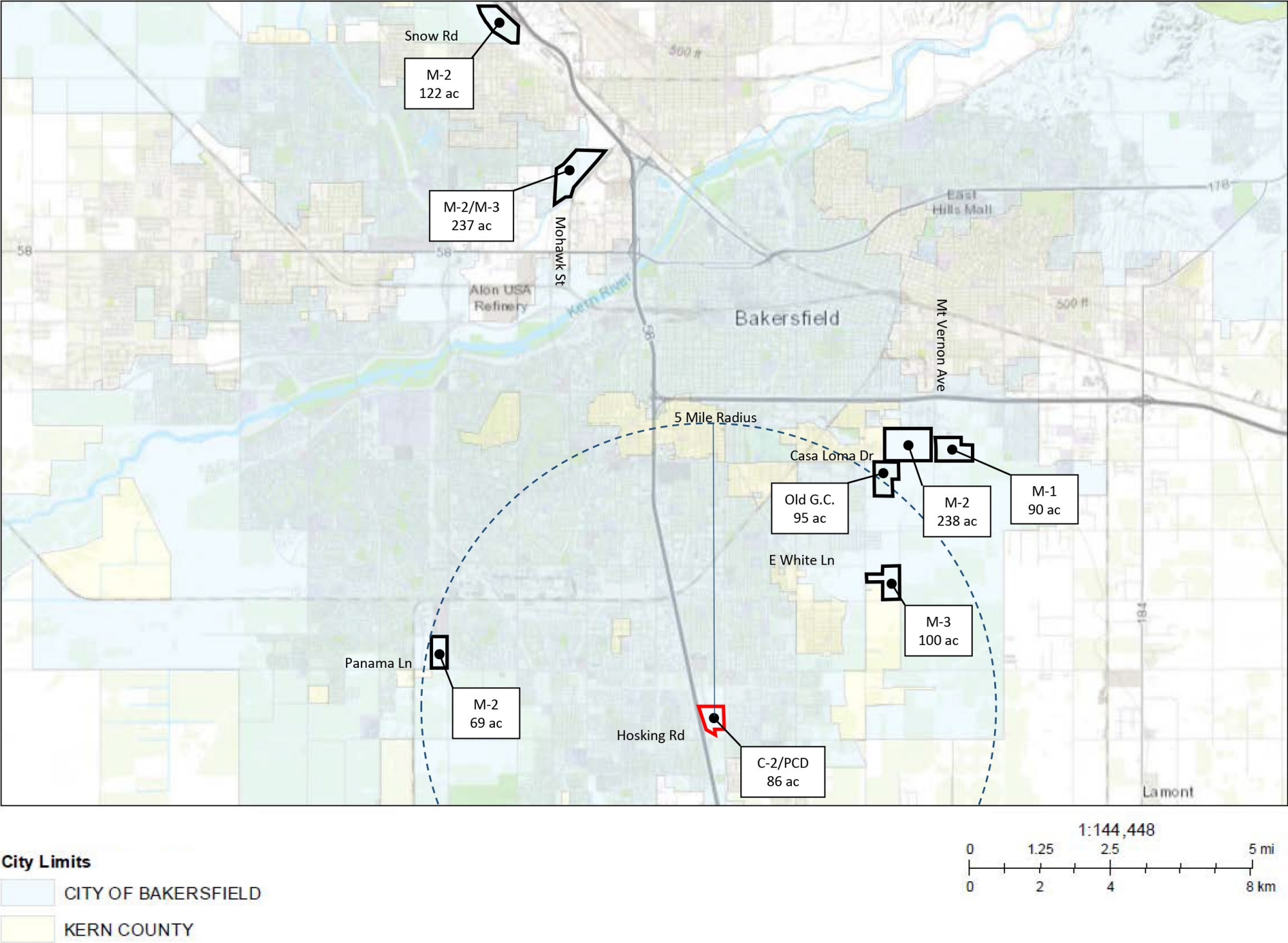
another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR” (CEQA Guidelines Section 15126.6(f)(2)).

The City of Bakersfield conducted a review of potential alternative site locations, and identified a total of seven (7) locations that are undeveloped, designated for commercial or industrial land uses, and that are of sufficient size to accommodate the uses proposed as part of the Project. These potential alternative site locations are depicted on Figure 6-1, *Potential Alternative Site Locations*. However, the Project Applicant does not own or otherwise have control of any of the alternative site locations depicted on Figure 6-1. Furthermore, development of the Project at an alternative location would not reduce or avoid the Project’s significant and unavoidable impacts due to greenhouse gas (GHG) emissions and vehicle miles traveled (VMT). The Project’s GHG emissions are due to the construction and operation of a 1,012,185 s.f. cross-dock speculative warehouse building and 187,500 s.f. of commercial uses. The Project’s VMT impacts are associated with truck trip lengths. Because the Project’s operational characteristics would not change with development of the Project at an alternative site location, and truck trip lengths could potentially increase, none of the Project’s two significant and unavoidable impacts would be avoided or reduced to below a level of significance.

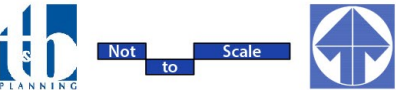
Specifically, and as previously shown in EIR Table 4.7-1, approximately 86% of the Project’s GHG emissions would be due to mobile sources, and the amount of traffic generated by the Project would not substantially change with development of the Project at an alternative site location. Vehicle-related GHG impacts are a direct reflection of the Project’s expected operational characteristics as a commercial and warehouse center, regardless of the property where the Project is located. The Project’s VMT impacts are associated with truck trip lengths and the selection of any location further from SR-99 than the Project site (which is located adjacent to SR-99) would worsen VMT impacts. As noted above, only locations that would avoid or substantially lessen a Project’s significant environmental effects need to be considered in an EIR. Accordingly, because development of the Project site at an alternative site location would not reduce or avoid the Project’s significant and unavoidable impact due to GHG emissions, a more detailed analysis of alternative site locations is not warranted.

6.3 ALTERNATIVE ANALYSIS

The discussion on the following pages compares the environmental impacts expected from each alternative considered by the Lead Agency relative to the impacts of the Project. A conclusion is provided for each topic as to whether the alternative results in one of the following: (1) reduction of elimination of the Project’s impact, (2) a greater impact than would occur under the Project, (3) the same impact as the Project, or (4) a new impact in addition to the Project’s impacts. Table 6-1 at the end of this section compares the impacts of the alternatives against those of the Project and identifies the ability of the alternative to meet the basic objectives of the Project. As previously listed in EIR Section 3.0, the Project’s basic objectives are:



Source(s): City of Bakersfield



Lead Agency: City of Bakersfield

Figure 6-1

Potential Alternative Site Locations

- A. Expand economic development, facilitate job creation, and increase the tax base for the City of Bakersfield by establishing a new commercial development area and a warehouse distribution facility adjacent to or near the State highway system.
- B. Attract employment-generating businesses to the City of Bakersfield to reduce the need for members of the local workforce to commute outside the area for employment, thereby improving the jobs-housing balance in the City and nearby areas beyond the City boundary.
- C. Diversify the mix of land uses in the City of Bakersfield and greater Kern County to support the growing goods movement supply chain and to streamline package delivery services in and around the City of Bakersfield.
- D. Establish a supply chain use adjacent to or near designated truck routes and/or the State highway system to avoid or shorten vehicular trip lengths on other roadways.
- E. Provide retail shopping opportunities easily accessible to local residents and passers-by on the State highway system to assist in meeting the growing and evolving shopping demands of local residents and planned communities in the City of Bakersfield and greater Kern County.
- F. Develop an unused or underutilized property adjacent to SR-99.
- G. Provide a gathering place for City residents and visitors that includes shopping and other retail services in an aesthetically appealing environment.
- H. Facilitate the development of commercial and distribution warehouse uses that are architecturally and operationally designed to meet contemporary industry standards and be economically competitive with similar buildings in the region.

6.3.1 NO DEVELOPMENT ALTERNATIVE (NDA)

The No Development Alternative (NDA) allows decision-makers to compare the environmental impacts of approving the Project to the environmental impacts that would occur if the property were left in its existing undeveloped condition for the foreseeable future. Under existing conditions, the Project site is vacant and undeveloped and where vegetation is present, it consists of disturbed annual grassland and ruderal species. The Project site would continue to be subject to routine maintenance (i.e., discing) for weed abatement. Refer to the description of the Project site's existing physical conditions in Section 2.0 of this EIR. This alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would leave the Project site in its existing condition.

A. Aesthetics

Under the NDA, the visual character and quality of the Project site would be maintained in its existing condition. No structures, landscaping, or lighting would be introduced on the Project site. The Project site does not contain any unique aesthetic resources, nor does it serve as a prominent scenic vista. As such, impacts to scenic vistas would be less than significant under both the Project and NDA, although impacts would be reduced under the NDA because no new structures that could interfere with distant views of visual resources would be constructed on site under the NDA. There are no designated or eligible State scenic highways within the Project site's immediate vicinity; thus, neither the Project nor the NDA would substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway, and the level of impact would be similar. Because no new development is proposed on site as part of the NDA, the NDA would have no potential to conflict with applicable zoning and other regulations governing scenic quality. Impacts due to a conflict with zoning or other regulations would not occur under either the Project or the NDA, and the level of impact would be similar. Additionally, because no new development would occur on site, the NDA would not result in any new sources of substantial light or glare. Because the Project would introduce new lighting and building materials that have nominal potential to create glare, impacts due to light and glare would be reduced in comparison to the Project with implementation of the NDA.

B. Air Quality

Under the NDA, the Project site would remain vacant and undeveloped for the foreseeable future and no sources of air pollution would be introduced on the Project site. As such, there would be no increase in air quality emissions under the NDA. Accordingly, the NDA has no potential to result in a conflict with the San Joaquin Valley Air Pollution Control District (SJVAPCD) Air Quality Attainment Plans (AQAPs), and implementation of the NDA would reduce the Project's less-than-significant impacts (with mitigation) due to a conflict with the SJVAPCD AQAPs. Additionally, because there would be no new development on site under the NDA, the NDA would avoid the Project's less-than-significant (with mitigation) impacts due to emissions of criteria pollutants for which the region is non-attainment. The NDA also would not include any land uses with the potential for exposing sensitive receptors to substantial pollutant concentrations; thus, the NDA would completely avoid the Project's less-than-significant localized air quality impacts. Furthermore, because no new development would occur on site, the NDA would avoid the Project's less-than-significant impacts due to other emissions (such as those leading to odors) that could affect a substantial number of people.

C. Biological Resources

The NDA would leave the property in its existing condition, which would include periodic disturbances related to discing (for weed abatement), and other routine, on-site maintenance activities. No grading would occur under this alternative. Implementation of the NDA would avoid the Project's significant but mitigable impacts to the burrowing owl, San Joaquin kit fox (SJKF), and nesting birds regulated by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code. Neither the Project nor the NDA would result in impacts to riparian habitat or other sensitive natural communities, and the

level of impact would be the same. Similarly, because no wetlands, potential waters of the U.S., or potential waters of the State are present on the Project site, neither the Project nor the NDA would have the potential to have substantial adverse effects on State- or federally-protected wetlands or jurisdictional areas, and the level of impact would be the same. The Project site does not serve as a wildlife movement corridor or a native wildlife nursery site; thus, neither the Project nor the NDA would result in any impacts to wildlife movement corridors or wildlife nursery sites, and the level of impact would be the same. Neither the Project nor the NDA has the potential to conflict with local policies or ordinances protecting biological resources, and the level of impact would be the same.

D. Cultural Resources

The NDA would leave the Project site in its existing condition, which would include periodic ground disturbances related to discing (for weed abatement), and other routine, on-site maintenance activities. No grading would occur under this alternative. No historic resources occur on site under existing conditions; thus, neither the Project nor the NDA would result in impacts to historic resources, and the level of impact would be the same. Although no archaeological resources are known to occur on the Project site, because no new ground disturbance would occur under the NDA, the NDA would avoid the Project's significant but mitigable impacts to archaeological resources that may be buried beneath the ground surface. Similarly, because no new ground disturbance would occur, the NDA would avoid the Project's significant but mitigable impacts to human remains that may be uncovered during grading activities.

E. Energy

Under the NDA, there would be no new development on site, and there would be no increase in demand from the Project site for energy resources. As such, the NDA would completely avoid the Project less-than-significant impacts due to the wasteful, inefficient, or unnecessary consumption of energy resources during construction or long-term operation. Neither the Project nor the NDA would conflict with a State or local plan for renewable energy or energy efficiency, although impacts would be reduced under the NDA in comparison to the Project because the NDA would not result in an increase in the use of energy resources.

F. Geology and Soils

Under the NDA, there would be no grading or development on site. As such, the NDA would avoid the Project's less-than-significant impacts due to earthquake faults, strong seismic ground shaking, seismic-related ground failure (including liquefaction), landslides, lateral spreading, subsidence, collapse, and expansive soils. Although the NDA would avoid the Project's less-than-significant construction-related impacts due to erosion or the loss of topsoil, the NDA would result in increased but less-than-significant impacts due to soil erosion under long-term conditions because the Project site would not be covered with impervious surfaces under the NDA. Additionally, because no ground-disturbing activities would occur under the NDA, the NDA would avoid the Project's significant but mitigable impacts to paleontological resources that may be buried beneath the surface of the Project site.

G. Greenhouse Gas Emissions

Under the NDA, there would be no construction activities on site and no new development would occur on the Project site. As such, implementation of the NDA would completely avoid the Project's significant and unavoidable impacts due to the generation of GHGs during both construction and long-term operation. In addition, the NDA would have no potential to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs, and impacts would be reduced in comparison to the Project.

H. Hazards and Hazardous Materials

Because no development would occur under the NDA, the NDA would have no potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and would have no potential to 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; thus, no impact would occur, and impacts would be reduced in comparison to the proposed Project. There are no existing or proposed schools within 0.25-mile of the Project site; thus, no impact would occur under the Project or the NDA, although impacts would be reduced under the NDA because no new sources of potential hazardous materials would be introduced on site. Because the Project site is not located on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, neither the Project nor the NDA have the potential to create a significant hazard to the public or the environment due to existing site conditions, and the level of impact would be similar. The Project site is not located within an airport land use plan and is not within two miles of a public airport or public use airport, or a private airstrip; thus, no airport-related impacts would occur under the Project or NDA, although the level of impact would be reduced under the NDA because the NDA would not introduce any new residents or workers to the Project site. Neither the Project nor the NDA has the potential to impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; thus, no impact would occur under the Project or NDA, and the level of impact would be similar. The Project site is not located in an area subject to wildland fire hazards; thus, no impacts would occur due to the risk of loss, injury or death involving wildland fires, although the level of impact under the NDA would be slightly reduced because the NDA would not result in the introduction of new residents or workers to the Project site.

I. Hydrology and Water Quality

No changes to existing hydrology and drainage conditions would occur under the NDA, and the NDA would not include any land uses with the potential to result in increased impacts to water quality beyond what occurs on the property under existing conditions. As such, the NDA would avoid the Project's less-than-significant impacts due to the violation of water quality standards or waste discharge requirements, and would avoid the Project's less-than-significant impacts to surface and groundwater quality. The NDA also would avoid the Project's less-than-significant impacts due to a conflict with a water quality control plan or sustainable groundwater management plan. Because the Project site would remain undeveloped under the NDA, the NDA would avoid the Project's less-than-significant impacts to groundwater supplies, groundwater recharge, and sustainable management of the

groundwater basin during both construction and long-term operation. Although the NDA would avoid the Project's less-than-significant construction-related impacts due to erosion and siltation, the NDA would result in increased but less-than-significant impacts due to soil erosion under long-term conditions because the Project site would not be covered with impervious surfaces under the NDA as would occur with implementation of the Project. The NDA also would avoid the Project's less-than-significant impacts due to increased runoff leading to flooding, or due to runoff that could exceed the capacity of existing or planned stormwater drainage systems. The Project site is not located within any flood hazard areas; thus, impacts associated with impeding or redirecting flood flows would not occur under the NDA or proposed Project, and the level of impact would be the same. Neither the Project nor the NDA would be subject to inundation due to flood hazards, tsunamis, or seiches; thus, no impact would occur, and the level of impact would be similar.

J. Land Use and Planning

Under the NDA, there would be no new development on site. Neither the Project nor the NDA would result in impacts due to the physical division an established community, and the level of impact would be the same. In addition, because no new development would occur on site under the NDA, the NDA would avoid the Project's less-than-significant impacts due to a conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

K. Noise

Under the NDA, no sources of noise would be introduced on the Project site. Thus, the NDA would avoid the Project's less-than-significant impacts due to construction-related noise, operational-related noise, and traffic-related noise. Additionally, because there would be no construction activities or long-term operational traffic under the NDA, the NDA would avoid the Project's less-than-significant impacts due to groundborne vibration and noise during both construction and operation. Although the Project site is not 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, the NDA would not introduce any new residents or workers to the Project site; thus, the NDA would reduce the Project's less-than-significant impacts due to airport-related noise.

L. Transportation

Under the NDA, there would be no new development on site, and the Project site only would generate nominal amounts of traffic associated with site maintenance and discing activities. As such, the NDA would completely avoid the Project's less-than-significant impacts due to a conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. In addition, because no new traffic would be generated under the NDA, the NDA would avoid the Project's significant and unavoidable impacts due to truck trip VMT. Additionally, there would be no new land uses introduced on site under the NDA, nor would the NDA result in any changes to existing circulation facilities; thus, the NDA would avoid the Project's less-than-significant impacts due to a substantial increase in hazards from a geometric design feature or incompatible uses.

Additionally, because there would be no development on site under the NDA, the NDA would completely avoid the Project's less-than-significant impacts due to inadequate emergency access.

M. Tribal Cultural Resources

The NDA would leave the Project site in its existing condition, which includes periodic ground disturbances related to weed abatement activities and other routine, on-site maintenance activities. No grading or ground-disturbing activities would occur under this Alternative and there would be no potential impacts to subsurface tribal cultural resources that may exist beneath the ground surface. As such, the NDA would completely avoid the Project's less-than-significant (with mitigation) impacts to tribal cultural resources.

N. Utilities and Service Systems

No new development would occur on site under the NDA. As such, the NDA would completely avoid the Project's less-than-significant impacts due to the construction or expansion of water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. In addition, the NDA would not result in any increases in demand for potable water, and therefore would completely avoid the Project's less-than-significant impacts to water supply. Similarly, because there would be no new development on site, the NDA would not result in the generation of wastewater requiring treatment; thus, the NDA would completely avoid the Project's less-than-significant impacts due to wastewater conveyance and treatment capacity. Likewise, the NDA would not result in the generation of any solid waste requiring disposal at area landfills, and as such the NDA would completely avoid the Project's less-than-significant impacts due to solid waste generation. The NDA also has no potential to conflict with federal, State, and local management and reduction statutes and regulations related to solid waste; thus, the NDA would avoid the Project's less-than-significant impacts due to compliance with such statutes and regulations.

O. Conclusion

Implementation of the NDA would result in no physical environmental impacts beyond those that have historically occurred on the property. Almost all effects of the proposed Project would be avoided or lessened by the selection of the NDA, with exception of long-term erosion and sedimentation impacts, which would be increased under this alternative. Because this alternative would avoid most of the Project's impacts, it warrants consideration as the "environmentally superior alternative." However, pursuant to CEQA Guidelines § 15126.6(e)(2), if a no project alternative is identified as the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives. Accordingly, the Warehouse Only Alternative (WOA), as discussed in subsection 6.3.4, is identified as the environmentally superior alternative.

The NDA would fail to meet all of the Project's objectives. Specifically, the NDA would not expand economic development, facilitate job creation, or increase the tax base for the City of Bakersfield by establishing new commercial and light industrial development adjacent to or near the State highway system. The NDA also would not attract employment-generating businesses to the City of Bakersfield

to reduce the need for members of the local workforce to commute outside the area for employment, thereby improving the jobs-housing balance in the City and nearby areas beyond the City boundary. The NDA also would fail to diversify the mix of uses in the City of Bakersfield and greater Kern County to support the growing goods movement supply chain and to streamline package delivery services in and around the City of Bakersfield. The NDA also would not meet the Project's objective to establish a supply chain use adjacent to or near designated truck routes and/or the State highway system to avoid or shorten vehicular trip lengths on other roadways. The NDA would not meet the Project's objective to provide retail shopping opportunities easily accessible to local residents and passers-by on the State highway system to assist in meeting the growing and evolving shopping demands of local residents and planned communities in the City of Bakersfield and greater Kern County. The NDA also would fail to meet the Project's objective to develop an unused or underutilized property near SR-99. The NDA also would not provide a gathering place for City residents and visitors that includes shopping and other retail services in an aesthetically appealing environment. Finally, the NDA would fail to meet the Project's objective to develop light industrial and commercial uses that are architecturally and operationally designed to meet contemporary industry standards and be economically competitive with similar buildings in the region.

6.3.2 NO PROJECT ALTERNATIVE (NPA)

The No Project Alternative (NPA) considers development of the Project site in accordance with the site's existing land use designation of "General Commercial (GC)" and the site's existing zoning classification of "General Commercial/Planned Commercial Development (C-2-PCD)." For purposes of analysis herein, under this alternative it is assumed the Project site would be developed in a manner that is consistent with the "SR-99/Hosking Commercial Center Project," which was previously approved for the Project site by the City of Bakersfield City Council in 2015. Thus, under the NPA, the Project site would be developed with up to 800,000 s.f. of leasable commercial space and a four-story hotel with 240 hotel rooms. Table 6-1 (previously presented) provides a summary of the various commercial uses assumed under the NPA. This alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would allow for buildout of the Project site in accordance with the site's existing General Plan land use designation and zoning classification. The analysis of the NPA herein is based in part on the "SR-99/Hosking Commercial Center Project Draft Environmental Impact Report" (herein, "Prior EIR"), which was certified by the City of Bakersfield in December 2015 (SCH No. 2007101067) (Bakersfield, 2015). The Prior EIR is herein incorporated by reference pursuant to CEQA Guidelines Section 15150, and is available for public review at the City of Bakersfield Planning Division, 1715 Chester Avenue, Bakersfield, CA 93301.

A. Aesthetics

Under existing conditions, the Project site is vacant and undeveloped and does not contain any special or unique scenic attributes, like rock outcroppings, native vegetation, or a substantial number of mature trees. As such, the Project and the NPA would result in less-than-significant impacts to scenic vistas, and the level of impact would be similar. The Project site is not located within the viewshed of any

officially designated State scenic highways or State-Eligible scenic highways; thus, the Project and the NPA would result in no impacts to scenic resources visible from a State scenic highway, and the level of impact would be similar. Construction characteristics associated with the NPA would be similar to the proposed Project; thus, construction-related impacts to aesthetics would be less than significant and would be similar. Under long-term operating conditions, both the Project and the NPA would be required to comply with the design measures approved or proposed for the Project site, which would ensure that future development on site occurs in a manner that is not visually offensive. Notwithstanding, because the Project would include a large warehouse building that would not occur under the NPA, impacts to visual quality under the NPA would be reduced in comparison to the Project's less-than-significant impacts. Both the Project and NPA would be required to comply with applicable zoning and other regulations governing scenic quality; thus, impacts would be less than significant, and the level of impact would be similar.

B. Air Quality

Neither the Project nor the NPA would exceed the SJVAPCD's thresholds of significance, and the Project and NPA would not result in growth that exceeds the growth projection of the SJVAPCD AQAPs; thus, both the Project nor the NPA would result in less-than-significant impacts due to a conflict with the applicable air quality plan, and the level of impact would be similar. Construction activities under the NPA would be similar to the proposed Project. As such, air quality emissions during construction of the Project or NPA would be similar and would not exceed the SJVAPCD thresholds of significance, resulting in a less-than-significant impact (Bakersfield, 2015, Table 4.2-7). Under long-term operational conditions, and based on the information reported in the Prior EIR, with mitigation the NPA would result in increased emissions of ROGs, NO_x, and CO, but would result in reduced emissions of SO_x, PM₁₀, and PM_{2.5} as compared to the proposed Project (Bakersfield, 2015, Table 4.2-10). However, neither the Project nor the NPA would exceed the SJVAPCD's thresholds of significance under long-term operating conditions with the implementation of mitigation measures. Under the NPA, the Project site would be developed with commercial and hotel uses, while under the proposed Project there would be a 1,012,185 s.f. in addition to commercial uses, and the Project would result in the generation of a substantial increase in the number of large truck trips as compared to the NPA. Thus, the NPA would reduce the Project's less-than-significant impact (with mitigation) due to the exposure of sensitive receptors to substantial pollutant concentrations. Neither the Project nor the NPA would be associated with the generation of odors affecting a substantial number of people, although impacts due to odors would be slightly reduced under the NPA as compared to the Project due to the reduction in the number of large truck trips, which are associated with the generation of diesel exhaust.

C. Biological Resources

Areas planned for physical impact under the NPA would be similar to the proposed Project, and under both the Project and NPA the entire Project site and off-site improvement areas would be subject to grading and ground disturbance. There are no special-status plant species on site, and as such neither the NPA or proposed Project would result in impacts to special-status plant species. As with the

proposed Project, the NPA would require mitigation requiring pre-construction surveys for the burrowing owl, the SJKF, and nesting birds regulated by the MBTA in order to reduce impacts to sensitive animal species to below a level of significance. Impacts to sensitive animal species would be the same under the NPA and proposed Project. No riparian habitat or other sensitive natural community is present on the Project site; thus, neither the Project nor the NPA would impact riparian habitat or other sensitive natural communities, and the level of impact would be the same. Because no wetlands or potential waters of the U.S., or potential waters of the State are present on the Project site, neither the Project nor NPA would have substantial adverse effect on state or federally protected wetlands, and the level of impact would be the same. The Project site does not serve as a wildlife movement corridor or native wildlife nursery site; thus, neither the Project nor NPA would result in impacts to wildlife movement corridors or native wildlife nursery sites, and the level of impact would be the same. Other than the potential for SJKF, which is addressed above, there are no biological resources on the Project site which are separately protected by local policies; thus, neither the Project nor the NPA would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and the level of impact would be the same. Both the Project and the NPA would be subject to mitigation in order to demonstrate compliance with the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP). Implementation of the required mitigation would ensure that both the Project and NPA result in similar less-than-significant impacts due to a conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

D. Cultural Resources

Areas planned for physical impact under the NPA would be similar to the proposed Project, and under both the Project and NPA the entire Project site and off-site improvement areas would be subject to grading and ground disturbance. No historic resources occur on site under existing conditions; thus, neither the Project nor the NPA would result in impacts to historic resources, and the level of impact would be the same. Although no archaeological resources are known to occur on the Project site, both the Project and the NPA have similar potential to uncover archaeological resources that may be buried beneath the surface of the Project site. Both the Project and NPA would be subject to mitigation measures requiring monitoring during ground-disturbing activities, which would reduce potential impacts to archaeological resources to less-than-significant levels. Similarly, both the Project and NPA have similar potential to uncover human remains during ground-disturbing activities, and such impacts would be reduced to less-than-significant levels with implementation of mitigation measures requiring monitoring during grading and ground-disturbing activities. Impacts to human remains would be similar under the proposed Project and NPA.

E. Energy

Construction characteristics associated with the NPA would largely be similar to the proposed Project. As with the proposed Project, energy use during construction activities would be primarily in the form of fuel consumption to operate heavy equipment, vehicles, machinery, and generators. In general, the construction processes under both the Project and NPA would promote conservation and efficient use

of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing, and refinement. Use of construction materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as the transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations. As such, impacts due to the wasteful or inefficient use of energy during construction activities would be less than significant, and the level of impact would be similar. With respect to energy usage under long-term operating conditions, the Prior EIR disclosed that the NPA would result in a demand for approximately 11,800,000 BTU of natural gas per year and 5,643,600 kWh per year of electricity, whereas the proposed Project would result in a demand for approximately 18,319,963 kBTU of natural gas per year and 7,000,000 kWh per year (Trinity, 2022b, Table 3-9; Bakersfield, 2015, Tables 4.11-5 and 4.11-6). Thus, the NPA would result in a substantial reduction in the amount of energy consumed under long-term operational conditions as compared to the Project, although neither the Project nor the NPA would result in impacts due to the wasteful or inefficient use of energy.

F. Geology and Soils

The NPA would be developed on the same site and construction activities would occur in the same or similar manner as the proposed Project. As such, impacts to geology and soils would be similar under the Project and NPA. Specifically, neither the NPA nor the Project would result in impacts due to earthquake faults, strong seismic ground shaking, seismic-related ground failure (including liquefaction), landslides, lateral spreading, subsidence, liquefaction, collapse, or expansive soils. Similarly, impacts associated with erosion and the loss of topsoil would be similar under the proposed Project and NPA during both construction and long-term operation, and impacts would be less than significant. Both the Project and NPA would result in full disturbance to the Project site, and thus have similar potential to result in impacts to paleontological resources that may be buried beneath the site's surface. Mitigation for paleontological resources would be required under both the Project and NPA, which would reduce impacts to paleontological resources to less-than-significant levels.

G. Greenhouse Gas Emissions

As reported by the Prior EIR, the NPA would result in total annual GHG emissions (inclusive of amortized construction emissions) of approximately 12,229.32 MTCO₂e per year, while the proposed Project would result in GHG emissions of approximately 19,742.59 MTCO₂e per year (Bakersfield, 2015, Table 4.6-4; Trinity, 2022a, Table 4-9). Thus, implementation of the NPA would result in a substantial (+/-38%) in reduction of GHG emissions as compared to the proposed Project. Although neither the Project nor the NPA would achieve the City's threshold of significance of no net increase in GHG emissions, resulting in significant and unavoidable impacts, the level of impact would be substantially reduced under the NPA as compared to the proposed Project. Both the Project and NPA would be required to comply with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of greenhouse gases; thus, impacts would be less than significant under both the NPA and proposed Project, and the level of impact would be similar.

H. Hazards and Hazardous Materials

Both the Project and NPA would be developed on the same property and in a similar manner. Both the Project and the NPA would require mitigation in order to reduce impacts due to existing site conditions to less-than-significant levels, and the level of impact would be similar. As with the proposed Project, The NPA would be subject to mandatory compliance with all applicable federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited requirements imposed by the EPA, DTSC, and the Central Valley RWQCB, which would reduce construction-related hazardous materials impacts to less-than-significant levels, and the level of impact would be similar to the proposed Project. However, under long-term operating conditions, the Project would include a 1,012,185 s.f. warehouse, while under the NPA only commercial retail and hotel uses would be constructed on site. Although future tenants of the Project's warehouse building are not known, there is a potential for future tenants to handle hazardous waste and materials. Although Project impacts would be less than significant with mandatory compliance with federal, State, and local laws and regulations related to hazardous materials, impacts due to the routine transport, use, or disposal of hazardous materials and due to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be reduced under the NPA as compared to the proposed Project. There are no schools within 0.25-mile of the Project site; thus, neither the Project nor the NPA would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, although the level of impact under the NPA would be reduced as compared to the Project because the NPA would not include any warehouse uses. The Project site is not located on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; thus, no impact would occur under the NPA or proposed Project, and the level of impact would be similar. The Project site is not located within two miles of a public airport or within an airport land use plan; thus, neither the Project nor the NPA would result in impacts due to airport-related hazards, and the level of impact would be similar. Neither the Project nor the NPA would impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan; thus, no impact would occur, and the level of impact would be similar. The Project site is not located within a very high fire hazard severity zone; thus, neither the Project nor the NPA would expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, and the level of impact would be similar.

I. Hydrology and Water Quality

Construction activities associated with the NPA would be substantially similar to the proposed Project. As with the proposed Project, construction-related impacts due to water quality would be less than significant with mandatory compliance with the requirements of the Central Valley RWQCB and Chapter 15.05 (California Building Code) of the City of Bakersfield Municipal Code, which collectively require the preparation and implementation of a SWPPP during construction activities. With implementation of a SWPPP, water quality impacts associated with the NPA, including impacts due to erosion or siltation, would be less than significant and similar to the proposed Project. Under long-term operational conditions, runoff associated with the NPA would be treated by an onsite

detention and infiltration facility, while runoff under the proposed Project would be conveyed to a proposed water quality/retention basin proposed along the western site boundary in the central portion of the Project site. Additionally, both the Project and NPA would be subject to compliance with a long-term WQMP, which would further preclude potential water quality impacts, including impacts to groundwater quality. Implementation of these drainage and water quality measures would ensure that water quality impacts associated with the NPA and the Project would be less than significant, and the level of impact would be similar. With respect to water supply, the Prior EIR disclosed that the NPA would result in a total system demand of 3,346 acre-feet per year, while the proposed Project is anticipated to generate a demand for only 129.4 acre-feet per year (Cornerstone, 2021c, Table 1; Bakersfield, 2015, p. 4.8-20). Thus, the NPA would result in a substantial increase in demand for water resources as compared to the Project, although it is anticipated that the GCWD would have sufficient supplies to serve either the Project or NPA, resulting in a less-than-significant impact. Additionally, the NPA would result in an increased demand for groundwater supplies as compared the proposed Project, although impacts to groundwater supplies would be less than significant under both the NPA and proposed Project. Neither the Project nor the NPA would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite, or that would exceed the capacity of existing or planned stormwater drainage systems; thus, impacts would be less than significant under both the Project and NPA, and the level of impact would be similar. The Project site is not subject to flood hazards; thus, neither the Project nor the NPA would result in impacts due to impeding or redirecting flood flows, and the level of impact would be similar. Neither the Project nor the NPA would be subject to inundation due to flood hazards, tsunamis, or seiches; thus, no impact would occur, and the level of impact would be similar.

J. Land Use and Planning

The Project site is bounded to the west by SR-99 and to the east by South H Street, and lands to the north and south of the Project site are planned for development with general commercial uses by the City's General Plan. As such, neither the Project nor the NPA would physically divide an established community, resulting in similar less-than-significant impacts. The NPA would develop the Project site in accordance with the City of Bakersfield General Plan. As such, there would be no conflicts with applicable land use plans, policies, or regulations resulting in significant environmental effects. Comparatively, the Project proposes a General Plan Amendment (GPA) to address consistency between the proposed land uses and the General Plan and other plans, policies, and regulations that rely on General Plan buildout projections. With approval of the Project's GPA, both the NPA and proposed Project would comply with all applicable land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect. As such, impacts would be less than significant, and the level of impact would be similar.

K. Noise

Construction activities associated with the NPA would be similar to the proposed Project. As with the proposed Project, noise levels generated during construction would not exceed the identified threshold of significance of 80 dBA Leq. As such, construction-related noise impacts would be similar under

the proposed Project and NPA, and impacts would be less than significant. Additionally, neither the Project nor the NPA would expose nearby sensitive receptors to operational noise levels exceeding the City's threshold of significance and neither the Project nor the NPA would result in long-term operational traffic-related noise impacts exceeding the City's threshold of significance. As such, traffic-related noise impacts would be similar under the NPA and the Project. Both the Project and NPA would result in less-than-significant impacts due to groundborne noise or vibration during construction activities. Likewise, both the Project and the NPA would result in less-than-significant operational groundborne noise or vibration impacts, although impacts would be slightly reduced under the NPA due to the reduction in the number of large truck trips as compared to the proposed Project. The Project site is not 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; thus, impacts due to airport-related noise would be less than significant under the Project and NPA, and the level of impact would be similar.

L. Transportation

Neither the Project nor the NPA has the potential to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Impacts would be less than significant, and the level of impact would be similar. With respect to VMT, the NPA would involve the construction and operation of 800,000 s.f. of commercial retail building area, while the Project only would entail construction and operation of 187,500 s.f. of commercial uses. The NPA would likely result in a significant and unavoidable VMT impact associated with the NPA because employee and visitor vehicle trip lengths would be increased as compared to the Project; the NPA would include more regional commercial retail land uses that would attract vehicular trips from further away than the commercial uses proposed as part of the Project and would generate more employees than the proposed Project. However, because the NPA does not include a land use that would attract a large volume of truck trips, the NPA would eliminate the Project's significant and unavoidable impact associated with truck-related VMT. Roadway improvements under the NPA would be similar to the proposed Project; thus, impacts due to a substantial increase in hazards from a geometric design feature or incompatible uses would be less than significant under the Project and NPA, and the level of impact would be similar. Both the Project and NPA would be required to maintain adequate access for emergency vehicles; thus, impacts due to inadequate emergency access would be less than significant under both the Project and NPA, and the level of impact would be similar.

M. Tribal Cultural Resources

Areas planned for physical impact under the NPA would be similar to the proposed Project, and under both the Project and NPA the entire Project site and off-site improvement areas would be subject to grading and ground disturbance. As such, potential impacts to tribal cultural resources would be similar under the proposed Project and NPA, and impacts under both the Project and NPA would be reduced to less-than-significant levels with implementation of mitigation measures.

N. Utilities and Service Systems

Both the Project and the NPA would require improvements to provide water, wastewater, stormwater drainage, and dry utilities to the Project site. Impacts associated with the construction of these facilities are inherent to the construction phases and would be less than significant under the Project and NPA, and the level of impact would be similar. With respect to water supply, the Prior EIR disclosed that the NPA would result in a total system demand of 3,346 acre-feet per year, while the proposed Project is anticipated to generate a demand for only 129.4 acre-feet per year (Cornerstone, 2021c, Table 1; Bakersfield, 2015, p. 4.8-20). As such, impacts to water supply would be increased under the NPA as compared to the proposed Project, although impacts to water supply would be less than significant under the Project and NPA. With respect to wastewater generation, the Project would generate an average of 132,000 gallons of wastewater per day, with peak daily flows of 243,000 gpd (Cornerstone, 2021b, p. 3). By comparison, the NPA would result in the generation of approximately 95,200 gallons of wastewater per day, with peak flows of 190,400 gallons per day (Bakersfield, 2015, Table 4.11-2). As such, impacts to wastewater treatment capacity would be reduced under the NPA as compared to the proposed Project, although impacts would be less than significant under both the Project and NPA. Solid waste generation associated with construction of the Project and NPA is expected to be similar and impacts would be less than significant. Under long-term operational conditions, the NPA is anticipated to generate approximately 10,880 pounds per day of solid waste (5.4 tons per year), while the Project is anticipated to generate approximately 23,000 tons per day (Bakersfield, 2015, Table 4.11-4). Thus, solid waste impacts would be reduced under the NPA as compared to the proposed Project, although impacts would be less than significant under both the Project and NPA. Both the Project and NPA would be required to comply with all applicable federal, state, and local management and reduction statutes and regulations related to solid waste; thus, impacts would be less than significant under the Project and NPA, and the level of impact would be similar.

O. Conclusion

As compared to the proposed Project, the NPA would have increased impacts under the issue areas of air quality (ROG, NO_x, and CO emissions), hydrology/water quality (water demand), transportation, and utilities/service systems. The NPA would result in the same or similar impacts under the issue areas of aesthetics, biological resources, cultural resources, geology/soils, hydrology/water quality (except water demand), land use/planning, and tribal cultural resources. The NPA would result in reduced impacts under the issue areas of air quality (SO_x, PM₁₀, and PM_{2.5} emissions and localized air quality impacts), energy, greenhouse gas emissions, hazards/hazardous materials, and noise, and would avoid the Project's significant and unavoidable impact associated with truck-related VMT but likely cause a significant and unavoidable VMT impact associated with employee and visitor passenger vehicle trips.

The NPA would not meet several of the Project's objectives. The NPA would not meet the Project's objective to expand economic development, facilitate job creation, and increase the tax base for the City of Bakersfield by establishing new commercial and light industrial development adjacent to or near the State highway system, as the NPA would not accommodate light industrial uses. The NPA

would meet the Project's objective to attract employment-generating businesses to the City of Bakersfield to reduce the need for members of the local workforce to commute outside the area for employment, thereby improving the jobs-housing balance in the City and nearby areas beyond the City boundary. The NPA would not include light industrial uses, and thus would not meet the Project's objective to diversify the mix of uses in the City of Bakersfield and greater Kern County to support the growing goods movement supply chain and to streamline package delivery services in and around the City of Bakersfield. The NPA also would fail to meet the Project's objective to establish a supply chain use adjacent to or near designated truck routes and/or the State highway system to avoid or shorten vehicular trip lengths on other roadways. The NPA would meet the Project's objective to provide retail shopping opportunities easily accessible to local residents and passers-by on the State highway system to assist in meeting the growing and evolving shopping demands of local residents and planned communities in the City of Bakersfield and greater Kern County. The NPA also would meet the Project's objective to develop an unused or underutilized property near SR-99. In addition, the NPA would meet the Project's objective to provide a gathering place for City residents and visitors that includes shopping and other retail services in an aesthetically appealing environment. Because the NPA does not include light industrial uses, the NPA would not meet the Project's objective to develop light industrial and commercial uses that are architecturally and operationally designed to meet contemporary industry standards and be economically competitive with similar buildings in the region.

6.3.3 PANAMA LANE TRUCK ROUTING ALTERNATIVE (PLTRA)

Under the Panama Lane Truck Routing Alternative (PLTRA), all Project-related truck traffic accessing the Project site via SR-99 would be restricted to Colony Street and Panama Lane, with no truck trips allowed along South H Street. All other on-site components of the PLTRA would be similar to the proposed Project, as described in EIR Section 3.0, *Project Description*. Off-site, all utility improvements and roadway improvements would be the same under the PLTRA and proposed Project, with the exception that fewer improvements would be made at the intersection of South H Street and Hosking Avenue because the intersection would not need to accommodate Project-related truck turning movements. Although more traffic congestion would be anticipated along Panama Lane, the PLTRA is assumed to not include any widening or improvements to Panama Lane, as the right of way is already fully improved. Although the Project would not result in any localized impacts associated with truck traffic (i.e., localized air quality impacts or traffic-related noise), this alternative was selected in order to consider an alternative that would avoid routing truck trips along roadways that parallel existing residential uses (i.e., existing residential uses located east of South H Street and the Kern Island Channel).

A. Aesthetics

All components of the PLTRA would be identical to the proposed Project, with exception of the proposed truck route. As such, all impacts related to aesthetics would be identical under the proposed Project and PLTRA. As with the proposed Project, impacts to scenic vistas, scenic resources, scenic highways, scenic quality, and due to light and glare would be less than significant.

B. Air Quality

All components of the PLTRA would be identical to the proposed Project, with exception of the proposed truck route. Neither the Project nor the PLTRA would conflict with or obstruct implementation of the applicable air quality plan, and the level of impact would be the same. As with the proposed Project, with mitigation the PLTRA would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. Although the Project would not expose sensitive receptors to substantial pollutant concentrations, because all truck trips under the PLTRA would be routed along roadways that do not abut residential uses, the PLTRA would result in reduced localized air quality impacts to sensitive receptors. Neither the Project nor the PLTRA would result in other emissions (such as those leading to odors) adversely affecting a substantial number of people; however, because truck trips under the PLTRA would be routed away from roadways abutting residential uses, the PLTRA would result in reduced impacts associated with odors from diesel truck trips.

C. Biological Resources

All areas of physical impact would be identical under the Project and PLTRA, resulting in the same impacts to biological resources. As with the proposed Project, with mitigation for the burrowing owl, SJKF, and migratory birds, impacts to biological resources under both the PLTRA and proposed Project would be reduced to less-than-significant levels, and the level of impact would be identical.

D. Cultural Resources

All areas of physical impact would be identical under the Project and PLTRA, resulting in the same potential for impacts to cultural resources. As with the proposed Project, with mitigation requiring monitoring during construction for subsurface archaeological resources and appropriate treatment of any human remains that may be uncovered during grading activities, impacts to cultural resources under both the PLTRA and proposed Project would be reduced to less-than-significant levels, and the level of impact would be identical.

E. Energy

All components of the PLTRA would be identical to the proposed Project, with exception of the proposed truck route. As such, both the Project and the PLTRA would result in less-than-significant impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation, and the level of impact would be the same. In addition, neither the Project nor the PLTRA would conflict with or obstruct a state or local plan for renewable energy or energy efficiency; thus, impacts would be less than significant, and the level of impact would be the same.

F. Geology and Soils

All components of the PLTRA would be identical to the proposed Project, with exception of the proposed truck route. With mitigation requiring appropriate treatment of any paleontological resources or unique geologic features that may be uncovered during ground-disturbing activities, as well as

mandatory compliance with applicable regulatory requirements, impacts due to geology and soils under the Project and PLTRA would be less than significant, and the level of impact would be the same.

G. Greenhouse Gas Emissions

All components of the PLTRA would be identical to the proposed Project, with exception of the proposed truck route. Thus, and similar to the proposed Project, even with mitigation both the PLTRA and proposed Project would result in a net increase in GHG emissions, resulting in a significant and unavoidable impact. Both the Project and PLTRA would comply with all applicable plans, policies, and regulations adopted for the purpose of reducing the emissions of greenhouse gases; thus, impacts would be less than significant, and the level of impact would be the same.

H. Hazards and Hazardous Materials

All components of the PLTRA would be identical to the proposed Project, with exception of the proposed truck route. As with the proposed Project, with mitigation related to subsurface septic systems and soil contaminants, as well as mitigation related to contaminated soils, impacts due to hazards and hazardous materials would be reduced to less-than-significant levels, and the level of impact would be similar.

I. Hydrology and Water Quality

All components of the PLTRA would be identical to the proposed Project, with exception of the proposed truck route. As with the proposed Project, with implementation of mitigation measures requiring preparation and compliance with a SWPPP during construction, compliance with applicable regulations related to water use, and incorporation of design measures into the proposed water quality/retention basin, impacts to hydrology would be less than significant and the level of impact would be the same.

J. Land Use and Planning

All components of the PLTRA would be identical to the proposed Project, with exception of the proposed truck route. The Project site is bounded to the west by SR-99 and to the east by South H Street, and lands to the north and south of the Project site are planned for development with general commercial uses by the City's General Plan. As such, neither the Project nor the PLTRA would physically divide an established community; thus, impacts would be less than significant, and the level of impact would be the same. The Project and PLTRA also would not 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; thus, impacts would be less than significant, and the level of impact would be the same.

K. Noise

All components of the PLTRA would be identical to the proposed Project, with exception of the proposed truck route. Construction activities also would be identical; thus, neither the Project nor the PLTRA would result in temporary construction-related noise impacts exceeding 80 dBA Leq and that could affect a substantial number of people, and the level of impact would be the same. Additionally, long-term on-site operational noise would be identical between the Project and PLTRA; thus, neither the Project nor the PLTRA would expose sensitive receptors to impacts associated with operational noise, and the level of impact would be the same. However, because all truck trips would access Panama Lane via Berkshire Road and Colony Street instead of via South H Street, implementation of the PLTRA would reduce the Project's less-than-significant traffic-related noise impacts affecting nearby residential receptors. Neither the Project nor the PLTRA would generate excessive groundborne vibration or groundborne noise levels during construction or operation; thus, impacts would be less than significant and the level of impact would be the same. Additionally, neither the Project nor the PLTRA would expose people residing or working in the area to excessive airport-related noise levels; thus, impacts would be less than significant, and the level of impact would be the same.

L. Transportation

All components of the PLTRA would be identical to the proposed Project, with exception of the proposed truck route. As with the proposed Project, the PLTRA would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities; thus, impacts would be less than significant, and the level of impact would be the same. Both the Project and the PLTRA would result in significant and unavoidable impacts due to truck-related VMT, and the level of impact would be similar. All roadway improvements would be the same under the PLTRA and proposed Project, with the exception that fewer improvements would be made at the intersection of South H Street and Hosking Avenue because the intersection would not need to accommodate Project-related truck turning movements. Both the Project and PLTRA would result in less-than-significant impacts due to a substantial increase in hazards due to a geometric design feature or incompatible use, and the level of impact would be the same. Likewise, both the Project and PLTRA would result in less-than-significant impacts due to emergency access, and the level of impact would be the same.

M. Tribal Cultural Resources

All areas of physical impact would be identical under the Project and PLTRA, resulting in the same potential for impacts to tribal cultural resources. As with the proposed Project, with mitigation requiring monitoring during construction for subsurface archaeological resources and appropriate treatment of any human remains that may be uncovered during grading activities, impacts to tribal cultural resources under both the PLTRA and proposed Project would be reduced to less-than-significant levels, and the level of impact would be identical.

N. Utilities and Service Systems

All components of the PLTRA would be identical to the proposed Project, with exception of the proposed truck route. As with the proposed Project, with mandatory compliance with applicable regulatory requirements, impacts to utilities and service systems under the PLTRA would be less than significant, and the level of impact would be the same as for the proposed Project.

O. Conclusion

As compared to the proposed Project, the PLTRA would have reduced impacts to sensitive receptors under the issue areas of air quality (localized air quality) and noise (traffic-related noise). All other impacts of the PLTRA would be identical to the proposed Project, and the PLTRA would not result in any increased environmental impacts as compared to the proposed Project. Traffic congestion would increase along Panama lane, but transportation impacts are assessed based on consistency with transportation plans and policies and are quantified using a VMT metric and not a level of service (LOS) metric; as such, traffic congestion is a transportation planning related consideration and is not considered an adverse environmental effect under CEQA. Because the PLTRA is identical to the proposed Project with exception of the proposed truck route, the PLTRA would meet all of the Project's objectives.

6.3.4 WAREHOUSE ONLY NET ZERO ALTERNATIVE (WOA)

Under the Warehouse Only Net Zero Alternative (WOA), the Project site would be developed entirely with warehouse uses, with no commercial retail uses proposed. Under the WOA, warehouse uses would be constructed on approximately 86.11 acres, with approximately 4.48 acres of the Project site consisting of retention basin uses. For purposes of analysis, it is assumed that warehouse uses would be developed at an intensity similar to the proposed Project, which proposes to develop the warehouse portions of the Project site at a Floor Area Ratio (FAR) of approximately 0.44. Accordingly, under the WOA the Project site would be developed with up to 1,650,419 s.f. of warehouse building area (86.11 acres x 0.44 FAR x 43,560 s.f./acre = 1,650,419 s.f.). Consistent with the proposed Project, warehouse uses under the WOA would consist of 90% fulfillment center uses and 10% cold storage uses. As previously shown in Table 6-2, and based on the rates assumed in the Project's Traffic Study (EIR *Technical Appendix J*), the WOA would generate approximately 5,795 average daily trips (ADT), whereas Table 4b of the Project's Traffic Study shows that the proposed Project would generate approximately 12,700 ADT; thus, the WOA would result in an approximate 55% reduction in daily vehicle trips as compared to the proposed Project (R&S, 2022, Table 4b).

This alternative assumes that the Project Applicant would be able to construct the WOA to prepare for a net zero GHG emissions future and that the building user would be able to implement operational practices to achieve near-zero or net-zero GHG emissions by 2050. Requiring a near-zero or net-zero project on opening day is not feasible because although technological advancements are occurring to reduce GHG emissions across various sectors of the economy, they are not advanced enough to assure that area source, energy source, and mobile source emissions can achieve net-zero in the next 25 years. However, with elimination of the commercial uses (conceptually designed to include 12 buildings)

proposed under the Project and only focusing on one large building and its future user(s), it is possible that given the trends in technological advancements that the WOA could have near-zero or net-zero GHG emissions by 2050. The California Air Resources Board (CARB) Draft 2022 Scoping Plan was published on May 10, 2022 and is expected to be adopted later in 2022, and evaluates a path for California to achieve carbon neutrality by 2045 (CARB, 2022a). It should be noted that the WOA is aspirational and it is not known with certainty whether a near-zero or net-zero WOA could actually be fully achieved by 2050 as it is yet unknown how quickly technological advancements will occur that would be feasible for a building operator to implement and for the City of Bakersfield to enforce.

A. Aesthetics

Under the WOA, the Project site would be developed entirely with warehouse uses, with no commercial retail uses proposed. The Project site does not offer prominent publicly-accessible scenic vistas under existing conditions; thus, neither the Project nor the WOA would result in a substantial effect on a scenic vista, and the level of impact would be similar. The Project site is not visible from any eligible or designated State scenic highways; thus, both the Project and WOA would result in no impacts to State scenic highways, and the level of impact would be the same. Both the Project and WOA would be required to comply with all applicable zoning and other regulations governing scenic quality. Although the entire Project site would be developed with warehouse uses under the WOA with no commercial retail uses proposed, it is assumed that the warehouse building would be visually obscured by perimeter landscaping and that truck courts would be visually screened by screen walls as is proposed by the Project. As such, potential impacts due to the degradation visual character or quality of public views of the site and its surroundings would be less than significant and similar under the proposed Project and the WOA. In addition, warehouse uses require less site lighting and contain fewer building materials subject to glare as compared to commercial retail land uses; thus, impacts due to light and glare would be reduced under the WOA as compared to the Project, although light and glare impacts would be less than significant under both the Project and WOA.

B. Air Quality

With mitigation, neither the Project nor the WOA would result in impacts due to a conflict with the applicable air quality plan; however, due to the 55% reduction in vehicular trips under the WOA as compared to the Project, and progression toward near-zero or net-zero GHG emissions by 2050 which would presumably require operation of the warehouse building with a non-diesel vehicle fleet, the WOA would result in reduced air pollutant emission impacts as compared to the Project. Both the Project and WOA would result in similar emissions of pollutants during construction; thus, construction-related air quality impacts would be less than significant under both the Project and WOA, and the level of impact would be similar. Long-term operational emissions under both the Project and WOA would be mitigated to below a level of significance; however, due to the 55% reduction in the total amount of vehicle trips under the WOA as compared to the Project, and progression toward near-zero or net-zero operations by 2050, long-term air quality emissions associated with the Project that stem mostly due from mobile sources would be reduced. Although the WOA would result in fewer vehicle trips overall as compared to the proposed Project, the WOA would be associated with a higher

number of heavy truck trips as compared to the proposed Project. As such, the WOA would have increased impacts to sensitive receptors associated with localized pollutant concentrations in the short term, until the WOA could progress toward a near-zero or net-zero condition. In any case, impacts under the WOA would be below a level of significance. Similarly, due to the increase in the number of heavy truck trips under the WOA as compared to the proposed Project, the WOA would result in increased odor potential in the short term due to diesel emission exhaust, although odor impacts under both the WOA and proposed Project would be less than significant. In the long-term and assuming the use of non-diesel trucks to achieve a near- to net-zero operational condition by 2050, the potential for odor from diesel exhaust would be eliminated.

C. Biological Resources

All areas of physical impact would be identical under the Project and WOA, resulting in the same impacts to biological resources. As with the proposed Project, with mitigation for the burrowing owl, SJKF, and migratory birds, impacts to biological resources under both the WOA and proposed Project would be reduced to less-than-significant levels, and the level of impact would be identical.

D. Cultural Resources

All areas of physical impact would be identical under the Project and WOA, resulting in the same potential for impacts to cultural resources. As with the proposed Project, with mitigation requiring monitoring during construction for subsurface archaeological resources and appropriate treatment of any human WOA that may be uncovered during grading activities, impacts to cultural resources under both the PLTRA and proposed Project would be reduced to less-than-significant levels, and the level of impact would be identical.

E. Energy

Construction characteristics associated with the WOA would largely be similar to the proposed Project, although construction would entail one larger warehouse building instead of a warehouse building and 12 commercial buildings. As with the proposed Project, energy use during construction activities would be primarily in the form of fuel consumption to operate heavy equipment, vehicles, machinery, and generators. In general, the construction processes under both the Project and WOA would promote conservation and efficient use of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing, and refinement. Use of construction materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as the transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations. As such, impacts due to the wasteful or inefficient use of energy during construction activities would be less than significant, and the level of impact would be similar. With respect to energy consumption, the proposed Project would result in an annual demand for 1,783,192 gallons of diesel fuel, 6,304,713 gallons of gasoline, 18,319,963 kBTU of natural gas, and 7,259,194 kWh of electricity (Trinity, 2022b, Tables 3-7 and 3-8). By comparison, and based on the values presented in EIR Tables 4.5-2 through 4.5-7, the WOA would result in an initial annual

demand for 2,421,756 gallons of diesel, 715,499 gallons of gasoline, 26,627,844 kBTU of natural gas, and 8,846,250 kWh of electricity. Thus, the WOA would result in an annual demand for approximately 5,589,241 less gasoline, but would result in an annual increase in demand for diesel fuel, natural gas, and electricity of 638,564 gallons, 8,307,881 kBTU, and 1,587,056 kWh, respectively. As the WOA transitions to near- to net-zero GHG emissions over time, the amount of fossil fuel use would decrease and the amount of electricity demand would increase. Although overall energy demands associated with the WOA would be greater than that for the proposed Project, the type of energy use would transition over time toward lower fossil fuel use. Although neither the Project nor the WOA would result in significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, energy impacts would be increased under the WOA as compared to the Project. Neither the Project nor the WOA would conflict with or obstruct a State or local plan for renewable energy or energy efficiency; thus, impacts would be less than significant, and the level of impact would be similar.

F. Geology and Soils

Areas planned for development would be the same under the WOA and proposed Project. With mitigation requiring appropriate treatment of any paleontological resources or unique geologic features that may be uncovered during ground-disturbing activities, as well as mandatory compliance with applicable regulatory requirements, impacts due to geology and soils under the Project and WOA would be less than significant, and the level of impact would be the same.

G. Greenhouse Gas Emissions

Construction activities associated with the WOA would be similar to the proposed Project, resulting in similar levels of GHG emissions during construction. However, due to the 55% reduction in the number of total vehicle trips under the WOA as compared to the Project, and because a majority of GHG emissions are due to mobile sources, the WOA would result in fewer emissions of GHGs as compared to the proposed Project initially.

This alternative assumes that the Project Applicant would be able to construct the WOA to prepare for a net zero GHG emissions future and that the building user would be able to implement operational practices to achieve near-zero or net-zero GHG emissions by 2050. Thus, the WOA would substantially reduce or eliminate the Project's long term direct and cumulatively considerable GHG impact. Although GHG impacts would be substantially reduced or eliminated in the long term, neither the Project nor the WOA would achieve the City's threshold of significance of net zero in the short-term, resulting in significant and unavoidable impacts. Both the Project and WOA would comply with all applicable plans, policies, and regulations adopted for the purpose of reducing the emissions of greenhouse gases; thus, impacts associated with plan, policy, and regulatory compliance would be less than significant, and the level of impact would be the same.

H. Hazards and Hazardous Materials

Both the Project and WOA would be subject to mitigation related to subsurface septic systems and soil contaminants, as well as mitigation related to contaminated soils, which would reduce potential impacts due to existing site contamination to less-than-significant and similar levels. Because the WOA would involve a substantial increase in the amount of warehouse building area as compared to the proposed Project, the WOA would result in increased, but less-than-significant, impacts due to the creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and due to a reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. There are no schools within 0.25-mile of the Project site; however, due to the increase in warehouse building area under the WOA, the WOA would result in increased, but still less-than-significant, impacts due to hazardous emissions or materials within 0.25-mile of an existing or proposed school. Because the Project site is not located on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, neither the Project nor the WOA would have the potential to create a significant hazard to the public or the environment associated with a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; thus, no impact would occur under the WOA or Project, and the level of impact would be the same. As there are no public or private airports in the Project vicinity, neither the Project nor the WOA would expose residents or workers in the local area to excessive airport-related noise, and the level of impact would be the same.

I. Hydrology and Water Quality

Construction activities associated with the WOA would be substantially similar to the proposed Project. As with the proposed Project, construction-related impacts due to water quality would be less than significant with mandatory compliance with the requirements of the Central Valley RWQCB and Chapter 15.05 (California Building Code) of the City of Bakersfield Municipal Code, which collectively require the preparation and implementation of a SWPPP during construction activities. With implementation of a SWPPP, water quality impacts associated with the WOA, including impacts due to erosion or siltation, would be less than significant and similar to the proposed Project. Under long-term operational conditions, runoff associated with the WOA would be treated by an onsite water quality/retention basin similar to the Project's design. Additionally, both the Project and WOA would be subject to compliance with a long-term WQMP, which would further preclude potential water quality impacts, including impacts to groundwater quality. Implementation of these drainage measures would ensure that water quality impacts associated with the WOA and the Project would be less than significant, and the level of impact would be similar. With respect to water supply, and based on the rates used in the Project's Water Supply Assessment (EIR *Technical Appendix M*) the WOA would result in a demand for approximately 23.7 million gallons per year, while the Project would result in a demand for 42.2 million gallons per year; thus, the WOA would result in reduced and less-than-significant impacts to water supply as compared to the proposed Project (Cornerstone, 2021c, Table 1). Additionally, the WOA would result in a decreased demand for groundwater supplies as compared the proposed Project, although impacts to groundwater supplies would be less than significant under both the WOA and proposed Project. Neither the Project nor the WOA would substantially increase

the rate or amount of surface runoff in a manner which would result in flooding on- or offsite, or that would exceed the capacity of existing or planned stormwater drainage systems; thus, impacts would be less than significant under both the Project and WOA, and the level of impact would be similar. The Project site is not subject to flood hazards; thus, neither the Project nor the WOA would result in impacts due to impeding or redirecting flood flows, and the level of impact would be similar. Neither the Project nor the WOA would be subject to inundation due to flood hazards, tsunamis, or seiches; thus, no impact would occur, and the level of impact would be similar.

J. Land Use and Planning

The Project site is bounded to the west by SR-99 and to the east by South H Street, and lands to the north and south of the Project site are planned for development with general commercial uses by the City's General Plan. As such, neither the Project nor the WOA would physically divide an established community, resulting in similar less-than-significant impacts. Both the Project and WOA would require a GPA to address consistency between the proposed land uses and the General Plan and other plans, policies, and regulations that rely on General Plan buildout projections. With approval of a GPA, both the WOA and proposed Project would comply with all applicable land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect. As such, impacts would be less than significant, and the level of impact would be similar.

K. Noise

Construction activities associated with the WOA would be similar to the proposed Project. As with the proposed Project, noise levels generated during construction would not exceed the identified threshold of significance of 80 dBA Leq. As such, construction-related noise impacts would be similar under the proposed Project and WOA, and impacts would be less than significant. Additionally, neither the Project nor the WOA would expose nearby sensitive receptors to operational noise levels exceeding the City's threshold of significance, although on-site noise impacts would slightly increase under the WOA due to the increase in the number of heavy truck trips. Likewise, because the WOA would result in an increase in the number of heavy truck trips, the WOA would result in increased impacts due to traffic-related noise, although traffic-related noise impacts would be less than significant under both the Project and WOA. The WOA assumes that the future building user would be able to implement operational practices to progress toward near-zero to net-zero GHG emissions by 2050, which presumably would include non-diesel trucks inclusive of electric powered trucks that produce less noise than diesel-fueled trucks. Thus, in the long term it is expected that mobile source noise would be reduced by the WOA.

Both the Project and WOA would result in less-than-significant impacts due to groundborne noise or vibration during construction activities. Likewise, both the Project and the WOA would result in less-than-significant operational groundborne noise or vibration impacts, although impacts would be slightly increased under the WOA due to the increase in the number of large truck trips as compared to the proposed Project. The Project site is not 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; thus, impacts due to airport-related noise would be less than significant under the Project and WOA, and the level of impact would be similar.

L. Transportation

Neither the Project nor the WOA has the potential to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Impacts would be less than significant, and the level of impact would be similar. With respect to VMT, the WOA would involve the construction and operation of 1,650,419 s.f. of warehouse uses, while the Project would entail construction and operation of 1,012,185 s.f. of warehouse uses and 187,500 s.f. of commercial uses. Both the Project and WOA would result in significant and unavoidable truck-related VMT impacts, and the level of impact associated with the WOA would be increased as compared to the Project because the WOA would generate more truck traffic. However, because the WOA would not include regional commercial retail land uses and omit all vehicular trips traveling to and from the site for commercial retail purposes, the WOA would reduce employee vehicle trips, thereby reducing passenger vehicle related VMT. It should be noted that although the significant and unavoidable VMT impact would not be reduced by the WOA, VMT is closely related to GHG impacts and the presumed transition of the WOA toward near-zero or net-zero GHG emissions by 2050 would be an environmental improvement. Roadway improvements under the WOA would be similar to the proposed Project; thus, impacts due to a substantial increase in hazards from a geometric design feature or incompatible uses would be less than significant under the Project and WOA, and the level of impact would be similar. Both the Project and WOA would be required to maintain adequate access for emergency vehicles; thus, impacts due to inadequate emergency access would be less than significant under both the Project and WOA, and the level of impact would be similar.

M. Tribal Cultural Resources

Areas planned for physical impact under the WOA would be similar to the proposed Project, and under both the Project and WOA the entire Project site and off-site improvement areas would be subject to grading and ground disturbance. As such, potential impacts to tribal cultural resources would be similar under the proposed Project and WOA, and impacts under both the Project and WOA would be reduced to less-than-significant levels with implementation of mitigation measures.

N. Utilities and Service Systems

Both the Project and the WOA would require improvements to provide water, wastewater, stormwater drainage, and dry utilities to the Project site. Impacts associated with the construction of these facilities are inherent to the construction phases and would be less than significant under the Project and WOA, and the level of impact would be similar. With respect to water supply, and based on the rates used in the Project's Water Supply Assessment (EIR *Technical Appendix M*), the WOA would result in a demand for approximately 23.7 million gallons per year, while the Project would result in a demand for 42.2 million gallons per year; thus, the WOA would result in reduced and less-than-significant impacts to water supply as compared to the proposed Project (Cornerstone, 2021c, Table 1). With respect to wastewater generation, the Project would generate an average of 132,000 gallons of

wastewater per day, with peak daily flows of 243,000 gpd (Cornerstone, 2021b, p. 3). By comparison, and based on the employee and wastewater generation rates reported in the Project's Sewer Capacity Study (EIR *Technical Appendix L*), the WOA would generate approximately 1,957 employees, resulting in the generation of an average of 19,567 gallons per day (gpd), with peak daily flows of 39,133 gpd (Cornerstone, 2021b, p. 3). As such, impacts to wastewater treatment capacity would be reduced under the WOA as compared to the proposed Project, although impacts would be less than significant under both the Project and WOA. Due to the reduction in the number of employees under the WOA as compared to the Project, the WOA also would generate less solid waste than the Project; thus, solid waste impacts would be reduced under the WOA as compared to the proposed Project, although impacts would be less than significant under both the Project and WOA. Both the Project and WOA would be required to comply with all applicable federal, state, and local management and reduction statutes and regulations related to solid waste; thus, impacts would be less than significant under the Project and WOA, and the level of impact would be similar.

O. Conclusion

As compared to the proposed Project, the WOA would result in increased short-term air quality (localized impacts), energy (increased demand for diesel fuel, natural gas, and electricity), GHG, hazards/hazardous materials, noise, and truck-related VMT impacts. In the long-term as the WOA transitions to a near-zero or net-zero GHG emissions by 2050, the WOA would have reduced long-term air quality, GHG, and noise impacts compared to the proposed Project. Implementation of the WOA would have the same or similar impacts under the issue areas of aesthetics, biological resources, cultural resources, geology/soils, hydrology/water quality (except water supplies), land use/planning, and tribal cultural resources. Implementation of the WOA would result in reduced impacts under the issue areas of air quality (except localized impacts), energy (gasoline demand, only), long-term GHG emissions, hydrology/water quality (water and groundwater supplies, only), passenger vehicle related VMT, and utilities/service systems.

The WOA would fail to meet or would be less effective in meeting several of the Project's objectives. Due to the omission of commercial retail uses under the WOA, the WOA would be less effective than the proposed Project in expanding economic development, facilitating job creation, and increasing the tax base for the City of Bakersfield by establishing new commercial and light industrial development adjacent to or near the State highway system. The WOA would meet the Project's objective to attract employment-generating businesses to the City of Bakersfield to reduce the need for members of the local workforce to commute outside the area for employment, thereby improving the jobs-housing balance in the City and nearby areas beyond the City boundary. Due to the increase in warehouse building area under the WOA, the WOA would be more effective than the proposed Project in meeting the Project's objective to diversify the mix of uses in the City of Bakersfield and greater Kern County to support the growing goods movement supply chain and to streamline package delivery services in and around the City of Bakersfield. Similarly, the WOA would be more effective than the proposed Project in meeting the Project's objective to establish a supply chain use adjacent to or near designated truck routes and/or the State highway system to avoid or shorten vehicular trip lengths on other roadways. As the WOA would not accommodate commercial retail uses, the WOA would fail to meet

the Project's objective to provide retail shopping opportunities easily accessible to local residents and passers-by on the State highway system to assist in meeting the growing and evolving shopping demands of local residents and planned communities in the City of Bakersfield and greater Kern County. The WOA would be equally effective as the proposed Project in meeting the objective to develop an unused or underutilized property between existing residential development and SR-99 to serve as a buffer and transitional use. However, due to the lack of commercial retail uses under the WOA, the WOA would not meet the Project's objective to provide a gathering place for City residents and visitors that includes shopping and other retail services in an aesthetically appealing environment. Additionally, and again due to the lack of commercial retail uses under the WOA, the WOA would be less effective than the proposed Project in developing light industrial and commercial uses that are architecturally and operationally designed to meet contemporary industry standards and be economically competitive with similar buildings in the region. Last, it is questionable whether the WOA is feasible. The WOA is aspirational and it is not known with certainty whether a near-zero or net-zero WOA could actually be fully achieved by 2050 as it is yet unknown how quickly technological advancements will occur that would be feasible for a building operator to implement and for the City of Bakersfield to enforce.

6.3.5 REDUCED PROJECT ALTERNATIVE

Under the Reduced Project Alternative (RPA), the Project site would be developed with approximately 25% less commercial building space and 25% less warehouse building space than proposed under the Project. The RPA thus evaluates development of the Project site with 140,000 s.f. of commercial uses and a 760,000 s.f. warehouse distribution facility. The buildings would occur in the same general arrangement as proposed under the Project, but with smaller building footprints. The areas not covered by buildings would be used for surface parking for passenger vehicles, trucks, and trailers. The RPA would generate approximately 9,495 average daily trips (25% of the Project) and commensurately reduce operational effects by 25%.

A. Aesthetics

Under the RPA, the Project site would be developed with 140,000 s.f. of commercial uses and a 760,000 s.f. warehouse distribution facility. The Project site does not offer prominent publicly-accessible scenic vistas under existing conditions; thus, neither the Project nor the RPA would result in a substantial effect on a scenic vista, and the level of impact would be similar. The Project site is not visible from any eligible or designated State scenic highways; thus, both the Project and RPA would result in no impacts to State scenic highways, and the level of impact would be the same. Both the Project and RPA would be required to comply with all applicable zoning and other regulations governing scenic quality. Because the Project site would be developed with 25% building space, potential impacts due to the degradation visual character or quality of public views of the site and its surroundings would be reduced, but less than significant and similar under the proposed Project and the RPA. The amount of site lighting would be the same or slightly reduced and the potential for glare would be the same or similar even with 25% less building space, as the building materials would be similar and subject to glare; thus, impacts due to light and glare would be slightly reduced under the

RPA as compared to the Project, although light and glare impacts would be less than significant under both the Project and WOA.

B. Air Quality

With mitigation, neither the Project nor the RPA would result in impacts due to a conflict with the applicable air quality plan; however, due to the 25% reduction in vehicular trips under the RPA as compared to the Project, the RPA would result in reduced air pollutant emission impacts as compared to the Project. Both the Project and WOA would result in similar daily emissions of pollutants during construction although the RPA would presumably require fewer construction days since the amount of building space to be constructed would be 25% less. Construction-related air quality impacts would be less than significant under both the Project and RPA, and the level of impact would be similar. Long-term operational emissions under both the Project and RPA would be mitigated to below a level of significance; however, due to the 25% reduction in building space and the total amount of vehicle trips under the RPA as compared to the Project, operational air quality emissions associated with the Project would be reduced. As such, the WOA would have less impacts to sensitive receptors associated with construction and operational related air quality pollutant emissions. In any case, impacts under the RPA would be below a level of significance. Similarly, due to the decrease in the number of heavy truck trips under the RPA as compared to the proposed Project, the RPA would result in reduced potential for odor due to diesel emission exhaust, although odor impacts under both the RPA and proposed Project would be less than significant.

C. Biological Resources

All areas of physical impact would be identical under the Project and RPA, resulting in the same impacts to biological resources. As with the proposed Project, with mitigation for the burrowing owl, SJKF, and migratory birds, impacts to biological resources under both the RPA and proposed Project would be reduced to less-than-significant levels, and the level of impact would be identical.

D. Cultural Resources

All areas of physical impact would be identical under the Project and RPA, resulting in the same potential for impacts to cultural resources. As with the proposed Project, with mitigation requiring monitoring during construction for subsurface archaeological resources and appropriate treatment of any human RPA that may be uncovered during grading activities, impacts to cultural resources under both the PLTRA and proposed Project would be reduced to less-than-significant levels, and the level of impact would be identical.

E. Energy

Construction characteristics associated with the WOA would largely be similar to the proposed Project, although construction would entail 25% building space. As with the proposed Project, energy use during construction activities would be primarily in the form of fuel consumption to operate heavy equipment, vehicles, machinery, and generators. In general, the construction processes under both the

Project and RPA would promote conservation and efficient use of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing, and refinement. Use of construction materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as the transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations. As such, impacts due to the wasteful or inefficient use of energy during construction activities would be less than significant, and the level of impact would be similar. With respect to energy consumption, the proposed Project would result in an annual demand for 1,783,192 gallons of diesel fuel, 6,304,713 gallons of gasoline, 18,319,963 kBTU of natural gas, and 7,259,194 kWh of electricity (Trinity, 2022b, Tables 3-7 and 3-8). By comparison, the RPA is assumed to consume approximately 25% less energy due to the 25% reduction in building space. Although neither the Project nor the RPA would result in significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, energy impacts would be decreased under the RPA as compared to the Project. Neither the Project nor the RPA would conflict with or obstruct a State or local plan for renewable energy or energy efficiency; thus, impacts would be less than significant, and the level of impact would be similar.

F. Geology and Soils

Areas planned for development would be the same under the RPA and proposed Project. With mitigation requiring appropriate treatment of any paleontological resources or unique geologic features that may be uncovered during ground-disturbing activities, as well as mandatory compliance with applicable regulatory requirements, impacts due to geology and soils under the Project and RPA would be less than significant, and the level of impact would be the same.

G. Greenhouse Gas Emissions

Construction activities associated with the RPA would be similar to the proposed Project, resulting in similar levels of GHG emissions during construction. However, due to the 25% reduction in the number of total vehicle trips under the RPA as compared to the Project, and because a majority of GHG emissions are due to mobile sources, the RPA would result in fewer emissions of GHGs as compared to the proposed Project. Neither the Project nor the RPA would achieve the City's threshold of significance of net zero in the short-term, resulting in significant and unavoidable impacts. Both the Project and RPA would comply with all applicable plans, policies, and regulations adopted for the purpose of reducing the emissions of greenhouse gases; thus, impacts associated with plan, policy, and regulatory compliance would be less than significant, and the level of impact would be the same.

H. Hazards and Hazardous Materials

Both the Project and RPA would be subject to mitigation related to subsurface septic systems and soil contaminants, as well as mitigation related to contaminated soils, which would reduce potential impacts due to existing site contamination to less-than-significant and similar levels. Because the RPA would involve a less building space as compared to the proposed Project, the RPA would result in reduced, but less-than-significant, impacts due to the creation of a significant hazard to the public or

the environment through the routine transport, use, or disposal of hazardous materials, and due to a reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. There are no schools within 0.25-mile of the Project site; however, due to the reduction in building space under the RPA, the RPA would result in reduced, but still less-than-significant, impacts due to hazardous emissions or materials within 0.25-mile of an existing or proposed school. Because the Project site is not located on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, neither the Project nor the RPA would have the potential to create a significant hazard to the public or the environment associated with a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; thus, no impact would occur under the RPA or Project, and the level of impact would be the same. As there are no public or private airports in the Project vicinity, neither the Project nor the RPA would expose residents or workers in the local area to excessive airport-related noise, and the level of impact would be the same.

I. Hydrology and Water Quality

Construction activities associated with the RPA would be substantially similar to the proposed Project, but less construction would occur due to the 25% reduction in building space. As with the proposed Project, construction-related impacts due to water quality would be less than significant with mandatory compliance with the requirements of the Central Valley RWQCB and Chapter 15.05 (California Building Code) of the City of Bakersfield Municipal Code, which collectively require the preparation and implementation of a SWPPP during construction activities. With implementation of a SWPPP, water quality impacts associated with the RPA, including impacts due to erosion or siltation, would be less than significant and similar to the proposed Project. Under long-term operational conditions, runoff associated with the RPA would be treated by a proposed water quality/retention basin similar as would occur under the proposed Project. Additionally, both the Project and RPA would be subject to compliance with a long-term WQMP, which would further preclude potential water quality impacts, including impacts to groundwater quality. Implementation of these drainage measures would ensure that water quality impacts associated with the RPA and the Project would be less than significant, and the level of impact would be similar. With respect to water supply, the RPA would result in less water demand than the Project associated with building usage but a greater water demand associated with landscape irrigation, as more landscape area would be provided under the RPA. Both the RPA and the Project would result in less-than-significant impacts to water supply. Additionally, the RPA would result in a decreased demand for groundwater supplies as compared the proposed Project, although impacts to groundwater supplies would be less than significant under both the RPA and proposed Project. Neither the Project nor the RPA would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite, or that would exceed the capacity of existing or planned stormwater drainage systems; thus, impacts would be less than significant under both the Project and RPA, and the level of impact would be similar. The Project site is not subject to flood hazards; thus, neither the Project nor the RPA would result in impacts due to impeding or redirecting flood flows, and the level of impact would be similar. Neither the Project nor the RPA would be subject to inundation due to flood hazards, tsunamis, or seiches; thus, no impact would occur, and the level of impact would be similar.

J. Land Use and Planning

The Project site is bounded to the west by SR-99 and to the east by South H Street, and lands to the north and south of the Project site are planned for development with general commercial uses by the City's General Plan. As such, neither the Project nor the RPA would physically divide an established community, resulting in similar less-than-significant impacts. Both the Project and RPA would require a GPA to address consistency between the proposed land uses and the General Plan and other plans, policies, and regulations that rely on General Plan buildout projections. With approval of a GPA, both the RPA and proposed Project would comply with all applicable land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect. As such, impacts would be less than significant, and the level of impact would be similar.

K. Noise

Construction activities associated with the RPA would be similar to the proposed Project, although occur over a fewer number of days due to the 25% reduction in building space. As with the proposed Project, noise levels generated during construction would not exceed the identified threshold of significance of 80 dBA Leq. As such, construction-related noise impacts would be similar under the proposed Project and RPA, and impacts would be less than significant. Additionally, neither the Project nor the RPA would expose nearby sensitive receptors to operational noise levels exceeding the City's threshold of significance, although on-site noise levels would slightly decrease under the RPA due to the decrease in passenger vehicle and heavy truck trips associated with 25% less building space. Likewise, because the RPA would result in fewer vehicle trips, the RPA would result in decreased impacts due to traffic-related noise, although traffic-related noise impacts would be less than significant under both the Project and RPA.

Both the Project and RPA would result in less-than-significant impacts due to groundborne noise or vibration during construction activities. Likewise, both the Project and the RPA would result in less-than-significant operational groundborne noise or vibration impacts, although impacts would be slightly decreased under the RPA due to the decrease in the number of vehicle trips as compared to the proposed Project. The Project site is not 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; thus, impacts due to airport-related noise would be less than significant under the Project and RPA, and the level of impact would be similar.

L. Transportation

Neither the Project nor the RPA has the potential to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Impacts would be less than significant, and the level of impact would be similar. With respect to VMT, the RPA would involve the construction and operation of the same types of land uses, but at a 25% reduction in building space. Both the Project and RPA would result in significant and unavoidable truck-related VMT impacts, as the distance that trucks would travel to and from the Project site would be the same, as their origins and destinations would not change. Roadway improvements under the

RPA would be similar to the proposed Project; thus, impacts due to a substantial increase in hazards from a geometric design feature or incompatible uses would be less than significant under the Project and RPA, and the level of impact would be similar. Both the Project and RPA would be required to maintain adequate access for emergency vehicles; thus, impacts due to inadequate emergency access would be less than significant under both the Project and RPA, and the level of impact would be similar.

M. Tribal Cultural Resources

Areas planned for physical impact under the RPA would be similar to the proposed Project, and under both the Project and RPA the entire Project site and off-site improvement areas would be subject to grading and ground disturbance. As such, potential impacts to tribal cultural resources would be similar under the proposed Project and RPA, and impacts under both the Project and RPA would be reduced to less-than-significant levels with implementation of mitigation measures.

N. Utilities and Service Systems

Both the Project and the RPA would require improvements to provide water, wastewater, stormwater drainage, and dry utilities to the Project site. Impacts associated with the construction of these facilities are inherent to the construction phases and would be less than significant under the Project and RPA, and the level of impact would be similar. With respect to water supply and wastewater generation, the RPA would result in slightly less demand for water and for wastewater treatment capacity, although both the Project and the RPA would result in less-than-significant impacts to water supply and wastewater facilities. Due to the reduction in the number of employees under the RPA as compared to the Project, the RPA also would generate less solid waste than the Project; thus, solid waste impacts would be reduced under the RPA as compared to the proposed Project, although impacts would be less than significant under both the Project and RPA. Both the Project and RPA would be required to comply with all applicable federal, state, and local management and reduction statutes and regulations related to solid waste; thus, impacts would be less than significant under the Project and RPA, and the level of impact would be similar.

O. Conclusion

As compared to the proposed Project, the RPA would result in reduced construction-related and operational impacts due to the provision of 25% less building space (air quality energy, GHG, hazards/hazardous materials, noise, truck-related VMT, and utilities and service systems). Implementation of the RPA would have the same or similar impacts under the issue areas of aesthetics, biological resources, cultural resources, geology/soils, hydrology/water quality (except water supplies which would be less), land use/planning, and tribal cultural resources.

The RPA would meet all of the Project's objectives, but many would be met to a lesser degree compared to the proposed Project. Due to the 25% reduction in building space under the RPA, the RPA would be less effective than the proposed Project in expanding economic development, facilitating job creation, and increasing the tax base for the City of Bakersfield by establishing new commercial and light industrial development adjacent to or near the State highway system. The RPA

would be less effective at meeting the Project's objective to attract employment-generating businesses to the City of Bakersfield to reduce the need for members of the local workforce to commute outside the area for employment, thereby improving the jobs-housing balance in the City and nearby areas beyond the City boundary. The RPA would be less successful than the Project in diversifying the mix of uses in the City of Bakersfield and greater Kern County to support the growing goods movement supply chain and to streamline package delivery services in and around the City of Bakersfield, due to the smaller warehouse building. The RPA would also be less successful at establishing a supply chain use adjacent to or near designated truck routes and/or the State highway system to avoid or shorten vehicular trip lengths on other roadways, as the demand for such space would still be present potentially resulting in adding vehicle trips from other projects that could be pursued to meet the demand. The RPA would provide retail shopping opportunities easily accessible to local residents and passers-by on the State highway system but to a lesser degree than the Project. The RPA would be equally effective as the proposed Project in meeting the objectives to develop an unused or underutilized property between existing residential development and SR-99, to provide a gathering place for City residents and visitors that includes shopping and other retail services in an aesthetically appealing environment, and to develop light industrial and commercial uses that are architecturally and operationally designed to meet contemporary industry standards and be economically competitive with similar buildings in the region.

6.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines § 15126.6 requires the identification of the environmentally superior alternative. As discussed herein, implementation of the NDA would result in no physical environmental impacts beyond those that have historically occurred on the property. Because the NDA would avoid most of the Project's impacts, it warrants consideration as the "environmentally superior alternative." However, pursuant to CEQA Guidelines § 15126.6(e)(2), if a no project alternative is identified as the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives. Accordingly, the RPA, as discussed above in subsection 6.3.4, is identified as the Environmentally Superior Alternative pursuant to CEQA Guidelines § 15126.6. If the RPA is determined not feasible, then the RPA would become the Environmentally Superior Alternative.

Table 6-1 Alternatives to the Project – Comparison of Environmental Impacts

Environmental Topic	Project Significance of Impacts After Mitigation	Level of Impact Compared to the Proposed Project/Compliance with Project Objectives				
		No Development Alternative (NDA)	No Project Alternative (NPA)	Panama Lane Truck Routing Alternative (PLTRA)	Warehouse Only Net Zero Alternative (WOA)	Reduced Project Alternative (RPA)
Aesthetics	Less than Significant	Reduced	Similar	Similar	Increased	Similar
Air Quality	Less than Significant	Reduced	Increased (ROG, NO _x , and CO emissions) Reduced (SO _x , PM ₁₀ , and PM _{2.5} Emissions and Localized Air Quality Impacts)	Reduced	<u>Short Term</u> Increased (Localized Air Quality Impacts) Reduced (Except Localized Air Quality Impacts) <u>Long Term</u> Reduced	Reduced
Biological Resources	Less than Significant	Reduced	Similar	Similar	Similar	Similar
Cultural Resources	Less than Significant	Reduced	Similar	Similar	Similar	Similar
Energy	Less than Significant	Reduced	Reduced	Similar	<u>Short Term</u> Increased (Diesel Fuel, Natural Gas, and Electricity) Reduced (Gasoline Demand, Only) <u>Long Term</u> Increased (Natural Gas and Electricity) Reduced (Diesel Fuel, Gasoline Demand)	Reduced
Geology and Soils	Less than Significant	Most Issues: Reduced Long-Term Erosion: Increased	Similar	Similar	Similar	Similar
Greenhouse Gas Emissions	Significant and Unavoidable	Reduced	Reduced	Similar	<u>Short Term</u> Increased	Reduced

	Cumulatively- Considerable Impact				<u>Long Term</u> Reduced	
Hazards and Hazardous Materials	Less than Significant	Reduced	Reduced	Similar	Increased	Similar
Hydrology and Water Quality	Less than Significant	Most Issues: Reduced Long-Term Erosion: Increased	Increased (Water Demand) Similar (Except Water Demand)	Similar	Similar (Except Water Demand) Reduced (Water and Groundwater Demand)	Similar
Land Use and Planning	Less than Significant	Reduced	Similar	Similar	Similar	Similar
Noise	Less than Significant	Reduced	Reduced	Reduced	<u>Short Term</u> Increased <u>Long Term</u> Reduced	Reduced
Transportation	Significant and Unavoidable Direct and Cumulatively- Considerable Impact	Reduced	Increased	Similar	Increased	Reduced
Tribal Cultural Resources	Less than Significant	Reduced	Similar	Similar	Similar	Similar
Utilities and Service Systems	Less than Significant	Reduced	Increased	Similar	Reduced	Reduced
Ability to Meet Project Objectives						
Objective A: Expand economic development, facilitate job creation, and increase the tax base for the City of Bakersfield by establishing a new commercial development area and a warehouse distribution facility adjacent to or near the State highway system.		No	No	Yes	Yes, but to a lesser extent	Yes, but to a lesser extent
Objective B: Attract employment-generating businesses to the City of Bakersfield to reduce the need for members of the local workforce to commute outside the area for employment, thereby improving the jobs-housing balance in		No	Yes	Yes	Yes	Yes, but to a lesser extent

the City and nearby areas beyond the City boundary.					
Objective C: Diversify the mix of land uses in the City of Bakersfield and greater Kern County to support the growing goods movement supply chain and to streamline package delivery services in and around the City of Bakersfield.	No	No	Yes	Yes, and to a greater extent	Yes, but to a lesser extent
Objective D: Establish a supply chain use adjacent to or near designated truck routes and/or the State highway system to avoid or shorten vehicular trip lengths on other roadways.	No	No	Yes	Yes, and to a greater extent	Yes, but to a lesser extent
Objective E: Provide retail shopping opportunities easily accessible to local residents and passers-by on the State highway system to assist in meeting the growing and evolving shopping demands of local residents and planned communities in the City of Bakersfield and greater Kern County.	No	Yes	Yes	No	Yes, but to a lesser extent
Objective F: Develop an unused or underutilized property adjacent to SR-99.	No	Yes	Yes	Yes	Yes
Objective G: Provide a gathering place for City residents and visitors that includes shopping and other retail services in an aesthetically appealing environment.	No	Yes	Yes	No	Yes
Objective H: Facilitate the development of commercial and distribution warehouse uses that are architecturally and operationally designed to meet contemporary industry standards and be economically competitive with similar buildings in the region.	No	No	Yes	Yes, but to a lesser extent	Yes

7.0 REFERENCES

7.1 PERSONS INVOLVED IN THE PREPARATION OF THIS EIR

7.1.1 CITY OF BAKERSFIELD DEVELOPMENT SERVICES DEPARTMENT

- Paul Johnson, Development Services Director
- Kassandra Gale, Principal Planner

7.1.2 T&B PLANNING, INC.

- Tracy Zinn, Principal
- Connie Anderson, Project Manager
- Jericca Harding, Senior Associate
- Kristen Goddard, Senior Planner
- Cristina Maxey, Graphics/GIS Specialist
- Rhea Smith, GIS Technician

7.2 DOCUMENTS APPENDED TO THIS EIR

The following reports, studies, and supporting documentation were used in preparing the Majestic Gateway Project EIR and are bound separately as Technical Appendices. A copy of the Technical Appendices is available for review at the City of Bakersfield Development Services Department at 1715 Chester Avenue, 2nd Floor, Bakersfield, CA 93301.

Appendix A:	Initial Study for Majestic Gateway Project EIR, Notice of Preparation (NOP), and Written Comments on the NOP.
Appendix B:	Trinity Consultants, 2022a. <i>Air Quality Impact Analysis, Majestic Gateway, Bakersfield, CA</i> . July 2022.
Appendix C:	McCormick Biological, Inc. (MBI), 2021 <i>Biological Resources Evaluation, SR 99/Hosking Commercial Center Project</i> . April 2022; Biological Resources Existing Conditions Letter. May 5, 2022. Biological Resources Offsite Conditions Letter. May 5, 2022,
Appendix D1:	Jones & Stokes Associates (J&S), 2007. <i>Cultural Resources Report for the Woodmont-SR-99/Hosking Commercial Center Project</i> . October 2007.
Appendix D2:	PaleoWest, 2022. <i>Updated Cultural Resources Study for the Majestic Hosking Project, Kern County, California</i> . July 27, 2021.
Appendix E:	Trinity Consultants, 2022b. <i>Energy Consumption and Efficiency Analysis</i> . May 2022.

- Appendix F: Krazan & Associates, Inc., 2021. *Geotechnical Engineering Investigation, Proposed Commercial/Retail Development, NEC of Hosking Avenue and Highway 99, Bakersfield, California*. September 9, 2021.
- Appendix G: Nova Group, GBC, 2021. *Phase I Environmental Site Assessment*. January 7, 2021.
- Appendix H: Cornerstone Engineering, 2022a. *Preliminary Hydrology Report for General Plan Amendment/Zone Change (GPA/ZC) No. 21-0184 located at the northwest corner of Hosking Avenue and South H Street (APN's 515-020-05, -07, -08, -09, -30, and -44)*. March 24, 2022.
- Appendix I: Urban Crossroads, 2022. *Majestic Gateway Noise and Vibration Impact Analysis, City of Bakersfield*. May 5, 2022.
- Appendix J: Ruettgers & Schuler (R&S), 2022. *Traffic Study for a Proposed Industrial/Warehouse and Retail Commercial Land Development at South H Street and Hosking Avenue, Bakersfield, California*. April 25, 2022.
- Appendix K: ALH [Urban & Regional] Economics, 2021. *Majestic Gateway Urban Decay Analysis*. November 2021.
- Appendix L: Cornerstone Engineering, 2021b. *Sewer Capacity Study for Warehouse/Commercial Development NW Corner of Hoskings and South 'H' Street*. October 15, 2021.
- Appendix M: Cornerstone Engineering, 2021c. *Majestic Hosking Project Water Supply Assessment*. September 28, 2021.
- Appendix N: Greenfield County Water District, 2021. *Request for Water Service*. July 12, 2021.

7.3 DOCUMENTS INCORPORATED BY REFERENCE

The following reports, studies, and supporting documentation were used in the preparation of this EIR and are incorporated by reference within this EIR. A copy of the following reports, studies, and supporting documentation is a matter of public record and is generally available to the public at the location listed.

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7.4 DOCUMENTS, WEBSITES AND PERSONS CONSULTED

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