

#### FOWLER CITY COUNCIL MEETING AGENDA TUESDAY, JANUARY 4, 2022 7:00 P.M. CITY COUNCIL CHAMBER 128 SOUTH 5TH STREET FOWLER, CA 93625

In compliance with the Americans with Disabilities Act, if you need assistance or accommodations to access the City Council Chambers or participate in this meeting, please contact the Clerk at (559) 834-3113 x102. Notification at least 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility.

City Council meetings are open to the public at the physical address listed above. There are numerous ways to participate in the City Council meetings: you may attend in person, you may appear by telephone as described below, or you may submit written comments via email to avasquez@ci.fowler.ca.us. Please include your name and reference the agenda item you are commenting on, if any. Written comments received that do not specify an agenda item will be marked for the general public comment portion of the agenda. Emails received by 8:00 am on the date of the meeting will be provided to the City Council at the meeting and made part of the record of proceedings but will not be read aloud.

Consistent with Government Code 54953 as amended by AB 361, and City Council Resolution No. 2527, this meeting may be accessed by members of the public or City Council members via Zoom.

The telephone number and Zoom link listed below will provide access to the meeting via teleconference or video conference.

https://us06web.zoom.us/j/83854491201?pwd=Y3dxQXhJY0U4L3ROM2Y3RHFZNzhkQT09

Telephone Number: (253) 215-8782

Meeting ID: 838 5449 1201

Passcode: 886691

Persons accessing the meeting will have an opportunity to provide comments at appropriate times during the meeting. To speak during a public comment period, press \*9 on your phone to raise your hand or click "raise hand" in the webinar. At the appropriate time, you will be prompted to unmute yourself, and asked to identify yourself when providing public comment.

Any writing or document that is a public record and provided to a majority of the City Council regarding an open session item on the agenda will be made available for public inspection at City Hall, in the City Clerk's office, during normal business hours. In addition, such writings and documents may be posted on the City's website at www.fowlercity.org.

Resolutions and Ordinances - With respect to the approval of resolutions and ordinances, the reading of the title thereto shall be deemed a motion to waive a reading of the complete resolution or ordinance and unless there is a request by a Councilmember that the resolution or ordinance be read in full, further reading of the resolution or ordinance shall be deemed waived by unanimous consent of the Council.

- 1. Meeting Called to Order
- 2. Roll Call
- 3. Invocation by Pastor Rod Haro of the Worship Centre
- 4. Pledge of Allegiance
- 5. Public Comment

This portion of the meeting is reserved for persons desiring to address the Council on any matter not described on this agenda. Presentations are limited to 5 minutes per person and no more than 15 minutes per topic.

6. Consent Calendar

Items on the Consent Calendar are considered routine and include a recommended action from Staff and shall be acted on by one motion of the Council. If a Councilmember requests additional information or would like to pull an item for discussion, that item shall be pulled from the Consent Calendar and acted upon separately. A Councilmember may register an action on an individual item without pulling the item from the Consent Calendar. A motion to approve the Consent Calendar is deemed to include a motion to waive the full reading of any ordinance or resolution on the Consent Calendar. For adoption of ordinances, only those which received a unanimous vote of the Councilmembers present at introduction shall be eligible for placement on the Consent Calendar.

- 6-A. RATIFY Warrants for January 4, 2022
- 6-B. APPROVE Minutes of the December 7, 2021 Special City Council Meeting
- 6-C. APPROVE Minutes of the December 7, 2021 City Council Meeting
- 6-D. Consider APPROVAL of Resolution No. 2532, A Resolution of the City Council of the City of Fowler Authorizing Continued Use of Remote Teleconferencing for City Council Meetings and Commission Meetings During Declared State of Emergency in Accordance with Government Code Section 54953 as amended by AB 361. (City Attorney)
- 6-E. Rejection of Claim filed by Gordon Panzak (City Manager)

- 6-F. ACCEPTANCE of Donations to the City (Finance)
- 6-G. ACCEPTANCE of Tract 6259 Public Improvements (Public Works)
- General Administration
  - 7-A. Finance
    - i. ACCEPT the FY 2020/21 Development Impact Fee Annual Report
  - 7-B. Planning
    - i. Consider INTRODUCTION of amendments to Sections 8-1.01, 8-1.02, 8-1.03, and 8-1.05 of the Fowler Municipal Code and the repeal of Sections 8-1.04.1 through Sections 8-1.04.4 related to the adoption of the California Building Code.
    - ii. Public Hearing to CONSIDER Planning Case No. 21-0015, a Tentative Subdivision Map (TSM), Prezone, Annexation, and Adoption of a Mitigated Negative Declaration, submitted by Sunshine Raisin Corporation for approximately 29.04 acres on the east side of South Armstrong Avenue between East Adams and East Hogan Avenues.
  - 7-C. City Manager's Office
- 8. Staff Communications (City Manager)
- 9. Councilmember Reports and Comments
- 10. Closed Session
  - 10-A. Government Code Section 54956.9(d)(4)
    CONFERENCE WITH LEGAL COUNSEL ANTICIPATED LITIGATION
    Deciding whether to initiate litigation
    8 potential cases
- 11. Adjourn

Next Ordinance No. 2022-03 Next Resolution No. 2533

CERTIFICATION: I, Angela Vasquez, Deputy City Clerk of the City of Fowler, California, hereby certify that the foregoing agenda was posted for public review on Wednesday, December 29, 2021.

Angela Vasquez Deputy City Clerk

Angela Vasquez

CITY OF FOWLER WARRANTS LIST January 4, 2022	CHECK NUMBERS CHECK DATES AMOUNT	38712-38810 Dec 1 thru Dec 21 \$ 161,779.67	3 161,779.67 \$ 161,779.67		thiy Payroli December 15, 2021 95,280.82	\$ 95,280.82	\$ 257,060.49
	ACCOUNTS PAYABLE CHECKS	Regular checks	TOTAL ACCOUNTS PAYABLE CHECKS	PAYROLL COSTS	First December Bi-Monthly Payroll	TOTAL PAYROLL COSTS	TOTAL CASH DISBURSEMENTS

Void check Void check

Check #38750 Check #38758

NOTE:

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CITY OF FOWLER CHECK REGISTER - DISBURSEMENT FUND

SUPERION DATE: 12/21/2021 TIME: 18:12:52

SELECTION CRITERIA: transact.check\_no between '38712' and '38810' ACCOUNTING PERIOD: 6/22

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12/08/21	1 14152	A-C ELECTRIC CO	6200	LIGHT POLE REPAIR	0.00	346.93
12/08/21	11 14519	AMAZON CAPITAL SERVICES	0809	CALENDARS-FIN	0.00	56.08
12/08/2 12/08/2	1 14543 1 14543	AMERICAN CRANE RENTAL AMERICAN CRANE RENTAL	6020 6020	CTRAIN REMOVAL CTRAIN REMOVAL	00.00	1,630.00 1,630.00 3,260.00
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12/08/21	21 12429	CENTRAL VALLEY AIRLESS I	6200	MAINT/REPAIRS	0.00	482.82
12/08/21	1 14542	CESAR & AMBER RODRIGUEZ	200	UB REFUND	0.00	76.16
12/08/21 12/08/21	1 14258 1 14258	CONSOLIDATED ELECTRICAL CONSOLIDATED ELECTRICAL	6200 5000	ELECTRICAL SUPPLIES ELECTRICAL GFIS	0.00	151.69

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CITY OF FOWLER CHECK REGISTER - DISBURSEMENT FUND

SELECTION CRITERIA: transact.check\_no between '38712' and '38810' ACCOUNTING PERIOD: 6/22

SUPERION DATE: 12/21/2021 TIME: 18:12:52

AMOUNT	314.21	64.46 74.58 139.04	77.06 8,525.95 8,603.01	82.96	174.96	232.49	778.62	4.44 49.02 53.46	90.45	240.00 240.00 240.00 720.00	143.55	51.86	2,080.00	6,430.70	450.00	34.00	284.86	117.03 145.46 197.69 827.25 1,287.43	54.47	647.72
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DEPT		5000 5000	6120 6120	200	6200	2000	6020	6120 6120	0709	6200 6200 6200	200	200	0709	6120	6020	6200	6200	6130 6200 6260 5000	6200	9700
NAME		CORE & MAIN CORE & MAIN	COUNTY OF FRESNO COUNTY OF FRESNO	DAVID & CONNIE LEWIS	DEPARTMENT OF TRANSPORTA	FERGUSON WATERWORKS #142	FIVE CITIES EDA - EDC	FOWLER ACE HARDWARE FOWLER ACE HARDWARE	FOWLER FLORAL SHOP, THE	FRESNO MOBILE RADIO INC FRESNO MOBILE RADIO INC FRESNO MOBILE RADIO INC	GILL, GURWIJINDER SINGH	GOOGOOLAN, BRITTANY	KOFF & ASSOCIATES, INC.	LEIST AND ASSOCIATES	LK DESIGN	NELSONS POWER CENTER	R & R AUTO REPAIR SHOP	ROBERT V JENSEN INC ROBERT V JENSEN INC ROBERT V JENSEN INC ROBERT V JENSEN INC	SPARKLETTS	SWANSON-FAHRNEY FORD
ISSUE DT VENDOR		12/08/21 14429 12/08/21 14429	12/08/21 10124 12/08/21 10124	12/08/21 14538	12/08/21 10087	12/08/21 13275	12/08/21 10108	12/08/21 14243 12/08/21 14243	12/08/21 10306	12/08/21 12567 12/08/21 12567 12/08/21 12567	12/08/21 14540	12/08/21 14539	12/08/21 14485	12/08/21 13981	12/08/21 10350	12/08/21 10885	12/08/21 10251	12/08/21 11195 12/08/21 11195 12/08/21 11195 12/08/21 11195	12/08/21 14358	12/08/21 10303
CCT CHECK NO	CHECK	38730 38730 CHECK	38731 38731 CHECK	38732	38733	38734	38735	38736 38736 CHECK	38737	38738 38738 38738 CHECK	38739	38740	38741	38742	38743	38744	38745	38746 38746 38746 38746 CHECK	38747	38748
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AMOUNT	47.04 47.04 58.56 58.56 185.40 396.60	737.75	14,613.96 14,613.96 29,227.92	75.00	724.19	128.35	163.66	299.37	21.77 141.95 -21.77 -141.95 0.00	14.86	839.12	250.00	64.30	39.16 300.00 975.00 1,314.16	119.04 119.04 119.04 119.04 476.16	10.87 14.93 15.28
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DESCRIPTION	ADMIN FIRE FIRE FIRE STREETS	CITY INTERNET	06/30/19 AUDIT 06/30/19 AUDIT	JOB POSTING	COUNTY INTERNET	CABLE SVC-CITYHALL	FL36P LID	STREETS	ADMIN/CITY HALL WATER ADMIN/CITY HALL WATER	PARKS	WELL PUMP SERV	SHARPS KIOSK NOV21	REIMB HERNANDEZ KID S	SALES TAX AUDIT CONTRACT SVC Q2 2021 SALES TAX Q2 2021	COPIER SVCS COPIER SVCS COPIER SVCS COPIER SVCS	TEMPERANCE LIGHTS LIGHTS
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ISSUE DT VENDOR	12/08/21 13543 12/08/21 13543 12/08/21 13543 12/08/21 13543 12/08/21 13543	12/15/21 12285	12/15/21 10022 12/15/21 10022	12/15/21 10666	12/15/21 12654	12/15/21 14356	12/15/21 14429	12/15/21 14245	12/15/21 14247 12/15/21 14247 12/15/21 14247 12/15/21 14247	12/15/21 14249	12/15/21 10137	12/15/21 13127	12/15/21 11862	12/15/21 10145 12/15/21 10145 12/15/21 10145	12/15/21 14259 12/15/21 14259 12/15/21 14259 12/15/21 14259	12/15/21 10237 12/15/21 10237 12/15/21 10237
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AMOUNT	21.77 21.82 42.90 63.49 65.31 97.74 119.03 205.30 634.76 5,591.99	3,840.00 4,727.00 8,567.00	21.78 33.41 47.24 48.67 74.23 76.29 111.13 186.41 185.59 754.75	39.19	12.95 186.53 221.80 611.96 830.06 1,863.30	893.06 1,103.82 2,507.69 4,504.57	250.00	32.00 105.00 137.00	40.17 47.04 185.40 202.16 474.77
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DEPT	6130 6200 6200 6130 6130 6200 6200 6200 6200 6200	6030 6030	6200 6030 6130 6200 6010 6150 6020	6120	5000 6200 6130 6260 5000	6160 6160 6160	6400	0 6120 0 6120	6700 6020 5000 6260
NAME	P G & E - SACRAMENTO	PRICE PAIGE & COMPANY PRICE PAIGE & COMPANY	00111 00111 00111 00111 00111 00111 00111 00111	R & R AUTO REPAIR SHOP	ROBERT V JENSEN INC ROBERT V JENSEN INC ROBERT V JENSEN INC ROBERT V JENSEN INC ROBERT V JENSEN INC	ROBINA WRIGHT ARCHITECT ROBINA WRIGHT ARCHITECT ROBINA WRIGHT ARCHITECT	SANTA CHARLIE	STATE OF CA DEPARTMENT ( STATE OF CA DEPARTMENT (	UNIFIRST CORPORATION UNIFIRST CORPORATION UNIFIRST CORPORATION UNIFIRST CORPORATION
ISSUE DT VENDOR	12/15/21 10237 12/15/21 10237 12/15/21 10237 12/15/21 10237 12/15/21 10237 12/15/21 10237 12/15/21 10237 12/15/21 10237 12/15/21 10237 12/15/21 10237	12/15/21 14433 12/15/21 14433	12/15/21 10249 12/15/21 10249 12/15/21 10249 12/15/21 10249 12/15/21 10249 12/15/21 10249 12/15/21 10249 12/15/21 10249 12/15/21 10249	12/15/21 10251	12/15/21 11195 12/15/21 11195 12/15/21 11195 12/15/21 11195 12/15/21 11195	12/15/21 14072 12/15/21 14072 12/15/21 14072	12/15/21 14386	12/15/21 10085 12/15/21 10085	12/15/21 13543 12/15/21 13543 12/15/21 13543 12/15/21 13543
ACCT CHECK NO	38765 38765 38765 38765 38765 38765 38765 38765	38766 38766 CHECK	38767 38767 38767 38767 38767 38767 38767 38767 38767 38767	38768	38769 38769 38769 38769 38769 CHECK	38770 38770 38770 CHECK	38771	38772 38772 HECK	38773 38773 38773 38773 CHECK
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	AMOUNT	555.99	342.04	21.77	141.95	15.00 445.00 460.00	58.38 162.99 221.37	60.65 158.72 219.37	216.81 499.95 716.76	63.00	429.30 500.40 929.70	157.24 839.19 1,202.13 2,198.56	2,750.00	100.70 100.70 142.02 142.02 485.44	-4,983.79 -1,090.08 -616.95 -378.88 -310.05 -175.79 -128.19
	SALES TAX	00.00	00.00	00.00	00.00	00.00	0000	0000	0000	0.00	0000	00000	0.00	88888	88888888
	DESCRIPTION	TECHNOLOGY REPAIR	CELL PHONES - PW	ADMIN/CITY HALL	WATER	FLAT TIRE TIRES/BAL/ALIGN	BARRICADE BOARDS OSCAR JCKT/SUPPLIES	BATTERY BATTERY	LANDLINE PHONE PLANIG SOFWARE BLDG OFFCL	COLI TEST	CA BSASRF APR-JUN21 CA BSASRF JUL-SEPT21	HELMET FONTS PUMP CONNECTIONS WILDLAND HELMETS	ST SWEEP NOV 21	EMPLOYEE BENEFITS EMPLOYEE BENEFITS EMPLOYEE BENEFITS	WC 21-22 3RD QTR WC 21-22 3RD QTR
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	NAME	UNITY IT	VERIZON WIRELESS	FOWLER ACE HARDWARE	FOWLER ACE HARDWARE	A & C TIRE SERVICE A & C TIRE SERVICE	ALERT-O-LITE, INC ALERT-O-LITE, INC	BATTERY SYSTEMS INC BATTERY SYSTEMS INC	BCT CONSULTING BCT CONSULTING	BSK ASSOCIATES	CA BUILDING STANDARDS CA BUILDING STANDARDS	CASCADE FIRE EQUIPMENT CASCADE FIRE EQUIPMENT CASCADE FIRE EQUIPMENT	CENTRAL VALLEY SWEEPING	COLONIAL LIFE INSURANCE COLONIAL LIFE INSURANCE COLONIAL LIFE INSURANCE COLONIAL LIFE INSURANCE	CSJVRMA CSJVRMA CSJVRMA CSJVRMA CSJVRMA CSJVRMA CSJVRMA
	ISSUE DT VENDOR	12/15/21 13521	12/15/21 10725	12/15/21 14246	12/15/21 14247	12/21/21 11689 12/21/21 11689	12/21/21 10007 12/21/21 10007	12/21/21 12489 12/21/21 12489	12/21/21 10026 12/21/21 10026	12/21/21 10024	12/21/21 11792 12/21/21 11792	12/21/21 10045 12/21/21 10045 12/21/21 10045	12/21/21 14131	12/21/21 10064 12/21/21 10064 12/21/21 10064 12/21/21 10064	12/21/21 10074 12/21/21 10074 12/21/21 10074 12/21/21 10074 12/21/21 10074 12/21/21 10074 12/21/21 10074 12/21/21 10074
· ·	CHECK NO	38774	38775	38776	38777	38778 38778 K	38779 38779 K	38780 38780 K	38781 38781 K	38782	38783 38783 K	38784 38784 38784 X	38785	38786 38786 38786 38786 X	38787 38787 38787 38787 38787 38787 38787 38787
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CITY OF FOWLER CHECK REGISTER - DISBURSEMENT FUND

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	AMOUN	-66.1 -46.6 -18.3 -11.3 -11.3 -11.3 -11.3 -17,204.2	181.7	340.5 729.7 881.7 1,580.0 1,684.2 2,691.2 7,907.5	217.9	74.4	821.0 3,054.3 3,875.3	81.6 328.0 409.7	43.5	149.7 182.1 331.8	17.0	21.0 84.0 126.0 147.0 147.0 224.0 279.1 1,07.0 1,407.0
	SALES TAX	88888888	00.00	8888888	0.00	0.00	0000	0000	00.00	0000	0.00	8888888888888
	DESCRIPTION	WC 21-22 3RD QTR LIAB 21-22 3RD QTR LIAB 21-22 3RD QTR	CHRISTMAS SUPPLIES	CASEISMIC APR-JUN20 CASEISMIC OCT-DEC20 CASEISMIC JUL-SEPT20 CASEISMIC JUL-SEPT21 CASEISMIC APR-JUN21 CASEISMIC JAN-MAR21	2021 2ND QTR	SUPPLIES PW	1" METERS 1 1/2 METERS	FIRE SUPPLIES	SUPPLIES LAMP	SMALL TOOLS CEILING FAN	SVC FEE	LEGAL SERVICES
	DEPT	6150 8500 6025 6400 6700 5000 6080	GUEZ 6400	OF CONSERVATI 6160	OF TRANSPORTA 6200	COMPANY 6200	WATERWORKS #142 5000 WATERWORKS #142 5000	HARDWARE 6130 HARDWARE 6130	HARDWARE 6700	CREDIT SERVIC 6130 CREDIT SERVIC 6700	EQUIPMENT 6130	
	NAME	CSJVRWA CSJVRWA CSJVRWA CSJVRWA CSJVRWA CSJVRWA CSJVRWA	DARIO DOMINGUEZ	DEPARTMENT DEPARTMENT DEPARTMENT DEPARTMENT DEPARTMENT DEPARTMENT DEPARTMENT	DEPARTMENT	FASTENAL CO	FERGUSON WA	FOWLER ACE FOWLER ACE	FOWLER ACE	HOME DEPOT HOME DEPOT	LINDE GAS &	LOZANO SMITH
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CITY OF FOWLER CHECK REGISTER - DISBURSEMENT FUND

SELECTION CRITERIA: transact.check\_no between '38712' and '38810' ACCOUNTING PERIOD: 6/22 SUPERION DATE: 12/21/2021 TIME: 18:12:52

	AMOUNT	4,364.14 4,527.09 15,070.04	406.20	158.88	82.21	62.50 194.15 429.14 685.79	736.77	71.99	53.50 112.78 112.78 129.48 221.80 449.28 457.09 457.09 611.96 830.06 3,416.78	1,000.00 1,000.00 2,000.00	117.02	40.00	39.34 47.04 47.04 47.04 58.56 185.40 475.28	1,130.00	82.21 82.21 82.21
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# CITY OF FOWLER CHECK REGISTER - DISBURSEMENT FUND

SELECTION CRITERIA: transact.check\_no between '38712' and '38810' ACCOUNTING PERIOD: 6/22

SUPERION DATE: 12/21/2021 TIME: 18:12:52

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CITY OF FOWLER CHECK REGISTER - DISBURSEMENT FUND

0.00 0.00 0.00 ---- SALES TAX SIREN REMOVAL 7900 DEPT SELECTION CRITERIA: transact.check\_no between '38712' and '38810' ACCOUNTING PERIOD: 6/22 AMERICAN CRANE RENTAL NAME FUND - 790 - FIRE STATION PROJECT CASH ACCT CHECK NO ISSUE DT VENDOR 12/08/21 14543 38750 TOTAL CASH ACCOUNT SUPERION DATE: 12/21/2021 TIME: 18:12:52 TOTAL FUND 1001

AMOUNT 847.00 847.00 847.00

CITY OF FOWLER CHECK REGISTER - DISBURSEMENT FUND

SUPERION DATE: 12/21/2021 TIME: 18:12:52

SELECTION CRITERIA: transact.check\_no between '38712' and '38810' ACCOUNTING PERIOD: 6/22

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ACCOUNTING PERIOD: 6/22	FUND - 900 - Pt	CASH ACCT CHECK NO ISSUE DT VENDOR	1001 1001 38712 TOTAL CHECK	TOTAL CASH ACCOUNT	TOTAL FUND	TOTAL REPORT

#### MINUTES OF THE FOWLER CITY COUNCIL SPECIAL MEETING TUESDAY DECEMBER 4, 2021

Mayor Cardenas called the meeting to order at 6:02 p.m. Roll call was taken.

Councilmembers Present: Cardenas, Rodriquez, Kazarian, Mejia, Parra

City Staff Present: City Manager Quan, City Attorney Cross, Public Works Director

Dominguez, Community Development Director Gaffery, Deputy City

Clerk Vasquez

#### 3. CLOSED SESSION

No reportable action was taken on any of the four items.

#### 4. ADJOURNMENT

Having no further business, the meeting adjourned at 6:51 p.m.

#### MINUTES OF THE FOWLER CITY COUNCIL MEETING Tuesday December 4, 2021

Mayor Cardenas called the meeting to order at 7:00 p. m.

Councilmembers Present: Cardenas, Rodriquez, Kazarian, Mejia, Parra

City Staff Present: City Manager Quan, City Attorney Cross, Police Chief Alcaraz,

Public Works Director Dominguez, Community Development Director Gaffery, Recreation Coordinator Hernandez, City Planner Marple, Finance Director Moreno, City Engineer Peters, Deputy

City Clerk Vasquez

#### 5. PUBLIC COMMENT

Fowler resident Melissa Squeo, Raul Gonzalez of Fresno County Department of Public Health, and the Patel family of La Quinta Inn Fowler addressed the Council.

#### 6. CONSENT CALENDAR

Mayor Pro-Tem Rodriquez made a motion to approve the consent calendar, seconded by Councilmember Kazarian. The motion carried by roll call vote: Ayes: Rodriquez, Kazarian, Cardenas, Mejia, Parra.

#### 7. GENERAL ADMINISTRATION

#### 7-A. FINANCE

#### i. ACCEPT the Independent Auditor's Report for the Fiscal year 2018-2019

Finance Director Moreno introduced Gus Corona, Partner of Borchardt, Corona, Faeth & Zakarian, Certified Public Accountants. Mr. Corona provided an overview of the auditor's report for Fiscal Year ending June 2019. He stated in stated in their opinion, the financial statements present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, each major fund and the aggregate remaining fund information of City of Fowler as of June 30, 2019, and the respective changes in financial position, and, where applicable, cash flows thereof for the year then ended in accordance with generally accepted accounting principles. Various Councilmembers had questions about internal controls regarding cash and credit cards. City Manager Quan assured Council controls have been put into place with the new administration.

#### 7-B. PLANNING

i. Public Hearing to CONSIDER Adoption of the Fresno County SB 743 Implementation Regional Guidelines.

City Planner Marple provided an overview of Fresno County SB 743 Implementation Regional Guidelines. She stated that historically, in the California Environmental Quality Act (CEQA) lead agencies are required to analyze traffic impacts based on level of service (LOS). City Planner Marple reported that in order to shift the traffic analysis to a method that considered greenhouse gas emissions Senate Bill 743 (SB 743) was passed in 2013. She stated SB 743 requires lead agencies to examine vehicle miles traveled (VMT) generated by a project, with a mandatory transition for all analysis from LOS to VMT by July 1, 2020. City Planner Marple reported SB 743 does not affect the City's ability to maintain LOS standards as part of its General Plan and will allow the City Engineer and Community Development Department to still require street improvements in conjunction with projects.

City Planner Marple reported the Fresno Council of Governments (COG) prepared their own analysis and prepared VMT guidelines for use by COG's member agencies. She stated that following extensive public review, COG adopted the "Fresno County SB 743 Implementation Regional Guidelines" in June 2020. City Planner Marple reported the largest difference between the State's guidelines and COG's guidelines is the threshold. The State's guidelines require a 15% reduction by each project and the COG's guidelines require a 13% reduction. City Planner Marple stated staff and the Planning Commission recommend the City Council adopt the Fresno County SB 743 Implementation Regional Guidelines as the City of Fowler's VMT threshold for future CEQA analysis.

There was no public comment.

Mayor Pro-Tem Rodriquez made a motion to CONSIDER Adoption of the Fresno County SB 743 Implementation Regional Guidelines, seconded by Councilmember Parra. The motion carried by roll call vote: Ayes: Rodriquez, Parra, Cardenas, Kazarian, Mejia.

ii. Public Hearing to CONSIDER Planning Case No. 21-0015, a Tentative Subdivision Map (TSM), Prezone, Annexation, and Adoption of a Mitigated Negative Declaration, submitted by Sunshine Raisin Corporation for approximately 29.04 acres on the east side of South Armstrong Avenue between East Adams and East Hogan Avenues.

City Planner Marple requested this item be moved to the January 4, 2022 Council meeting.

Mayor Pro-Tem Rodriquez made a motion to continue Public Hearing to CONSIDER Planning Case No. 21-0015, a Tentative Subdivision Map (TSM), Prezone, Annexation, and Adoption of a Mitigated Negative Declartion, submitted by Sunshine Raisin Corporation for approximately 29.04 acres on the east side of South Armstrong Avenue between East Adams and East Hogan Avenues to January 4, 2022 Council meeting, seconded by Councilmember Kazarian. The motion carried by roll call vote: Rodriquez, Kazarian, Cardenas, Mejia, Parra.

#### 7-C. PUBLIC WORKS

i. Discussion Regarding SKGSA Fiscal Year (FY) 2021-2022 Budget.

As requested by Council, City Engineer Peters presented an overview of the South Kings Groundwater Sustainability Agency (SKGSA) budget. He stated that each spring the SKGSA adopts a preliminary budget. City Engineer Peters reported the SKGSA budget is funded by contributions from member agencies based on gross water pumped. He reported Fowler's contribution is approximately 13% of the SKGSA budget. Various Councilmembers had questions about SKGSA funding, background on how GSAs function, returns on contributions, and potential grants.

ii. Receive analysis from ARC Alternatives on their third-party review of the City's proposals for the Solar/Energy Conservation Project.

Provide Staff direction on next steps for the Project, which may include authorizing the City Manager or designee to negotiate a Project Agreement with the selected vendor.

Councilmember Parra recused himself from the discussion of this item.

City Manager Quan introduced Simon Olivieri of ARC Alternatives who reviewed the City's proposals for the Solar/Energy Conservation Project. Mr. Olivieri provided an overview of their findings which included scope issues and vendor responses. He stated after reviewing the potential sites, the best option in the immediate term is for the City to install the solar system at the new Fire Station building, which would offset utility costs at that facility and at City Hall. Mr. Olivieri reported the timing of this project in relation to PG&E interconnection rules presents a risk to the project and securing grandfathering will likely be crucial to the financial success of the Solar/Energy Conservation Project. Mr. Olivieri stated the ideal process is to select a vendor first and have them manage the interconnection prior to having a vendor partner.

Various Councilmembers had questions about cost per watt, monitoring cost, and whether the City should pursue additional vendor bids. Councilmember Kazarian inquired if staff could share comments on their recommended direction. City Manager Quan stated staff recommend ARC Alternatives pursue additional vendor bids and work with SitelogIQ on a possible cost reduction. After discussion, Council directed staff to work with ARC Alternatives to pursue additional vendor bids and work with SitelogIQ on reducing their bid.

## iii. Review alternatives and provide staff direction regarding potential request to Caltrans to add median treatment to the State Route 99 improvement project.

City Engineer Peters reported Caltrans is performing work on State Route 99 through Fowler which includes installation of a center median concrete barrier. He shared examples of various options with the Council. After much discussion, it was the consensus of Council to move forward with the dyed brick design with the Fowler logo.

#### 7-D. CITY MANAGER'S OFFICE

#### i. COVID-19 Update

City Manager Quan reported that the Fresno County Department of Public Health's data shows Fowler's vaccination rate is 70%. She reminded Council the Fire Station Open House is Tuesday, December 14th at 3:00 p.m. City Manager Quan stated the next Council meeting will be January 4, 2022. She reported staff is moving forward with the EDA grant for the community center.

#### 8. STAFF COMMUNICATIONS – (CITY MANAGER)

#### 8-A. FINANCE DEPARTMENT

Finance Director Moreno provided a second quarter sales tax update.

#### 8-B. PUBLIC WORKS DEPARTMENT

Public Works Director Dominguez updated Council on the Donny Wright dog park and Laker Lane fences. He stated staff is working on two grants as well.

#### 8-C. CITY CLERK DEPARTMENT

Deputy City Clerk Vasquez updated Council on the Chamber's audio/visual upgrade.

#### 8-D. PLANNING DEPARTMENT

City Planner Marple reported the General Plan EIR Scoping Meeting was held last month and the comment period will close December 10, 2021.

#### 8-E. POLICE DEPARTMENT

Police Chief Alcaraz distributed DOJ crime statistics for the months of October and November.

#### 9. COUNCILMEMBER REPORTS AND COMMENTS

Mayor Cardenas thanked Recreation Coordinator Hernandez, the Recreation Commission, Public Works Department, and Police Department for a successful Christmas on Merced Street event.

Mayor Pro-Tem Rodriquez, Councilmember Kazarian, Councilmember Mejia, and Councilmember Parra echoed Mayor Cardenas' comments.

#### 9-A. Board/Committee Assignment for 2022 Veterans Day event

Mayor Pro-Tem Rodriquez volunteered to be the 2022 liaison for the Veterans Day event committee.

#### 10. ADJOURNMENT

Having no further business, Councilmember Kazarian made a motion to adjourn the meeting, seconded by Councilmember Parra. The meeting adjourned at 9:50 p.m.



ITEM NO: 6-D

#### REPORT TO THE CITY COUNCIL

January 4, 2022

**FROM:** Scott Cross, City Attorney

#### **SUBJECT**

Consider Approval of Resolution No. 2532, A Resolution of the City Council of the City of Fowler Authorizing Continued Use of Remote Teleconferencing for City Council Meetings and Commission Meetings During Declared State of Emergency in Accordance with Government Code Section 54953 as amended by AB 361

#### RECOMMENDATION

Approve Resolution No. 2532 if the City Council makes the findings required by Government Code Section 54953(e)(3) to continue to allow City Council members to attend City Council meetings via remote teleconferencing without following typical Brown Act requirements for teleconference participation by City Council members at City Council meetings. The Resolution also authorizes the City's other commissions to continue meeting remotely for as long as the City Council authorizes.

#### **BACKGROUND**

The City Council approved Resolution No. 2522 on October 19, 2021, authorizing remote teleconferencing for City Council and City commission meetings in accordance with Government Code Section 54953 as amended by AB 361 during the COVID-19 declared emergency. To continue with the "relaxed" remote teleconferencing for City Council and other commission meetings Government Code Section 54953 requires the City Council to make findings every 30 days that (1) it has reconsidered the circumstances of the state of emergency, and either (a) the state of emergency continues to directly impact the ability of the members to meet safely in person, or (b) state or local officials continue to impose or recommend measures to promote social distancing.

Fowler City Council meetings are currently conducted in a manner that allows the public and Council members to attend in person or via teleconference in compliance with all applicable legal requirements. Approving this resolution would not change the way members of the public are allowed to participate in meetings (both in-person and teleconference attendance is allowed) and would also allow City Council members to continue to attend meetings via teleconference, if desired, without complying with the typical Brown Act requirements for teleconferencing attendance at City Council meetings.

The proclaimed COVID-19 emergency is still in effect and there may be occasions when the proclaimed emergency directly impacts the ability of members of the public or Council members to meet safely in person. Also, some state and local officials continue to recommend measures to promote social distancing. As a result, the necessary findings can be made, if desired, to continue with remote teleconferencing for City Council and other commission meetings. These findings must be made every 30 days to continue with the relaxed Brown Act teleconference requirements.

#### **FISCAL IMPACT**

No fiscal impact is anticipated whether this Resolution is approved or not.

#### Attachments:

- Resolution No. 2532

#### **RESOLUTION NO. 2532**

## A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FOWLER AUTHORIZING CONTINUED USE OF REMOTE TELECONFERENCING FOR CITY COUNCIL MEETINGS AND COMMISSION MEETINGS DURING DECLARED STATE OF EMERGENCY IN ACCORDANCE WITH GOVERNMENT CODE SECTION 54953 AS AMENDED BY AB 361

- **WHEREAS**, on March 4, 2020, the Governor of California declared a state of emergency in the State as a result of the COVID-19 pandemic; and
- **WHEREAS**, pursuant to Resolution 2461, approved by the Fowler City Council on March 17, 2020, the City Council declared a local emergency as a result of the threatened spread of COVID-19 in the City, surrounding areas, and the state; and
- WHEREAS, on March 17, 2020, with the issuance of Executive Order N-29-20, the Governor suspended certain provisions of the Ralph M. Brown Act in order to allow local legislative bodies to conduct meetings telephonically or by other remote means; and
- **WHEREAS**, on June 11, 2021, the Governor issued Executive Order N-08-21, which placed an end date of September 30, 2021, for agencies to meet remotely; and
- WHEREAS, AB 361 was enacted on September 16, 2021, enacting certain changes to the Brown Act for teleconferencing and remote participation at public meetings as set forth in Government Code Section 54953; and
- **WHEREAS**, the state of emergency proclaimed by the Governor on March 4, 2020, has not been rescinded and remains in effect; and
- **WHEREAS**, the City Council has determined that teleconferencing from remote locations by the public and City Council members has not limited participation of members of the public, Council members, or other attendees at City Council or other City commission meetings; and
- **WHEREAS**, on October 19, 2021, the City Council approved Resolution No. 2522 authorizing remote teleconferencing for City Council and City commission meetings in accordance with Government Code Section 54953 as amended by AB 361; and
- **WHEREAS**, Government Code Section 54953, as amended by AB 361, requires the City Council to make certain findings every 30 days after approving Resolution No. 2522 in order to continue with remote teleconferencing.

#### NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF FOWLER RESOLVES AS FOLLOWS:

1. The City Council has reconsidered the circumstances of the COVID-19 state of emergency and finds that the following circumstances exist:

- A. The state of emergency continues to directly impact the ability of members of the public, City Council members, and members of other City commissions to meet safely in person; and
- B. State or local officials continue to recommend measures to promote social distancing.
- 2. This Resolution shall be effective immediately and a similar resolution shall be a standing item on City Council meeting agendas each month to reconsider the circumstances of the COVID-19 state of emergency and determine whether the state of emergency continues to directly impact the ability of members of the public, City Council members, and members of other City commissions to meet safely in person, or whether state or local officials continue to impose or recommend measures to promote social distancing, until the necessary findings required for continuing remote teleconferencing are no longer approved by the City Council.

The foregoing resolution of the City Council of the City of Fowler was duly and regularly introduced and approved at a regular meeting of the City Council on January 4, 2022, by the following vote:

AYES:	
NOES:	
ABSENT:	
ABSTAIN:	
	APPROVED:
ATTEST:	David Cardenas, Mayor
Angela Vazquez, Deputy City Clerk	



ITEM NO: 6-E

#### REPORT TO THE CITY COUNCIL

January 4, 2022

FROM: Wilma Quan, City Manager

**SUBJECT** 

Rejection of Claim filed by Gordon Panzak

#### **RECOMMENDATION**

Staff recommends that the City Council reject a claim received from Gordon Panzak on December 13, 2021. The claim has been forwarded to AIMS for further review.

#### **BACKGROUND**

The claim states that on June 14, 2021 to June 22, 2021, contractors acting at the direction of the City allegedly entered the property located at 405 E. Adams Ave., Fowler, and during the course of public works of improvements allegedly damaged a panel of claimant's chain link fence. As a result of this alleged damage, the claimant asserts he has suffered more than \$2 million in damages for, among other things, elder abuse, intentional and negligent infliction of emotional distress, breach of contract, and trespass to land, among other claims. Claimant is also seeking \$1 million in punitive damages.

Pursuant to Government Code Section 912.4, the City Council must act upon a claim within 45 days after receipt. If there is no official action by Council, the claim is deemed to be rejected on the last day. Denial by minute order action provides a clearly defined rejection date and allows AIMS to begin their investigation and take appropriate action to resolve the claim in a timely manner.

The total claim is for \$2,040,250.

#### FISCAL IMPACT

There is no fiscal impact associated with rejecting the claim.

#### **ATTACHMENTS**

Subject Claim



### GOVERNMENT CLAIM PURSUANT TO 810 ET. SEQ. OF THE GOVERNMENT CODE

#### Claimants name and mailing address:

Gordon Panzak 260 Fulton St. Fresno, CA 93721

Name of public employees causing harm: City Manager Wilma Quan, Mayor David Cardenas, Councilmember Mark Rodriguez, Councilmember Daniel Parra, Councilmember Karnig Kazarian, Councilmember Juan Mejia, Public Works Dario Dominguez, Deputy City Clerk Angela Vasquez, West Valley Construction, Don Berry Construction, and several city employees and contractors whose identities are unknown at this time, (herein the City Manager and parties.)

Date of Occurrence: June 14, 2021 to June 22, 2021.

Place of Occurrence: 405 E. Adams Ave. Fowler, California

<u>Circumstances of Occurrence:</u> On June 14, 2021 to June 22, 2021 contractors acting at the direction of the City of Fowler, City Manager, Public Works Director, Mayor, and City Councilmembers, did enter the property located at 405 E. Adams Ave., Fowler, and did construction work consisting of digging out an area on the northwest portion of the property and placing a ramp and sidewalks in that area. During this proceedings, a panel of the claimant's chain link fence was damaged.

Further the city did enter the northeast portion of the premises and commence digging and place an oversized ramp and sidewalk.

The city at all times was then and there aware that the so-called "Public Right" of way and other issues were the subject of dispute by claimant and in litigation in the Fresno County Superior Court Case #17CECG02635.

The parties pre-planned and approved the entry, digging, and placement of the ramps and sidewalks without first giving notice to the claimant, and without filing any request or motion for permission with the Superior Court of Fresno County, who had jurisdiction over the property.

All of which gives rise to the Causes of Action alleged and violates the Due Process rights of the Claimant under the United States Constitution and the Constitution of the State of California.

It is further alleged that on one day an officer of the Fowler Police Department was present during the construction on the northwest portion of the property. This presence was an attempt to intimidate the claimant into not exercising his constitutional rights of Free Speech to protest the city's actions at that time and thereafter.

Since such actions were made by the City Manager and parties when they were aware the claimant was an elder person over 65 years of age, who is recognized by the State of California as a disabled person, and who was suffering from medical conditions that are aggravated by

stress. The actions have caused the claimant to be in sustained fear and apprehension of future destruction of his property, buildings, and plants, and to suffer mental and physical harm.

<u>Causes of Action</u>: The acts of the City Manager and parties acting under their directions have given rise to the causes of action against the city for:

Elder abuse: in that the City Manager and parties caused parties acting under their direction to do acts which caused injury to the emotional and physical health of the claimant who is over age 65.

Intentional infliction of emotional distress: in that the City Manager and parties caused parties acting under their direction to do acts that were extreme and outrageous that were calculated to intentionally make the claimant fear for his personal safety and to be in a state of sustained mental suffering as to future acts and reprisals by the City Manager and City Employees acting at his direction.

Negligent infliction of emotional distress: in that the City Manager and parties caused parties acting under their direction to do acts which because of their commission were foreseeable to cause the claimant sustained mental and physical suffering as a direct result.

<u>Trespass to land</u>: in that the City Manager and parties caused parties acting under their direction to enter without permission of the land owner and damage land which has been used and occupied and used by his family since 1911.

Breach of contract: in that the City Manager and parties caused parties acting under their direction, breached contracts with the land owners and claimant wherein the city previously approved the placement of 2 outbuildings and other structures in the now claimed "public right of way" and had previously acknowledged that the "public right of way" had been abandoned by city action in 1925 and again in 1946 and again in 1957 and at other times.

Elder civil rights violations: in that the City Manager and parties caused parties acting under their direction, knowing that the claimant was an elder and disabled person within the meaning of various statutes, did violate the claimants due process rights and other civil rights by entering his property and destroying property and threating future such conduct without authority of law, knowing that the claimant had filed an action in the Fresno County Superior Court under case # 17CECG02635, and with the intention to deny claimant his Due Process Rights to have the matter adjudicated on its merits in a court of law.

<u>Inverse condemnation</u>: in that the City Manager and parties caused parties acting under their direction to have taken for city use 25% of the lot located at 405 E. Adams Ave. City of Fowler for "public use" without due process of law or arguable right or just compensation.

<u>Damage to real estate</u>: in that the City Manager and parties caused parties acting under their direction to do damage the real estate by forcibly removing and damaging fences, and removing dirt from the lot and placing sidewalks and ramps on the property without permission.

#### **Losses Incurred:**

One Fence Section \$250

Loss of 25% of the lot = \$40,000 and costs of removal of ramps and sidewalks.

Pain and suffering = \$1,000,000.

Punitive damages according to proof: \$1,000,000.

Total claim is over \$25,000 and is in the Unlimited Civil jurisdiction of the Superior Court.

Respectfully Submitted,

December 9, 2021

Gordon Panzak

Claimant



ITEM NO: 6-F

#### REPORT TO THE CITY COUNCIL

January 4, 2022

**FROM:** Margarita Moreno, Finance Director

#### **SUBJECT**

Acceptance of Donations to the City.

#### RECOMMENDATION

Staff recommend the City Council accept donations from Sunny Lube & Tire and the Fowler Lions Club.

#### **BACKGROUND**

Per Resolution 1881, donations to the City of \$500 or more shall be approved by the City Manager, and then presented to the City Council for acceptance.

A donation was received on October 12, 2021 from Sunny Lube & Tire in the amount of \$500 for the Employees Appreciation Dinner. A donation was received on December 4, 2021 from the Fowler Lions Club in the amount of \$525 for the Senior Christmas Luncheon. Both donations were accepted by the City Manager.

#### FISCAL IMPACT

Donation revenue enhances the City's ability to provide programs and services to residents.

Attachments:

None





ITEM NO: 6-G

#### REPORT TO THE CITY COUNCIL

January 4, 2022

**FROM:** David Peters, City Engineer

**SUBJECT** 

Acceptance of Tract 6259 Public Improvements

#### RECOMMENDATION

Staff recommends the City Council accept the Tract 6259 public improvements constructed by K Hovnanian Homes, authorize the City Engineer to file the notice of completion, and release bonds associated with the project.

#### BACKGROUND

On December 2, 2019, the City Council approved Final Map 6259 for development of a 74-lot subdivision in the northeast corner of Sunnyside Avenue / South Avenue interesection. The tract is the second phase of the subdivision approved under Tentative Tract Map 5834 in 2007and is being developed by K Hovnanian Homes.

The final map approval was conditioned upon development of certain public improvements such as streets and underground utilities including water, sewer, storm drainage, electrical, and communication facilities. These public improvements have been constructed to the satisfaction of the City Engineer and Public Works Director and are recommended for acceptance by the City Council.

The Council's acceptance of the improvements will begin the 1-year warranty period.

#### FISCAL IMPACT

After the 1-year warranty period, the City will be responsible for these improvements. The ongoing maintenance will be funded by the appropriate funding source such as the City's Landscape and Lighting Maintenance District (LLMD), the Water Fund, and the General Fund.

Attachments

None



#### FOWLER CITY COUNCIL

ITEM NO: 7-Ai

#### REPORT TO THE CITY COUNCIL

January 4, 2022

**FROM:** Margarita Moreno, Finance Director

#### **SUBJECT**

Accept the FY 2020/21 Development Impact Fee Annual Report

#### RECOMMENDATION

Staff recommend City Council review, receive, and file the FY 2020/21 Development Impact Fee Annual Report.

#### **BACKGROUND**

The Mitigation Fee Act (Government Code Section 66006 et. seq.) requires local agencies to submit an annual report detailing the status of development impact fees. The annual report must be made available to the public within 180 days after the close of the fiscal year, and must be presented to the City Council at least 15 days after it is made available to the public.

With the passage of Proposition 13 in 1978 and the resulting decline in local government revenues, local governments have increasingly relied on impact fees in order to mitigate the impacts created by new development. Development impact fees are collected to finance the design, construction and acquisition of facilities and equipment necessary to accommodate future development.

In response to the growing use of impact fees, the state Legislature passed AB 1600 in 1987, the California Mitigation Fee Act, setting forth standards and procedures for how impact fees are imposed, collected and expended. The Mitigation Fee Act requires local governments to segregate and place development impact fees collected in special funds. Those funds are held to finance the construction of the specific facilities for which the fee was imposed. The Mitigation Fee Act also requires local governments to prepare annual reports detailing the status of development impact fees until the funds collected are expended.

The Development Impact Fees Annual Report enclosed herein as Attachment 'A' provides information on the amount of development impact fees collected and expended, and the interest earned on unexpended funds from July 1, 2020 through June 30, 2021.

The City of Fowler has nine types of development impact fees they are:

#### **General Services 710**

Funds facilities, equipment, and services for general City government operations to accommodate new development.

#### Law Enforcement 720

Funds law enforcement facilities, equipment, and services to accommodate new development.

#### **Fire 730**

Funds fire department facilities, equipment, and services to accommodate new development.

#### Street Maintenance 740

Funds infrastructure necessary to provide safe and efficient vehicular access to accommodate new development.

#### Parks 750

Funds open space land acquisition, park construction, renovation, and related facilities to accommodate new development.

#### Water 760

Funds domestic water production, treatment, and distribution facilities to accommodate new development.

#### Sewer 770

Fund wastewater infrastructure to accommodate new development.

#### Storm Drain 780

Funds stormwater collection, retention and disposal facilities to accommodate new development.

#### Merced 799

Funds improvements to Merced Street to accommodate new development.

The Development Impact Fees Annual Report attached provides information on the amount of developer impact fees collected and expended, and the interest earned on unexpended funds for fiscal year ending June 30, 2021 in compliance with the Mitigation Fee Act. A public hearing notice was published in the Business Journal.

#### FISCAL IMPACT

There is no fiscal impact associated with the recommended action.

#### Attachment:

Development Impact Fee Report Fiscal Year 2020-2021

#### AB1600 GENERAL SERVICES FUND 710

Beginning Fund Balance, July 1, 2020	
adjustment to beg fund bal	\$ 14,050
	\$ 14,050
Revenues:	
Interest Earnings	\$ _
Development Impact Fees	\$ 19,808
Total Revenue	\$ 19,808
Expenditures:	
Eng Consulting-Peters Engeering	\$ 7,920
Planning Consultant-Provost & Pritchard	\$ 55,692
Financial Svc-DTA	\$ 4,761
Total Expenditures	\$ 68,374
Ending Fund Balance, June 30, 2021	\$ (34,515)
*Based on unaudited numbers	

#### **AB1600 LAW ENFORCEMENT FUND 720** Beginning Fund Balance, July 1, 2020 346,431 adjustment to beg fund bal 346,431 Revenues: **Interest Earnings Development Impact Fees** 64,261 **Total Revenue** 64,261 **Expenditures: Special Dept Building Equipmemt** Vehicles **Total Expenditures** Ending Fund Balance, June 30, 2021 410,692

\*Based on unaudited numbers

AB1600 FIRE FUND 730		
Beginning Fund Balance, July 1, 2020	\$	49,968
adjustment to beg fund bal	\$	
	\$ \$	49,968
Revenues:		
Interest Earnings	\$	-
Development Impact Fees	\$	79,909
Total Revenue	\$	79,909
Expenditures:		
Professional Svc	\$	_
Building	\$	-
Vehicles	\$	_
Total Expenditures	\$	-
Ending Fund Balance, June 30, 2021	\$	129,877
*Based on unaudited numbers		

AB1600 STREETS FUND 740			
Beginning Fund Balance, July 1, 2020  adjustment to beg fund bal	\$	80,704	
adjustifient to beg fund bar	<u>\$</u>	80,704	
Revenues:			
Interest Earnings	\$		
Development Impact Fees	\$	••	
Total Revenue	<u>\$</u> \$	-	
Expenditures:			
Engineering Consulting	\$	1,200	
Total Expenditures	\$	1,200	
Ending Fund Balance, June 30, 2021	\$	79,504	
*Based on unaudited numbers			

AB1600 PARKS FUND 750		
Beginning Fund Balance, July 1, 2020	\$	185,548
adjustment to beg fund bal	\$	-
	\$	185,548
Revenues:		
Interest Earnings	\$	-
Development Impact Fees	\$	170,166
Total Revenue	\$	170,166
Expenditures:		
Engineering Consulting	\$	-
Total Expenditures	\$	-
Ending Fund Balance, June 30, 2021	\$	355,714
*Based on unaudited numbers		

AB1600 WATER FUND 760		
Beginning Fund Balance, July 1, 2020	\$	380,847
adjustment to beg fund bal	\$	-
	\$	380,847
Revenues:		
Interest Earnings	\$	••
Development Impact Fees	\$	70,132
Total Revenue	\$	70,132
Expenditures:		
Engineering Consulting-Peters Engineering	\$	43,985
Total Expenditures	\$	43,985
Ending Fund Balance, June 30, 2021	\$	406,995
*Based on unaudited numbers		

AB1600 SEWER FUND 770		
Beginning Fund Balance, July 1, 2020	\$	916,971
adjustment to beg fund bal		-
	\$	916,971
Revenues:		
Interest Earnings	\$	-
Development Impact Fees	\$	260,384
Total Revenue	\$	260,384
Expenditures:		
Professional Services	\$	-
Total Expenditures	\$	-
Ending Fund Balance, June 30, 2021	\$	1,177,355
*Based on unaudited numbers		

AB1600 STORM DRAIN FUND 780		
Beginning Fund Balance, July 1, 2020	\$	8,505
adjustment to beg fund bal	\$	•
	\$	8,505
Revenues:		
Interest Earnings	\$	-
Development Impact Fees	\$	103,200
Total Revenue	\$	103,200
Expenditures:		
Professional Services	\$	-
Total Expenditures	\$	-
Ending Fund Balance, June 30, 2021	\$	111,705
*Based on unaudited numbers		

99/MERCED SIGNALIZATION FUND 799		
Posinning Fund Delawar July 4 0000	•	202.000
Beginning Fund Balance, July 1, 2020	\$	220,226
adjustment to beg fund bal	<u>\$</u>	-
	\$	220,226
Revenues:		
Interest Earnings	\$	-
Development Impact Fees	\$	
Total Revenue	\$	_
Expenditures:		
Building	\$	=
Total Expenditures	\$	
Ending Fund Balance, June 30, 2021		220,226
*Based on unaudited numbers		



ITEM NO: 7-Bi

#### REPORT TO THE CITY COUNCIL

January 4, 2022

**FROM:** Thomas W. Gaffery IV, Community Development Director

#### **SUBJECT**

Consider INTRODUCTION of amendments to Sections 8-1.01, 8-1.02, 8-1.03, and 8-1.05 of the Fowler Municipal Code and the repeal of Sections 8-1.04.1 through Sections 8-1.04.4 related to the adoption of the California Building Code.

#### RECOMMENDATION

Staff recommend Council consider introduction of amendments to Sections 8-1.01, 8-1.02, 8-1.03, and 8-1.05 of the Fowler Municipal Code and the repeal of Sections 8-1.04.1 though Sections 8-1.04.4 related to the adoption of the California Building Code.

#### **BACKGROUND**

The California Building Code is updated on a triennial basis. The Fowler Municipal Code currently references the 1994 version of the Uniform Building Code. These amendments will specify the current edition of the California Building Code is the version of the California Building Code adopted by the City. This change will make the Fowler Municipal Code consistent with the current California Building Code and not require future updates to the Fowler Municipal Code when the California Building Code changes. These amendments will also specify that administrative citations pursuant to Chapter 8 of Title 1 of the Fowler Municipal Code and all other enforcement mechanisms authorized by the Fowler Municipal Code and state law are available for enforcing violations of the Building Code.

#### **ENVIRONMENTAL REVIEW**

This change to Fowler Municipal Code is not a "project" pursuant to the California Environmental Quality Act ("CEQA") as defined by Public Resource Code section 21065 and CEQA Guidelines Section 15378. Adoption of the proposed ordinance will not cause a direct or indirect change in the environment.

#### **FISCAL IMPACT**

There is no fiscal impact associated with this change to the Fowler Municipal Code.

#### Attachment

- Redline of Proposed Fowler Municipal Code Ordinance No. 2022-01

#### **Chapter 1 - BUILDING CODE**

8-1.01 - Adoption of the Uniform California Building Code.

The City adopts the 1994 edition of the Uniform Building Code, Volumes 1, 2, and 3, regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, height, area, and maintenance of all buildings or structures in the City of Fewler; providing for the issuance of permits and collection of fees therefor; providing for penalties for violation thereof, three (3) copies of which are on file in the office of the City Clerk, one of the three (3) copies of the Building Code may be kept on file in the office of the Building Official.

The City adopts by specific reference thereto and incorporation herein by said reference, in their entirety, the California Building Code, current edition, including appendix chapters, amendments, supplements, and errata as promulgated by the California Building Standards Commission; the California Fire Code, current edition, including those sections and appendices as more specified in Chapter 14.35; and the National Fire Codes, current edition, as adopted by the National Fire Protection Association. One paper copy of each shall be maintained on file and available for public inspection during normal business hours at Fowler City Hall.

(Ord. 13-6 §§ 4, 6; Ord. 81-6 § 2, 7-2-81; Ord. 88-5, 7-21-88; Ord. 93-5 § 1, 9-2-93; Ord. 94-8 § 1, 2-2-95) 8-1.02 - Definitions.

For the purposes of this chapter, unless otherwise apparent from the context, certain words and phrases used in this chapter and in said Building Code are defined as follows:

- (a) "Building Official" means the officer or other designated authority charged with the administration and enforcement of this code, or the building official's duly authorized representative.
- (b) "City" means the City of Fowler.
- (c) "City Attorney" means the City Attorney of the City of Fowler.
- (d) "Construction" means and includes the construction, erection, enlargement, alteration, conversion, demolition, or movement of any building or structure within the City of Fowler.

(Ord. 13-6 § 1; Ord. 88-5, 7-21-88; Ord. 94-8 § 1, 2-2-95)

8-1.03 - Administration.

The provisions of this chapter and the Building Code shall be administered by the office of the Building Official, personnel provided therefor from time to time by the City Manager, or other designee appointed by the City Manager of the City.

(Ord. 13-6 § 3; Ord. 88-5, 7-21-88; Ord. 94-8 § 1, 2-2-95)

8-1.04 - Additions. REPEALED

In addition to the Uniform Building Code, 1994 Edition, Volumes 1, 2, and 3 published by the International Conference of Building Officials, the following Appendix Chapter shall be enforceable:

- (1) Volume 1, Appendix Chapters 3, 4, 11, 12, 15, 29, 30, 33 and 34;
- (2) Volume 2. Appendix Chapter 16. Division III.

(Ord. 13-6; Ord. 94-8 § 1, 2-2-95)

#### 8-1.04.1 - Amendments - Section 104. REPEALED

Subsection (e) of Section 104 of said Building Code is hereby amended to read as follows:

— Sec. 104. Application to existing buildings and structures. (e) Moved buildings and temporary buildings. Buildings or structures moved into or within the jurisdiction shall comply with the provisions of this code for new buildings or structures.

Temporary structures such as reviewing stands and other miscellaneous structures, sheds, canopies or fences used for the protection of the public around and in conjunction with construction work may be erected by special permit from the building official for a limited period of time. Such buildings or structures need not comply with the type of construction or fire-resistive time periods required by this code. Temporary buildings or structures shall be completely removed upon the expiration of the time limit stated in the permit.

There is established a Moved Building Review Committee. This Committee shall consist of the City Administrator, Superintendent of Public works, City Planner, and the Building Official. In all cases, except for single-family dwellings, the Chief of the Fire Department shall be a member of this committee. Committee members may delegate their responsibilities to their deputies or subordinates.

(Ord. 93-5 § 2, 9-2-93)

8-1.04.2 - Amendments Section 504. REPEALED

Section 504 of said Building Code is deleted.

(Ord. 93-5 § 2, 9-2-93)

8-1.04.3 - Amendments - Appendix Chapter 12 Section 1243(a)(9). REPEALED

Appendix Chapter 12 Sec. 1243 (a)(9) of said Building Code is deleted.

(Ord. 93-5 § 2, 9-2-93)

8-1.04.4 - Amendments—Section 3802. REPEALED

Subsection (a) of Section 3802 of said Building Code is hereby amended to read as follows:

Sec. 3802. Automatic Fire Extinguishing Systems. (a) Where required. Notwithstanding any other provisions of this code, standard automatic sprinklers systems shall be installed and maintained according to the latest adopted edition of the appropriate National Fire Protection Association Standards and their Appendices as adopted in the National Fire Code in All Group A, B, E, I, M. H4, and H5 occupancies exceeding 5,000 square feet in gross floor area; Group H divisions 1 and 2, occupancies exceeding 1,500 square feet in gross floor area, when such areas have any eaves or overhang exceeding a distance of three (3) feet from the wall or support, the gross roof area shall be used to determine the need for automatic fire sprinklers, which shall include, but not be limited to, covered walkways, patios, porches, or any architectural feature attached to or within ten (10') feet of the structure. In existing buildings where an automatic fire sprinkler system does exist, and a change in the character of occupancy or use is made, or the floor area is changed, and the gross floor area exceeds the areas set forth herein, an automatic sprinkler system shall be installed through the structure. This section shall not apply to Group R, Division 1, or Group R, Division 3, structures.

(Ord. 93-5 § 2, 9-2-93)

#### 8-1.05 - Violations—Penalties. Enforcement.

Violations of this Chapter may be enforced by one or more of the following non-exclusive remedies:

- (a) Abatement. Abatement and cost recovery pursuant to Chapters 22 and 23 of Title 5 of the Municipal Code.
- (b) Administrative Citation. Administrative citation pursuant to Title 1, Chapter 8 of the Municipal Code.
- (c) Criminal Complaint or Citation. Misdemeanor enforcement pursuant to Title 1, Chapter 2 of the Municipal Code.
- (d) Injunction. Injunctive relief.
- (e) Receivership. Receiverships pursuant to Health and Safety Code section 17980.7.
- (f) Unlawful Business Practice. Unlawful business practices pursuant to Business and Professions Code section 17200.
- (g) State Housing Law. State housing law as set forth in Health and Safety Code section 17910 et seq.
- (h) Other. Any other available remedy set forth in the Municipal Code or state law.

Any person who shall violate or fail to comply with any provision of said Building Code, shall be punishable as set forth in Chapter 2 of Title 1 of the Fowler Municipal Code.

(Ord. 13-6 § 2; Ord. 94-8 § 1, 2-2-95)

#### ORDINANCE NO. 2022-01

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF FOWLER AMENDING CHAPTER 1, OF TITLE 8 OF THE FOWLER MUNICIPAL CODE, RELATED TO THE ADOPTION OF THE CALIFORNIA BUILDING CODE

THE CITY COUNCIL OF THE CITY OF FOWLER DOES ORDAIN AS FOLLOWS:

SECTION 1. Section 01 of Chapter 1, of Title 8 of the Fowler Municipal Code is hereby amended as follows:

Adoption of the California Building Code.

The City adopts by specific reference thereto and incorporation herein by said reference, in their entirety, the California Building Code, current edition, including appendix chapters, amendments, supplements, and errata as promulgated by the California Building Standards Commission; the California Fire Code, current edition, including those sections and appendices as more specified in Chapter 14.35; and the National Fire Codes, current edition, as adopted by the National Fire Protection Association. One paper copy of each shall be maintained on file and available for public inspection during normal business hours at Fowler City Hall.

SECTION 2. Section 02 of Chapter 1, of Title 8 of the Fowler Municipal Code is hereby amended as follows:

#### Definitions.

For the purposes of this chapter, unless otherwise apparent from the context, certain words and phrases used in this chapter and in said Building Code are defined as follows:

- (a) "Building Official" means the officer or other designated authority charged with the administration and enforcement of this code, or the building official's duly authorized representative.
- (b) "City" means the City of Fowler.
- (c) "City Attorney" means the City Attorney of the City of Fowler.

SECTION 3. Section 03 of Chapter 1, of Title 8 of the Fowler Municipal Code is hereby amended as follows:

#### Administration.

The provisions of this chapter shall be administered by the office of the Building Official, the City Manager, or other designee appointed by the City Manager.

SECTION 4. Section 8-1.04, Section 8-1.04.1, Section 8-1.04.2, Section 8-1.04.3 and Section 8-1.04.4, of Chapter 1, of Title 8 of the Fowler Municipal Code, are hereby repealed.

SECTION 5. Section 05 of Chapter 1, of Title 8 of the Fowler Municipal Code is hereby amended as follows:

#### Violations – Enforcement

Violations of this Chapter may be enforced by one or more of the following non-exclusive remedies:

- (a) Abatement. Abatement and cost recovery pursuant to Chapters 22 and 23 of Title 5 of the Municipal Code.
- (b) Administrative Citation. Administrative citation pursuant to Title 1, Chapter 8 of the Municipal Code.
- (c) Criminal Complaint or Citation. Misdemeanor enforcement pursuant to Title 1, Chapter 2 of the Municipal Code.
- (d) Injunction. Injunctive relief.
- (e) Receivership. Receiverships pursuant to Health and Safety Code section 17980.7.
- (f) Unlawful Business Practice. Unlawful business practices pursuant to Business and Professions Code section 17200.
- (g) State Housing Law. State housing law as set forth in Health and Safety Code section 17910 et seq.
- (h) Other. Any other available remedy set forth in the Municipal Code or state law.

SECTION 6. The City Council has determined that this change to Fowler Municipal Code is not a "project" pursuant to the California Environmental Quality Act ("CEQA") as defined by Public Resource Code section 21065 and CEQA Guidelines Section 15378. Adoption of the proposed ordinance will not cause a direct or indirect change in the environment.

SECTION 7. This Ordinance shall take effect thirty (30) days after its adoption.

SECTION 8. The City Clerk is further directed to cause this ordinance or a summary of this ordinance to be published once in a newspaper of general circulation published and circulated within the City of Fowler, within fifteen (15) days after its adoption. If a summary of the ordinance is published, then the City Clerk shall cause a certified copy of the full text of the proposed ordinance to be posted in the office of the City Clerk at least five (5) days prior to the City Council meeting at which the ordinance is adopted and again after the meeting at which the ordinance is adopted. The summary shall be approved by the City Attorney.

The foregoing ordinance was introduced at a re- January 4, 2022, and was adopted at a re- , 2022, by the following	egular meeting of said Council held on
AYES: NOES: ABSENT: ABSTAIN:	
	David Cardenas, Mayor
ATTEST:	
Angela Vasquez, Deputy City Clerk	



ITEM NO: 7-Bii

#### REPORT TO THE CITY COUNCIL

January 4, 2022

**FROM:** Dawn E. Marple, City Planner

#### **SUBJECT**

Public hearing to consider Planning Case No. 21-0015, a Tentative Subdivision Map (TSM), Prezone, Annexation, and adoption of a Mitigated Negative Declaration, submitted by Sunshine Raisin Corporation for approximately 29.04 acres on the east side of South Armstrong Avenue between East Adams and East Hogan Avenues.

#### RECOMMENDATION

Both Staff and Planning Commission recommend approval of Planning Case No. 21-0015 and adopt a Mitigated Negative Declaration for said actions.

#### BACKGROUND

In June 2021, National Raisin Corporation submitted a tentative map application proposing to subdivide the land on the east side of South Armstrong Avenue between East Adams and East Hogan Avenues (APN 340-130-14).

The subdivision map proposes 74 single-family lots on 29.04 acres ("Project"). The site is within the City's Sphere of Influence but is not currently within the City limits. An annexation is associated with the Project and will be acted on separately by the City Council. The General Plan land use designation for the site is Low Density Residential. The site is currently zoned AE-20 (Exclusive Agricultural – Minimum 20 acres) by Fresno County. Proposed zoning is R-1-10 (One Family Residential – 10,000 square foot minimum lot size). Proposed lot sizes range between 10,160 and 17,371 square feet. This range of sizes is consistent with the General Plan, which prescribes a density of 0.0-3.6 dwelling units per gross acre (du/ga) for Low Density Residential. The subdivision map proposes a density of approximately 2.57 du/ga and thus meets the density provisions of the General Plan.

Development of the subdivision is expected to occur over a 2.5-year period with project construction beginning in 2022 and completed by mid-2024. At 3.2 persons per household, the 74-unit project will accommodate approximately 237 people.

Circulation within the site would be provided by a system of four primary interior local streets generally forming a grid pattern, with cul-de-sacs proposed at locations where through-streets are not possible

or practical. The interior circulation system will connect to the City's existing collector street system on North Armstrong Avenue, located on the west side of the subdivision. Street connections to the south are proposed to connect to the residential subdivision currently under construction.

Figure 1 contains an aerial photo showing the project site in relation to other facilities. Figure 2 shows the Fowler General Plan land use designations. Figure 3 illustrates the zoning of the site and vicinity. Figure 4 contains the proposed subdivision map.

Land Uses and Zoning in the Project Vicinity

	Land Use	Zoning
North	Single-Family Residential	R-1-10 (City)
West	Rural Residences, Agriculture	AE-20 / AL-20 (County)
South	Single-Family Residential	R-1-10 (City)
East	Single-Family Residential	R-1-10 (City)

**Proposed Homes Within the Subdivision.** The developer has not provided floor plans or elevations. If approved, the developer/builder would be required to comply with the provisions of Fowler Municipal Code (FMC) Section 9-5.1605 related to single-family design criteria. The developer/builder would be required to submit elevations for consideration by the Development Review Committee prior to issuance of a building permit for any lot within the subdivision.

#### **ANALYSIS**

The Planning Commission recommended approval of the proposed project at its November 7, 2021 regular meeting.

#### **Growth Management Policy**

In 2004, your Council adopted a growth management policy to implement the desired growth rate contained in the General Plan without creating adverse effects on City services and the Fowler Unified School District. The policy is to be reviewed with each subdivision application. Policy No. 1 of the Growth Management Policy states, "The desirable annual population and housing growth rate should not exceed the average of the planned growth rate through 2025 of 3% over any five-year period (50-60 units), and should not exceed 6% in any single year (80-90 units)."

The chart below indicates that growth for the past 10 years has stayed within the bounds identified by the Growth Management Policy. Nevertheless, Senate Bill (SB) 330, adopted in 2019, prohibits the City of Fowler, among other cities, from limiting housing permit issuance until 2025.

#### **Fowler Unified School District**

Students from the project would attend Marshall Elementary (K-2), Fremont Elementary (3-5), Sutter Middle School (6-8), and Fowler High School (9-12). The student generation factor within Fowler Unified has ranged between 0.5 and 0.6 students per household, indicating that the proposed project would generate 37 to 45 students.

In accordance with State Law, any new development will be subject to school development fees as a condition of building permit to offset potential impacts to schools. These funds, in combination with bond financing authorized by District voters and State assistance will provide facilities and reduce overcrowding in the long-term.

#### **Tentative Subdivision Map**

The subdivision map proposes 74 single-family lots in a proposed R-1-10 zone district ranging from 10,160 to 17,371 square feet. As previously discussed, this range of sizes results in a number of lots that is consistent with the General Plan designation.

The California Subdivision Map Act (Gov. Code Sec. 66410, et seq.) allows local agencies to regulate the design and improvement of subdivisions. The City's Subdivision Ordinance provides more detailed requirements for design and improvement as well as processing applications. Staff has met with the developer and the project engineer to discuss relevant issues and the resulting configuration generally meets the City's requirements.

The approval of Marshall Estates, currently in construction to the south, required the construction of a drainage basin. This subdivision map proposes to relocate this drainage basin to the northeast, where it would abut the ponding basin of Crestwood Estates.

General Plan Policy 4.3.16.b requires that single-family projects include 5% open space within the project site. The tentative map provides a 1.44-acre park/open space area in conformance with the General Plan Policy. This park space is designed to provide a large, single open space for the proposed neighborhood. The Quimby Act and Subdivision Ordinance requires an additional 1.33 acres that can be provided on-site or typically through the payment of off-site fees.

Lots bordering adjacent subdivisions are proposed at widths equal to their rear yard neighbors.

#### **Grounds for Approval of a Tentative Map**

The Subdivision Map Act (Government Code Section 66474) requires a City to make the following findings prior to approval of a tentative map:

1. The proposed map is consistent with applicable general and specific plans as specified in Section 65451.

Development must provide between 0.0 and 3.6 du/ga in order to maintain consistency; the subdivision map proposes a density of approximately 2.57 du/ga and thus meets the density provisions of the General Plan. The proposed project is consistent with the 2004 Fowler General Plan because the prezoning and annexation request is for land located contiguous to existing development where public facilities and services are available, the requested annexation is consistent with the General Plan policies related to logical and efficient growth and prevention of premature conversion of agricultural land.

2. The design or improvement of the proposed subdivision is consistent with applicable general and specific plans.

The City is empowered to regulate the design and improvement of subdivisions by the Subdivision Map Act and the City's Subdivision Ordinance. The project meets the City's design requirements. Conditions of approval will ensure consistency with General Plan standards and policies.

The site is physically suitable for the type of development.

The site is generally flat and level and is capable of supporting single-family development.

3. The site is physically suitable for the proposed density of development.

Infrastructure needed to serve the development is located within adjacent public rights-of-way, or its installation will be required as conditions of approval. The flat, level nature of the site in conjunction with the proximity of infrastructure and project conditions ensure that the site is physically suitable for the proposed density of development density of the project.

4. The design of the subdivision or the proposed improvements are not likely to cause substantial environmental damage or substantially and avoidably injure a fish or wildlife habitat.

An initial study was prepared to evaluate the potential impacts of the subdivision on the environment. The initial study determined that, with incorporation of recommended mitigation, the subdivision would have a less than significant impact on the environment.

5. The design of the subdivision or type of improvements is not likely to cause serious public health problems.

There is no evidence in the record that the project is likely to cause serious public health problems.

6. The design of the subdivision or the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision.

The project will not conflict with easements.

With conditions, including those related to open space, all of the above findings can be made.

#### Prezone

The Project proposes prezoning to the R-1-10 (One Family Residential – 10,000 square foot minimum lot) zone district, which would allow lots with a minimum area of 10,000 square feet and would facilitate development at a density consistent with the range prescribed in the General Plan's Low Density Residential designation.

#### Annexation to the City of Fowler

If the Project is approved, an application for annexation can be submitted to LAFCo. The Project is located within the existing Sphere of Influence.

#### **ENVIRONMENTAL FINDINGS**

The proposed project has been reviewed for compliance with CEQA. The City prepared an initial study and on this basis determined that the proposed project will not have significant adverse effects on the environment with incorporation of recommended mitigation. The City has prepared a proposed Mitigated Negative Declaration in accordance with CEQA requirements. Comments received on the proposed Mitigated Negative Declaration and responses are attached for the City Council's review.

#### Attachments

Figures 1-4: Aerial Photo, General Plan, Zoning, Subdivision Map Ordinance No. 2021-08 Resolutions 2529, 2530, and 2531

Figure 1: Aerial Photo

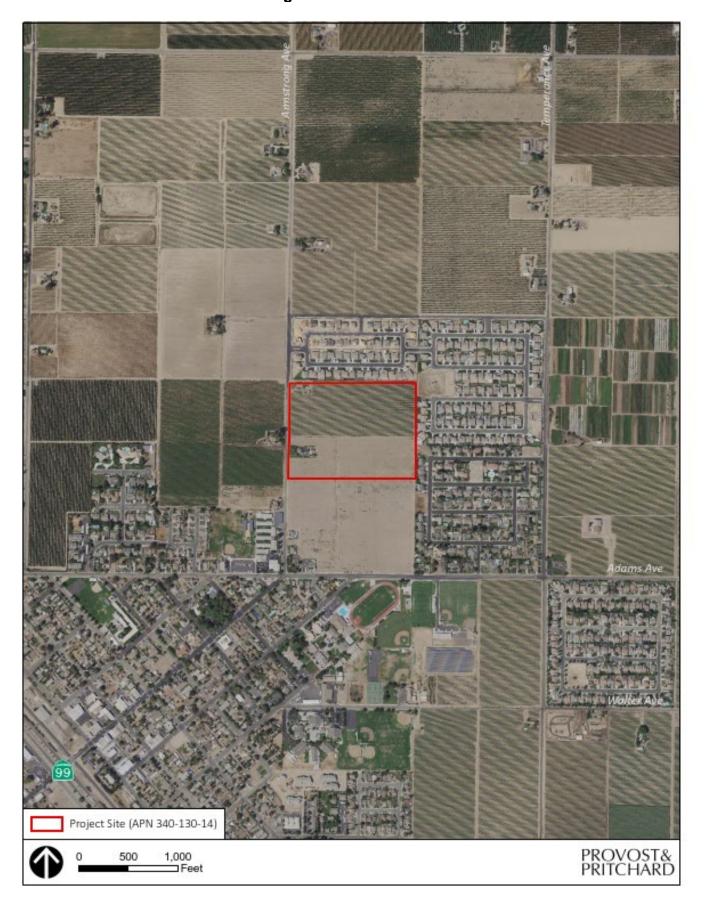


Figure 2: General Plan

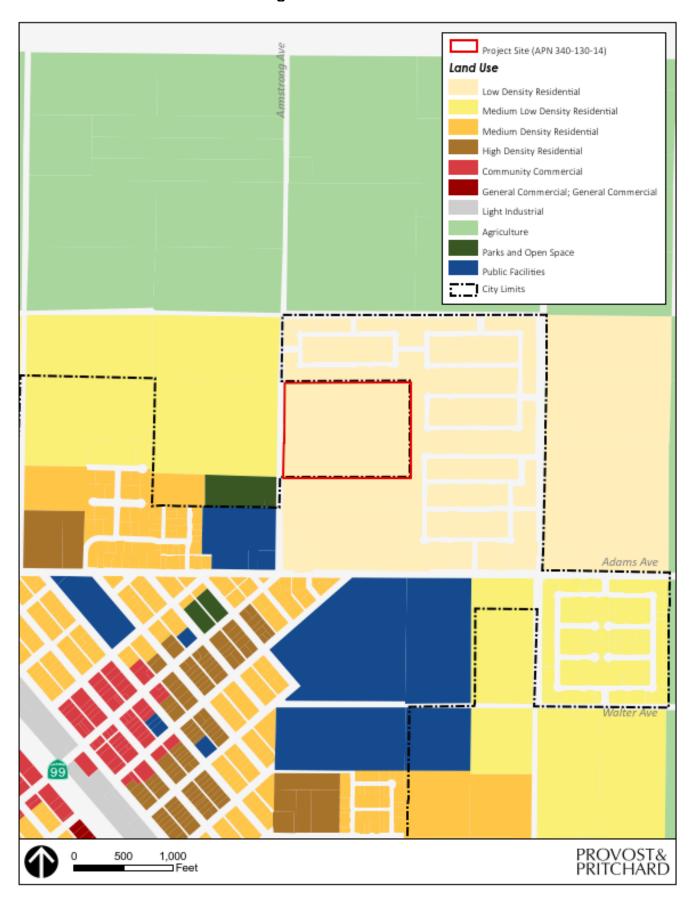
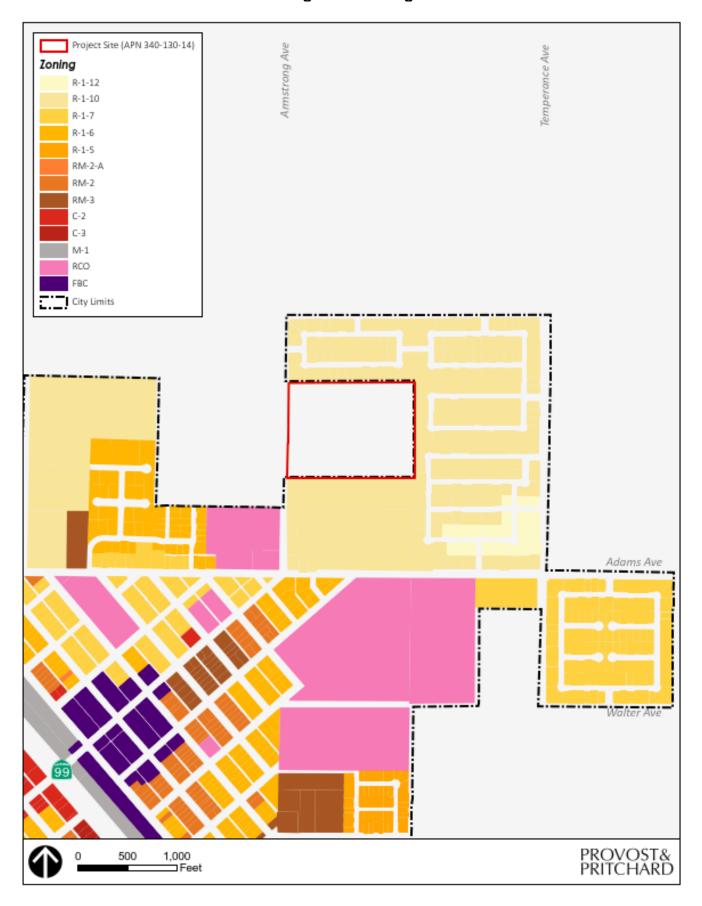
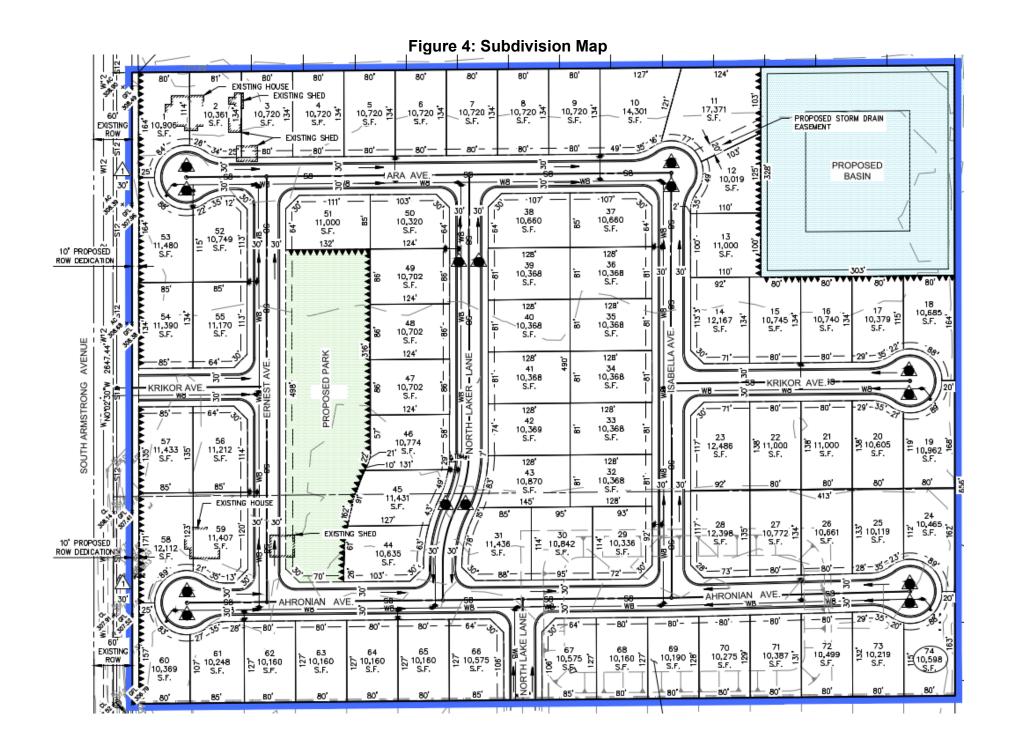


Figure 3: Zoning





#### ORDINANCE NO. 2022-02

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF FOWLER AMENDING THE OFFICIAL ZONING MAP OF THE CITY TO REFLECT A CHANGE OF ZONE FOR ASSESSOR'S PARCEL NO. 340-130-14

THE CITY COUNCIL OF THE CITY OF FOWLER DOES ORDAIN AS FOLLOWS:

<u>SECTION 1.</u> The Official Zoning Map of the City of Fowler is hereby amended to indicate Assessor's Parcel No. 340-130-14 as R-1-10 (One Family Residential – 10,000 square foot minimum lot size) as indicated in Exhibit "A" hereto.

<u>SECTION 2.</u> This Ordinance shall take effect thirty (30) days after its adoption.

<u>SECTION 3.</u> The City Clerk is further directed to cause this ordinance or a summary of this ordinance to be published once in a newspaper of general circulation published and circulated within the City of Fowler, within fifteen (15) days after its adoption. If a summary of the ordinance is published, then the City Clerk shall cause a certified copy of the full text of the proposed ordinance to be posted in the office of the City Clerk at least five (5) days prior to the City Council meeting at which the ordinance is adopted and again after the meeting at which the ordinance is adopted. The summary shall be approved by the City Attorney.

The foregoing ordinance v	vas introduced at a regular meeting of the City Council held on
	2022, and was adopted at a regular meeting of said Council
held on	, 2022, by the following vote, to wit:
AYES:	
NOES:	
ABSENT:	
ABSTAIN:	
	David Cardenas, Mayor
ATTEOT	
ATTEST:	
Aligoia vasquez, Deputy	

# RESOLUTION NO. 2529 RESOLUTION BEFORE THE CITY COUNCIL OF THE CITY OF FOWLER COUNTY OF FRESNO, STATE OF CALIFORNIA

\_\_\_\_\_

# RESOLUTION REQUESTING THAT THE LOCAL AGENCY FORMATION COMMISSION UNDERTAKE PROCEEDINGS FOR THE ANNEXATION OF TENTATIVE SUBDIVISION MAP NO. 21-0015

WHEREAS the City of Fowler desires to initiate proceedings pursuant to t

**WHEREAS**, the City of Fowler desires to initiate proceedings pursuant to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, Division 3, commencing with Government Code Section 56000 for the proposed Tentative Subdivision Map No. 21-0015 ("Marshall Estates II"); and

**WHEREAS,** the specific changes of organization consist of annexation to the City of Fowler and the Selma-Kingsburg-Fowler County Sanitation District and detachment from the Kings River Conservation District, Consolidated Irrigation District and the Fresno County Fire Protection District; and

**WHEREAS,** the territory proposed to be changed is inhabited, and on this day contains five (5) registered voters, according to information received from the County Elections Officer; and

**WHEREAS,** an illustration of the boundaries of the territory is set forth in Exhibit "A" hereto, and a map and written description accurately depicting said territory shall be forwarded to the Local Agency Formation Commission upon application; and

WHEREAS, this proposal is consistent with the City of Fowler sphere of influence; and

WHEREAS, the City of Fowler does not desire to subject the proposal to additional terms or conditions; and

**WHEREAS,** the proposed reorganization is intended to facilitate development of Marshall Estates II occupying Assessor's Parcel No. 340-130-14, which comprises approximately 29.04 acres and would constitute a logical expansion of the city limits; and

**WHEREAS,** the City Council, via Resolution No. 2529 has adopted a Mitigated Negative Declaration for the project pursuant to the California Environmental Quality Act.

NOW THEREFORE, BASED UPON THE ENTIRE RECORD OF THE PROCEEDINGS, THE COUNCIL HEREBY ADOPTS this Resolution of Application and the Local Agency Formation Commission of Fresno County is hereby requested to initiate proceedings for the Marshall Elementary School Reorganization in the manner prescribed by the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000.

Attest:		Mayor of the City C	Council
Deputy City (	Clerk	_	
adopted at a	squez, Deputy City Clerk of the City Co a meeting of the City Council of th and second by Councilme	ne City of Fowler, on the motion	on of Councilmember
2022 by the fo	following vote:		
AYES:	Councilmembers:		
NAYS:	Councilmembers:		
ABSTAIN:	Councilmembers:		
ABSENT:	Councilmembers:		

# RESOLUTION NO. 2530 RESOLUTION BEFORE THE CITY COUNCIL OF THE CITY OF FOWLER COUNTY OF FRESNO, STATE OF CALIFORNIA

\_\_\_\_\_

## RESOLUTION APPROVING TENTATIVE TRACT MAP NO. 21-0015

**WHEREAS,** Tentative Tract Map No. 21-0015 (also known as "Tentative Tract Map No. 6381") has been submitted for 29.04 acres (APN 340-130-14) located north of the northwest corner of East Adams and North Armstrong Avenues ("Property"); and

**WHEREAS,** the applicant intends to subdivide the Property and construct 74 single family homes ("Project"); and

WHEREAS, the subject application was reviewed for compliance with the Fowler Municipal Code; and

**WHEREAS,** City staff and Planning Commission recommend the City Council approve Tentative Tract Map No. 6381 as shown on Exhibit "A" and subject to the Conditions of Approval attached as Exhibit "B"; and

**WHEREAS,** the City Council reviewed the proposal and conducted a duly noticed public hearing at a regular meeting on January 4, 2022; and

**WHEREAS,** the City prepared an Initial Study and on this basis determined that the proposed project will not have significant adverse effects on the environment with the adoption of a Mitigated Negative Declaration in accordance with requirements of CEQA; and

**WHEREAS,** the City Council reviewed and considered the proposed Tentative Tract Map No. 6381, as well as the staff report, Initial Study/Mitigated Negative Declaration, and all evidence presented at the public hearing, including oral and written public testimony on the Project, and those records and documents related to the Project determined to be necessary to make an informed decision, which are incorporated herein by this reference.

**NOW, THEREFORE, BE IT RESOLVED** that the City Council of the City of Fowler, based upon the entire record of proceedings, hereby finds and determines as follows:

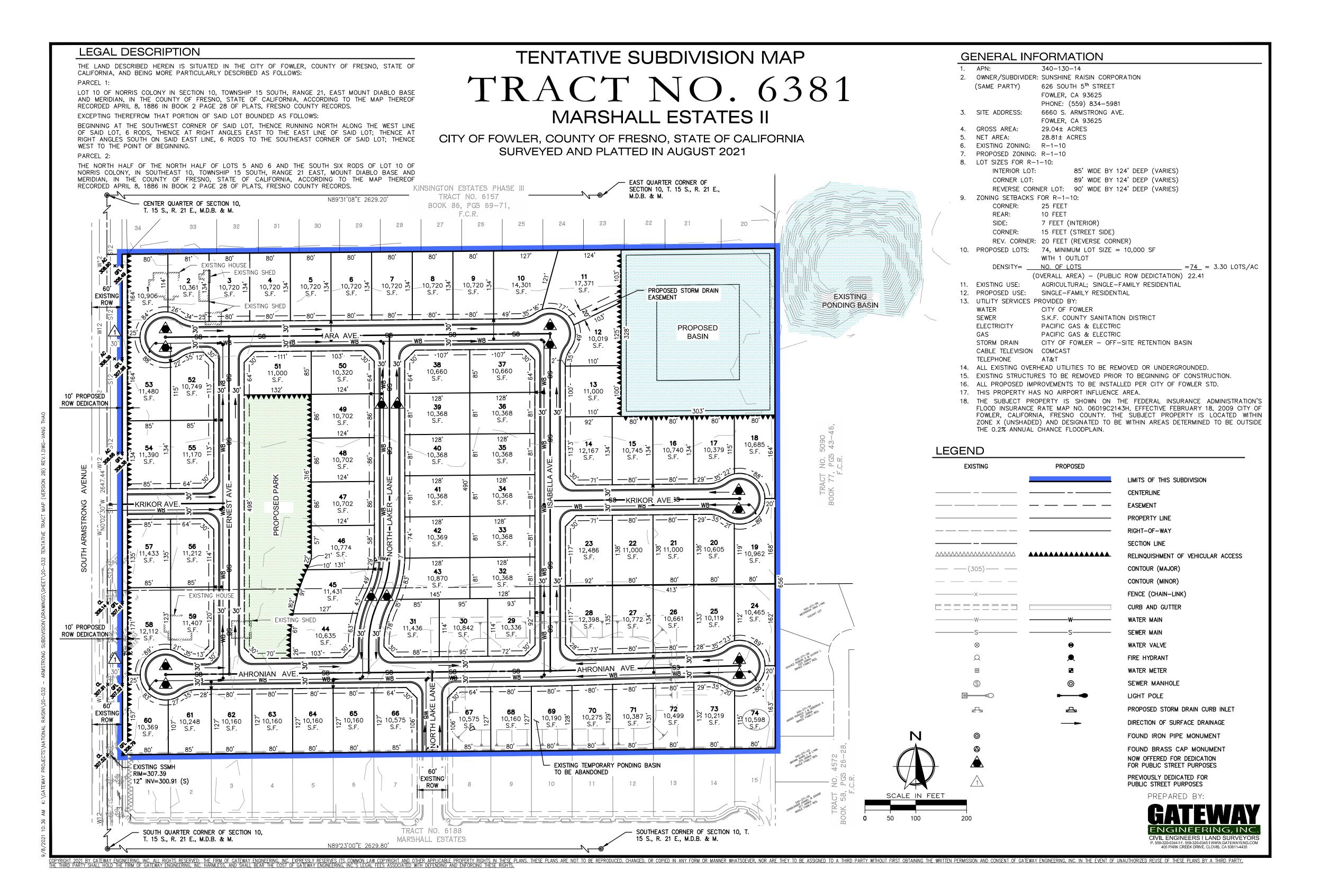
- 1. The proposed map is consistent with applicable general and specific plans.
- 2. The design or improvement of the proposed subdivision is consistent with applicable general and specific plans.
- 3. The site is physically suitable for the type of development.

- 4. The site is physically suitable for the proposed density of development.
- 5. The design of the subdivision or the proposed improvements are not likely to cause substantial environmental damage or substantially and avoidably injure a fish or wildlife habitat.
- 6. The design of the subdivision or type of improvements is not likely to cause serious public health problems.
- 7. The design of the subdivision or the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision.
- 8. These findings could not be made without the Conditions of Approval attached as Exhibit "B".
- 9. Tentative Tract Map No. 6381 as shown on Exhibit "A" is approved, subject to the Conditions of Approval attached as Exhibit "B".

PASSED, APPROVED AND ADOPTED this 4th day of January, 2022, at a regular meeting of the Fowler City Council by the following vote:

AYES: NOES: ABSTAIN: ABSENT:	
APPROVED:	
	David Cardenas, Mayor
I hereby certify that the foregoing is a full, true, and correct copy of a Reso by the City Council of the City of Fowler at a meeting thereof held on the	
ATTEST:	
Angela Vasquez, Deputy City Clerk	

## Attachment A – Tentative Tract Map No. 21-0015



# RESOLUTION NO. 2531 RESOLUTION BEFORE THE CITY COUNCIL OF THE CITY OF FOWLER COUNTY OF FRESNO, STATE OF CALIFORNIA

\_\_\_\_\_

## RESOLUTION ADOPTING A MITIGATED NEGATIVE DECLARATION FOR TENTATIVE TRACT MAP NO. 21-0015

**WHEREAS**, applications for Tentative Tract Map and Zoning Ordinance Amendment No. 21-0015 ("Project") have been submitted for APN: 340-130-14 located north of the northeast corner of East Adams and North Armstrong Avenues; and

**WHEREAS,** the subject application was deemed complete by the Fowler Planning Department and has been reviewed for compliance with the Fowler Zoning Ordinance; and

**WHEREAS,** the Project requires approval of a Tentative Tract Map and Prezone in accordance with Article 4 of the Fowler Zoning Ordinance and the Fowler Subdivision Ordinance; and

**WHEREAS,** an Initial Study/Mitigated Negative Declaration has been prepared, circulated, and made available for public comment pursuant to the California Environmental Quality Act (CEQA), Public Resources Code, sections 21000, et seq., and the Guidelines for implementation of CEQA, Title 14 California Code of Regulations, Chapter 3 sections 15000, et seq.; and

**WHEREAS,** a public hearing notice was duly published informing the public that the Project and Mitigated Negative Declaration would be considered for approval at the City Council meeting on December 7, 2021 at 7:00p.m.; and

**WHEREAS,** the City Council reviewed the proposed Project together with the Mitigated Negative Declaration at a Regular Meeting on January 4, 2022; and

**WHEREAS,** the City Council reviewed and considered the staff report, mitigated negative declaration, and all evidence in the administrative record and presented at the City Council duly noticed public hearing on December 7, 2021, which the City Council determined to be necessary to make an informed decision, including oral and written public testimony on the Project and the Mitigated Negative Declaration.

**NOW THEREFORE, BE IT RESOLVED** that the City Council of the City of Fowler, based upon the entire record of proceedings, finds and determines as follows:

- 1. The foregoing recitals are true and correct.
- 2. The Mitigated Negative Declaration, and the mitigation monitoring program set forth in Attachment A, including the mitigation measures identified therein and as described in the Mitigated Negative Declaration, is adopted.

- 3. The Initial Study and Mitigated Negative Declaration for the Project are adequate, reflect the City's independent judgment and analysis, and have been completed in compliance with CEQA and the CEQA Guidelines.
- 4. On the basis of the whole record, there is no substantial evidence that the Project will have a significant effect on the environment with mitigation measures included.
- 5. The record of these proceedings shall be contained in the Department of Planning and Community Development located at 128 S. 5th Street, Fowler, CA 93625, and the custodian of the record shall be the City Planner or other person designated by the Community Development Director.
- 6. The Community Development Director, or his/her designee, is authorized to file a notice of determination for the Project in accordance with CEQA and to pay any fees required for such filing.
- 7. The basis for the findings is detailed in the January 4, 2022 staff report, which is hereby incorporated by reference, the entire Administrative Record, as well as evidence and comments presented in connection with the Mitigated Negative Declaration.

**PASSED, APPROVED AND ADOPTED** this 4<sup>th</sup> day of January 2022, at a regular meeting of the Fowler City Council by the following vote:

AYES:	
NOES:	
ABSTAIN:	
ABSENT:	
	A PRINCIPLE
	APPROVED:
	David Cardenas, Mayor
I hereby certify that the foregoing is a full, true, and c the City Council of the City of Fowler at a meeting th	correct copy of a Resolution duly and regularly adopted by
	correct copy of a Resolution duly and regularly adopted by
the City Council of the City of Fowler at a meeting the	correct copy of a Resolution duly and regularly adopted by

### Attachment A – Initial Study

# City of Fowler Marshall Estates II

**Admin Draft Initial Study / Mitigated Negative Declaration** 

October 2021

Prepared for: City of Fowler 128 S. 5<sup>th</sup> Street Fowler, CA 93625

Prepared by: Provost & Pritchard Consulting Group 130 N. Garden Street Visalia, CA 93291



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#### **Report Prepared for:**

#### **City of Fowler**

128 S. 5th Street Fowler, CA 93625

#### Contact:

Dawn E. Marple (559) 834-3113 Ext 122

#### **Report Prepared by:**

#### **Provost & Pritchard Consulting Group**

Briza Sholars, Senior Planner, QA/QC
Jarred Olsen, Associate Planner, Project Manager, Technical Writing
Dena Giacomini, Senior Biologist/Senior Planner
Lizbeth Avitia, Wyatt Czeshinski, Ryan McKelvey, Morgan Wright, Assistant Planners, Technical Writing
Ben Toews, GIS
Jackie Lancaster, Administrative Support, Technical Writing

#### Contact:

Jarred Olsen, Associate Planner (559) 636-1166

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# Acronyms and Abbreviations

AB	
AFY	acre-feet/year
ALUCP	Airport Land Use Compatibility Plan
AQP	Air Quality Plan
BAU	Business As Usual
bcf	billion cubic feet
BPS	Best Performance Standards
Cal Fire	
Cal/OSHA	California Occupational Safety and Health Administration
CalEEMod	
CAP	
CCAP	
CDFW	
City	
CNEL	
County	Fresno County
CPUC	
CRHR	
CSLC	
CWA	
dBA	
DDW	
DOC	
DOGGR	Division of Oil, Gas and Geothermal Resources
DPM	
DPU	
DTSC	(California) Department of Toxic Substances Control
DWR	Department of Water Resources
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program

# City of Fowler Marshall Estates II

GC	Government Code
GHG	Greenhouse Gas
GIS	Geographic Information System
gpd	gallons per day
HUC	
IS	Initial Study
IS/MND	
LAFCo	Local Agency Formation Commission
Ldn	
mgd	million gallons per day
MMRP	Mitigation Monitoring and Reporting Program
MND	Mitigated Negative Declaration
MRZ	
MTCO2e	
NAAQS	National Ambient Air Quality Standards
ND	
NEPA	
NFIP	
NGVD	
NHPA	
NMFS	
NOx	
NPDES	National Pollutant Discharge Elimination System
NRCS	
NRHP	
NWI	
O3	Ozone
Pb	Lead
PC	Production-Consumption
PCB	Polychlorinated biphenyls
PG&E	Pacific Gas and Electric Company
PM <sub>10</sub>	particulate matter 10 microns in size
PM <sub>2.5</sub>	particulate matter 2.5 microns in size
ppb	parts per billion
ppm	parts per million

# City of Fowler Marshall Estates II

PRC	
RCRA	
Reclamation	United States Bureau of Reclamation
ROC	
ROV	
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCH	State Clearinghouse
SGMA	Sustainasble Groundwater Management Act
SIP	State Implementation Plan
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SO <sub>2</sub>	Sulfur Dioxide
SOI	Sphere of Influence
SOx	Sulfur Oxide
SR	State Route
SSJVIC	Southern San Joaquin Valley Information Center
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	
TCP	
TDS	total dissolved solids
TPY	Tons Per Year
USDA	United States Department of Agriculture
USFWS	
VOC	Volatile Organic Compound
μg/m3	micrograms per cubic meter

# Chapter 1 Introduction

Provost & Pritchard Consulting Group (Provost & Pritchard) has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) on behalf of the City of Fowler (City) to address the environmental effects of the proposed Marshall Estates II Project (Project). This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 *et seq.* The City is the CEQA lead agency for this proposed Project.

The site and the proposed Project are described in detail in the Project Description.

## 1.1 Regulatory Information

An Initial Study (IS) is a document prepared by a lead agency to determine whether a project may have a significant effect on the environment. In accordance with California Code of Regulations Title 14 (Chapter 3, Section 15000, et seq.)— also known as the CEQA Guidelines—Section 15064 (a)(1) states that an environmental impact report (EIR) must be prepared if there is substantial evidence in light of the whole record that the proposed project under review may have a significant effect on the environment and should be further analyzed to determine mitigation measures or project alternatives that might avoid or reduce project impacts to less than significant levels. A negative declaration (ND) may be prepared instead if the lead agency finds that there is no substantial evidence in light of the whole record that the project may have a significant effect on the environment. An ND is a written statement describing the reasons why a proposed project, not otherwise exempt from CEQA, would not have a significant effect on the environment and, therefore, why it would not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, a ND or mitigated ND shall be prepared for a project subject to CEQA when either:

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

## 1.2 **Document Format**

This IS/MND contains four chapters and four appendices. Introduction provides an overview of the proposed Project and the CEQA process. Project Description provides a detailed description of proposed

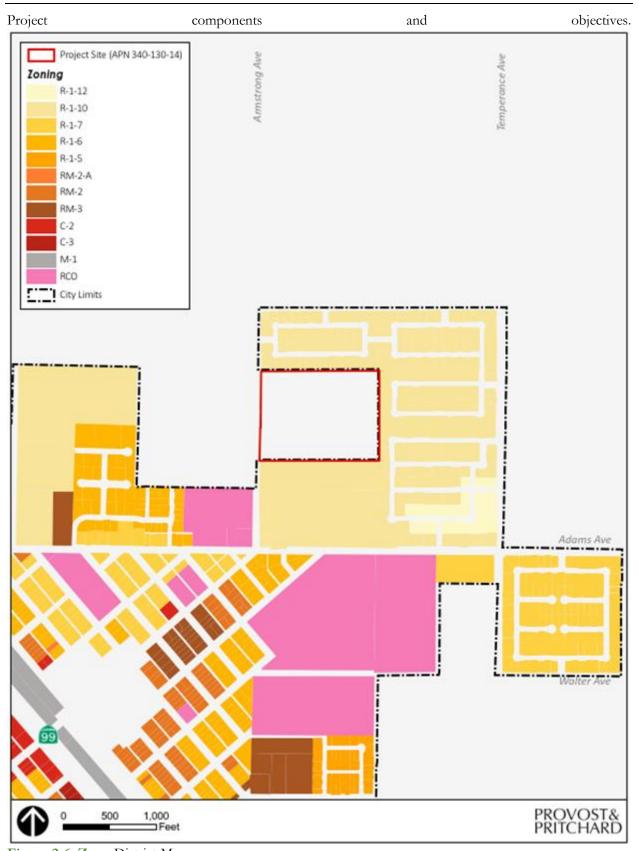


Figure 2-6. Zone District Map

Impact Analysis, presents the CEQA checklist and environmental analysis for all impact areas, mandatory findings of significance, and feasible mitigation measures. If the proposed Project does not have the potential to significantly impact a given issue area, the relevant section provides a brief discussion of the reasons why no impacts are expected. If the proposed Project could have a potentially significant impact on a resource, the issue area discussion provides a description of potential impacts, and appropriate mitigation measures and/or permit requirements that would reduce those impacts to a less than significant level. **Chapter 3** concludes with the Lead Agency's determination based upon this initial evaluation. **Mitigation Monitoring and Reporting Program** (MMRP) provides the proposed mitigation measures, implementation timelines, and the entity/agency responsible for ensuring implementation.

The following technical documents are provided at the end of this document:

Appendix A	CalEEMod Output Files
Appendix B	Biological Resources Information
Appendix C	Cultural Resources Information
Appendix D	Soils Report

# **Chapter 2 Project Description**

## 2.1 Project Background and Objectives

### 2.1.1 Project Title

National Raisin Corporation: Marshall Estates II

### 2.1.2 Lead Agency Name and Address

City of Fowler 128 S. 5th Street Fowler, CA 93625

#### 2.1.3 Contact Person and Phone Number

Lead Agency Contact Dawn E. Marple, City Planner 559-834-3113, ext. 122; Fax 559-834-0185 dmarple@ci.fowler.ca.us

## 2.1.4 **Project Location**

The Project is currently located outside the City of Fowler in central Fresno County, approximately 270 miles south of Sacramento and 150 miles north of Bakersfield (see Figure 2-1). It is on the east side of South Armstrong Avenue between East Adams and East Hogan Avenues on Assessor's Parcel Number 340-130-14, approximately one mile east of State Route 99 (SR 99).

## 2.1.5 Latitude and Longitude

The centroid of the Project area is 36°38'19"N, 119°40'15"W.

## 2.1.6 **General Plan Designation Zoning**

Table 2-1. Fowler General Plan Designation and County Zone District

Fowler General Plan Designation	Zone District
Low Density Residential	AE-20 (County), R-1-10 (City; Proposed)

## 2.1.7 **Description of Project**

#### 2.1.7.1 Project Description

National Raisin Company is proposing to subdivide approximately 29 acres of agricultural and residential land north of the northeast corner of Adams Avenue and Armstrong Avenue in Fowler, California into a 74-lot single-family residential development. The lots range between 10,160 and 17,371 square feet in size. A park will be also be constructed.

#### 2.1.7.2 Development of Subdivision

Development of the subdivision is expected to occur over a 2.5-year period with project construction beginning in 2022 and completed by mid-2024. At 3.2 persons per household, the 74-unit project will accommodate approximately 237 people.

Circulation within the site would be provided by a system of local roadways with two access points, one to Armstrong Avenue and one to Marshall Estates I (see Figure 2-4). It is proposed that the local streets be public.

A total of two (2) homes are located on the 29 acre site that would be demolished.

#### 2.1.7.3 Utilities and Electrical Services

The City of Fowler provides water service within its corporate limits, including to the Project site. The water distribution system within the Project site would be provided and maintained by the City. Sanitary sewer service, including wastewater treatment, will be provided to the Project site by the Selma-Kingsburg-Fowler (SKF) County Sanitation District. Existing water and sewer mains are located along Armstrong Avenue and will provide connections for this Project. The stormwater collection will be connected to a proposed stormwater basin being constructed at the northeast corner of the Project site.

Electrical and gas service to the Project site would be provided by PG&E. AT&T would provide telephone service and cable television service would be provided by Comcast. The Applicant will be required to extend these services to the site.

### 2.1.8 Site and Surrounding Land Uses and Setting

The Project site is located northeast of downtown Fowler in an area once dominated by agriculture but now planned for urban uses. Land uses in the vicinity consist predominantly of low- and medium-density residential, public facilities, and farmland planned for eventual urban expansion.

As illustrated in Figure 2-3, the Project site is surrounded by an existing low-density, single-family residential subdivision to the east and several single-family residential homes to the southwest. Marshall Elementary School sits across Armstrong Avenue to the west and Fowler High School is across Adams Avenue to the south. The northern border of the Project consists of currently undeveloped agricultural land that has been designated for low-density residential use, beyond which is additional existing single-family development. In addition to Marshall Elementary School and Fowler High School, there are several other schools within 0.5 miles of the Project site.

## 2.1.9 Other Public Agencies Whose Approval May Be Required

- State Water Resources Control Board
- San Joaquin Valley Air Pollution Control District
- California Public Utilities Commission
- Selma-Kingsburg-Fowler County Sanitation District
- Fresno Local Agency Formation Committee (LAFCo)

#### 2.1.10 Consultation with California Native American Tribes

Public Resources Code Section 21080.3.1, et seq. (codification of AB 52, 2013-14)) requires that a lead agency, within 14 days of determining that it will undertake a project, must notify in writing any California Native American Tribe traditionally and culturally affiliated with the geographic area of the project if that Tribe has previously requested notification about projects in that geographic area. The notice must briefly describe the project and inquire whether the Tribe wishes to initiate request formal consultation. Tribes have 30 days from receipt of notification to request formal consultation. The lead agency then has 30 days to initiate the consultation, which then continues until the parties come to an agreement regarding necessary mitigation or agree that no mitigation is needed, or one or both parties determine that negotiation occurred in good faith, but no agreement will be made.

The City has received written correspondence from the Tachi-Yokut Tribe pursuant to Public Resources Code Section 21080.3.1 requesting notification of proposed projects. On June 21,2021, the City sent the Yokut Tribe a formal Notification of a Decision to Undertake a Project, and Notification of Consultation Opportunity, including a Project description of the TSM No. 21-0015 applications. In accordance with the law, the letter provided 30 days from receipt of the letter to request consultation in writing. No request for consultation was made for the Project.

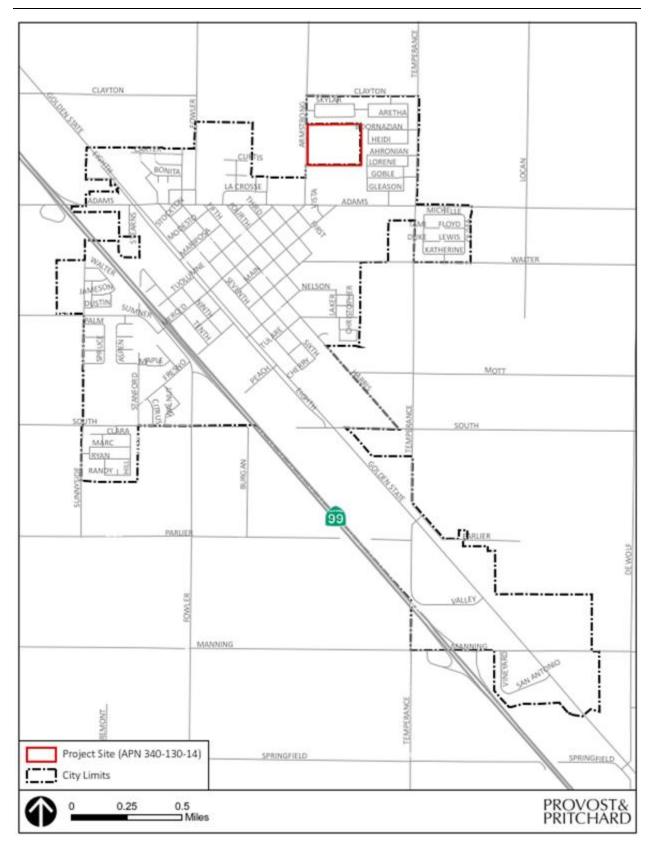


Figure 2-1. Regional Location Map

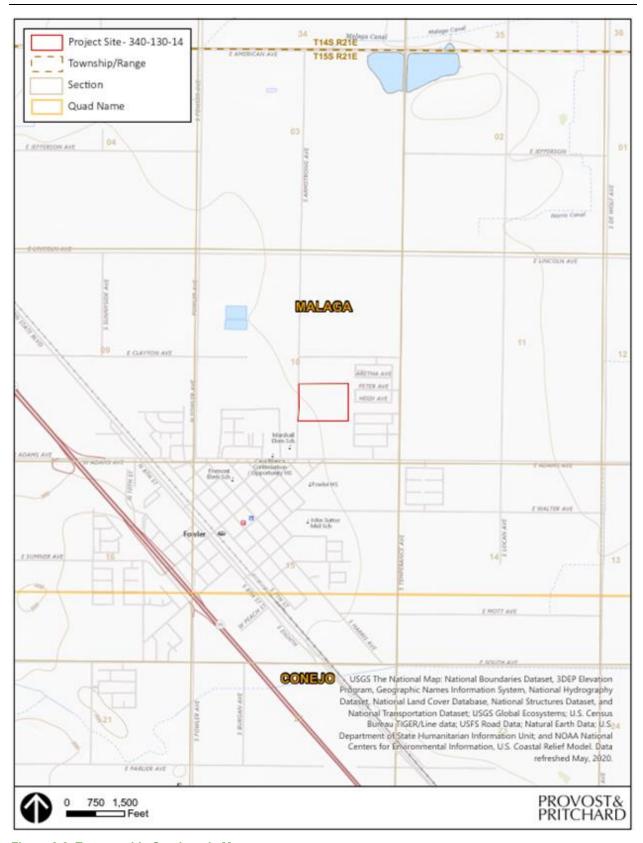


Figure 2-2. Topographic Quadrangle Map



Figure 2-3. Area of Potential Effect Map

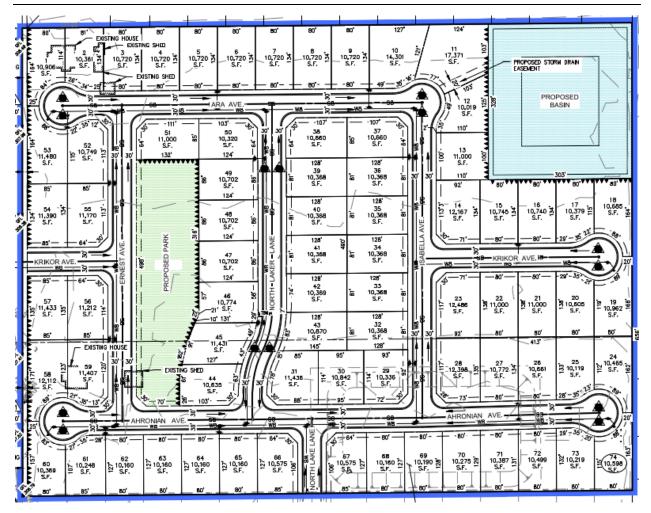


Figure 2-4. Site Plan

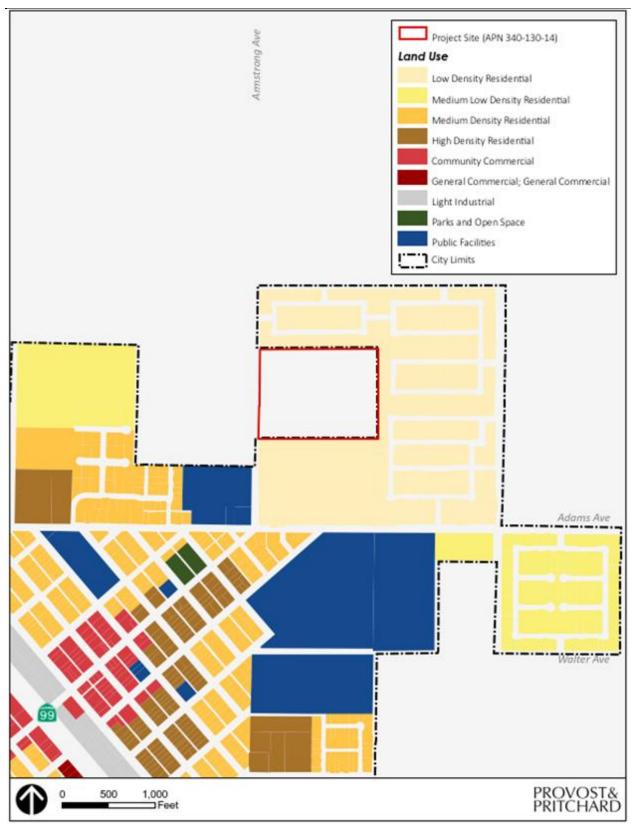


Figure 2-5. General Plan Land Use Designation Map

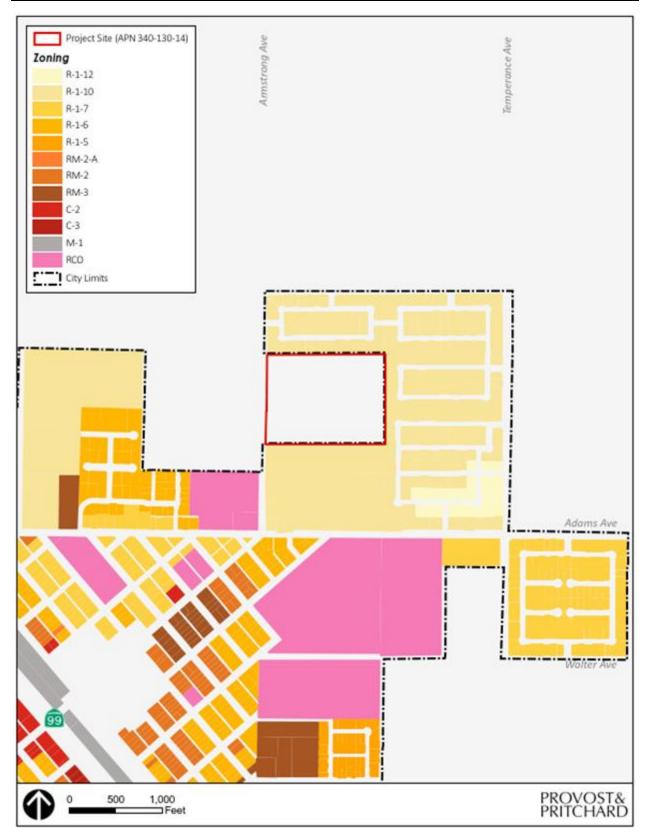


Figure 2-6. Zone District Map

# Chapter 3 Impact Analysis

## 3.1 Environmental Factors Potentially Affected

As indicated by the discussions of existing and baseline conditions, and impact analyses that follow in this Chapter, environmental factors not checked below would have no impacts or less than significant impacts resulting from the project. Environmental factors that are checked below would have potentially significant impacts resulting from the project. Mitigation measures are recommended for each of the potentially significant impacts that would reduce the impact to less than significant.

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

The analyses of environmental impacts here in **Chapter 3 Impact Analysis** are separated into the following categories:

Potentially Significant Impact. This category is applicable if there is substantial evidence that an effect may be significant, and no feasible mitigation measures can be identified to reduce impacts to a less than significant level. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

Less than Significant with Mitigation Incorporated. This category applies where the incorporation of mitigation measures would reduce an effect from a "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measure(s), and briefly explain how they would reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced).

Less than Significant Impact. This category is identified when the proposed Project would result in impacts below the threshold of significance, and no mitigation measures are required.

No Impact. This category applies when a project would not create an impact in the specific environmental issue area. "No Impact" answers do not require a detailed explanation if they are adequately supported by the information sources cited by the lead agency, which show that the impact does not apply to the specific project (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

## 3.2 Aesthetics

**Table 3-1. Aesthetics Impacts** 

	able 5-1. Aesthetics impacts						
	Aesthetics Impacts						
	Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact		
a)	Have a substantial adverse effect on a scenic vista?			$\boxtimes$			
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?			$\boxtimes$			
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?						

## 3.2.1 Environmental Setting and Baseline Conditions

The Project site is located along the floor of the San Joaquin Valley in northeast Fowler, which lies along State Route 99. The predominant landscape feature of the San Joaquin Valley is a wide variety of agricultural land. Regional views from the valley floor are generally limited due to the flatness of the region, however, on clear days the Sierra Nevada Mountains are visible to the east. The City is characterized as a freestanding city with small town atmosphere surrounded by agricultural land. As one of the cities along the Fresno County Blossom Trail, Fowler offers scenic views of blossoming orchards from February to March.

The Project site currently contains two homes, 17 acres of grapes, and vacant land. The site would be visible from the nearby Marshall Elementary School and from the residences to the north and east. The Project lies within an area designated as low density residential. The surrounding area is considered rural and low density, with agricultural land developed with a single-family residence to the west of the Project site. There are no scenic vistas on the Project site or in the vicinity. There are no designated State scenic highways within the City or surrounding area. In Fresno County, a portion of State Route 180 (SR 180) has been officially identified by Caltrans as a "designated State Scenic Highway," however, that segment is approximately 18 miles northeast of the Project site.

## 3.2.2 Impact Assessment

#### a) Would the project have a substantial adverse effect on a scenic vista?

Less than Significant Impact. Scenic features in the vicinity may include the vast expanse of agricultural uses. The Project site is not within the viewshed of any water features or scenic vistas. Furthermore, the Project site does not stand out from its surroundings in any remarkable fashion. Impacts would be less than significant.

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

No Impact. In Fresno County, a portion of State Route 180 (SR 180) has been officially identified by Caltrans as a "designated State Scenic Highway." However, Project activities would occur approximately 18 miles southwest and do not have the potential to affect the highway. There would be no impact.

#### 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 view are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant Impact. The existing visual character of the Project site and its surroundings consist of urban development, schools, and agricultural land. To the west, the Project site is surrounded by agricultural and rural infrastructure such as vineyards, irrigation standpipes, and wells. It could be argued that the development of a subdivision could visually degrade the visual character of the surrounding agricultural land. However, the Project would create development consistent with the City of Fowler General Plan and would likely increase the quality of the visual character. Furthermore, the residential development will offer attractive landscaping and architectural design to reduce any visual effect to the surrounding properties and conform with the existing character of the neighboring community. Any impacts would be less than significant.

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

Less than Significant Impact. Implementation of the Project would create new sources of light typical of urban development. Nighttime lighting levels would increase over current levels, as sources of new and nighttime lighting and illumination would include, but are not necessarily limited to, lighting from the new residential use, lights associated with vehicular travel (i.e., car headlights), and street lighting. Increased nighttime lighting and illumination could result in adverse effects to adjacent land uses through the "spilling over" of light into these areas and "sky glow" conditions. However, all future development under the Project would have to comply with Title 9 of the City of Fowler Zoning Ordinance, which ensures that proposed lighting is so arranged as to deflect the light away from adjoining properties. This would assist in reducing potential impacts associated with daytime glare and nighttime light. As such, any potential light and glare would be reduced to a less than significant impact.

## 3.3 Agriculture and Forestry Resources

Table 3-2. Agriculture and Forest Impacts

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

## 3.3.1 Environmental Setting and Baseline Conditions

The Project is located in California's central San Joaquin Valley in Fresno County and more specifically within the City of Fowler. Fresno County is located within California's agricultural heartland. In 2019, Fresno County ranked was the top agricultural county in the State in the annual market value of farm products.<sup>1</sup>

A wide range of commodities are grown in the county, with major production of milk, poultry, livestock, and other animal commodities, row crops, nuts and fruit tree crops, and vegetables. Rich soil; irrigation water; Mediterranean climate; and steady access to local, national, and global markets make this possible.

Farmland Mapping and Monitoring Program (FMMP): The FMMP produces maps and statistical data used for analyzing impacts to California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. The maps are updated every two years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance.

The California DOC's FMMP is a non-regulatory program that produces "Important Farmland" maps and statistical data used for analyzing impacts on California's agricultural resources. The Important Farmland maps

<sup>&</sup>lt;sup>1</sup> USDA. California County Agricultural Commissioners' Reports 2020. <a href="https://www.cdfa.ca.gov/Statistics/PDFs/2020">https://www.cdfa.ca.gov/Statistics/PDFs/2020</a> Ag Stats Review.pdf Accessed 1 July 2021.

identify eight land use categories, five of which are agriculture related: prime farmland, farmland of statewide importance, unique farmland, farmland of local importance, and grazing land – rated according to soil quality and irrigation status. Each is summarized below:

- PRIME FARMLAND (P): Farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- FARMLAND OF STATEWIDE IMPORTANCE (S): Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

As demonstrated in Figure 3-1, the FMMP for Fresno County designates the Project site as Prime Farmland and Farmland of Statewide Importance.

### 3.3.2 Impact Assessment

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?

Less Than Significant Impact. As of 2018, the Project site was designated primarily as "Prime Farmland", with a small section of "Farmland of Statewide Importance", as shown on the Farmland Mapping and Monitoring Program maps. Although the Project site is designated as "Prime Farmland," the conversion of the approximately 29 acres of farmland within City limits is not considered a significant impact. This area has been planned and zoned for urban development since the City of Fowler General Plan was adopted in 1976. As illustrated in Figure 3-1, there is no shortage of Prime Farmland in the Central Valley. The 29-acre Project site represents approximately 0.004 percent of Fresno County's 678,103 acres of Prime Farmland. Impacts would be less than significant.

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

No Impact. Although the Project site has historically been used for agriculture, it is not subject to a Williamson Act contract, nor are the adjacent properties. The Project site was designated for low density residential uses in the City of Fowler General Plan and will be zoned as low-density residential following its annexation to the City. The Project site is surrounded by urban neighborhood and schools in all directions. Implementation of the Project will not conflict with existing zoning for agricultural use or a Williamson Act contract. There will be no impact.

- 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))?
- d) Would the project result in the loss of forest land or conversion of forest land to non-forest use? c-d) No Impact. There are no forest lands or timberlands within the Project site or vicinity. There will be no impact.
- e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. As discussed in Impact Assessments II a-d, implementation of the Project would not impinge on the existing agricultural productivity in the area nor would it result in significant conversion of Farmland to

## Chapter 3 Impact Analysis – Agriculture and Forestry Marshall Estates II

non-agricultural use or conversion of forest land to non-forest use. Although the site has been used for agriculture in the past, it is not currently in production. Surrounding areas are comprised of urban neighborhoods and schools.

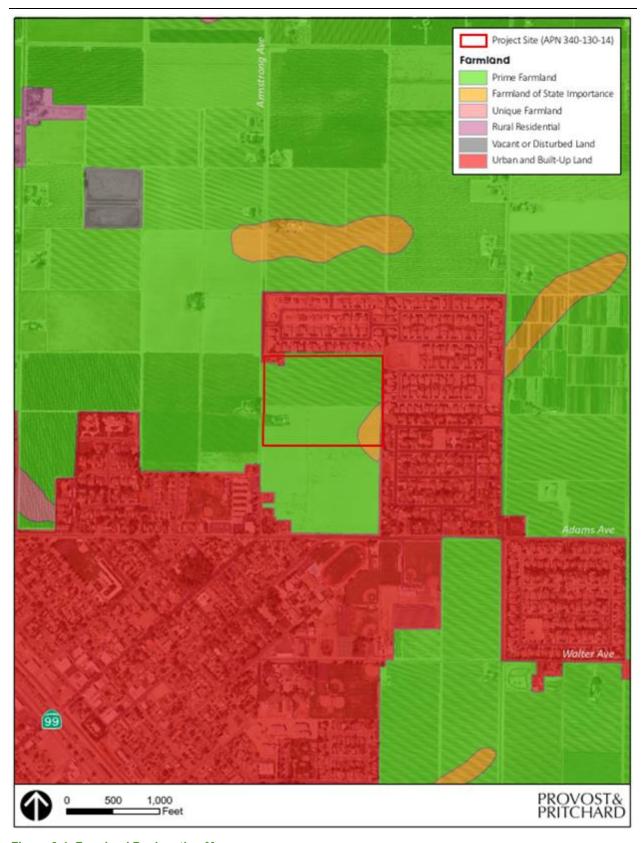


Figure 3-1. Farmland Designation Map

## 3.4 Air Quality

Table 3-3. Air Quality Impacts

Tubic	7-5. All Quality illipacts					
	Air Quality Impacts					
man	Where available, the significance criteria established by the applicable air quality agement district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	
a)	Conflict with or obstruct implementation of the applicable air quality plan?			$\boxtimes$		
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?			$\boxtimes$		
c)	Expose sensitive receptors to substantial pollutant concentrations?			$\boxtimes$		
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			$\boxtimes$		

### 3.4.1 Environmental Setting and Baseline Conditions

#### 3.4.1.1 Regulatory Attainment Designations

Under the CCAA, the CARB is required to designate areas of the State as attainment, nonattainment, or unclassified with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of the classifications. An "unclassified" designation signifies that the data does not support either an attainment or nonattainment designation. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The EPA designates areas for ozone, CO, and NO<sub>2</sub> as "does not meet the primary standards," "cannot be classified," or "better than national standards." For SO<sub>2</sub>, areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than national standards." However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used. The EPA uses the same sub-categories for nonattainment status: serious, severe, and extreme. In 1991, EPA assigned new nonattainment designations to areas that had previously been classified as Group I, II, or III for PM<sub>10</sub> based on the likelihood that they would violate national PM<sub>10</sub> standards. All other areas are designated "unclassified."

The State and national attainment status designations pertaining to the SJVAB are summarized in **Appendix A.** The SJVAB is currently designated as a nonattainment area with respect to the State PM<sub>10</sub> standard, ozone, and PM<sub>2.5</sub> standards. The SJVAB is designated nonattainment for the NAAQS 8-hour ozone and PM<sub>2.5</sub> standards. On September 25, 2008, the EPA re-designated the San Joaquin Valley to attainment status for the PM<sub>10</sub> NAAQS and approved the PM<sub>10</sub> Maintenance Plan.

Table 3-4. Summary of Ambient Air Quality Standards and Attainment Designation

	Averaging	California Standard	s*	National Standards*		
Pollutant	Averaging Time	Concentration*	Attainment Status	Primary	Attainment Status	
Ozone	1-hour	0.09 ppm	Nonattainment/ Severe	-	No Federal Standard	
(O <sub>3</sub> )	8-hour	0.070 ppm	Nonattainment	0.075 ppm	Nonattainment (Extreme)**	
Particulate Matter	AAM	20 μg/m³	Nonattainment	_	Attainment	
(PM <sub>10</sub> )	24-hour	50 μg/m³	Nonattaininent	150 μg/m³	Attairinent	
Fine Particulate	AAM	12 μg/m³	Nonattainment	12 μg/m³	Nonettainment	
Matter (PM <sub>2.5</sub> )	24-hour	No Standard	Nonattainment	35 μg/m <sup>3</sup>	Nonattainment	
	1-hour	20 ppm		35 ppm		
Carbon Monoxide	8-hour	9 ppm	Attainment/	9 ppm	Attainment/	
(CO)	8-hour (Lake Tahoe)	6 ppm	Unclassified	_	Unclassified	
Nitrogen Dioxide	AAM	0.030 ppm	Attainment	53 ppb	Attainment/	
$(NO_2)$	1-hour	0.18 ppm		100 ppb	Unclassified	
	AAM	-			Attainment/ Unclassified	
Sulfur Dioxide	24-hour	0.04 ppm	Attainment			
(SO <sub>2</sub> )	3-hour	_	Attairinont	0.5 ppm		
	1-hour	0.25 ppm		75 ppb		
	30-day Average	1.5 μg/m³		_		
Lead (Pb)	Calendar Quarter	_	Attainment		No Designation/	
. ,	Rolling 3-Month Average	-		0.15 μg/m³	Classification	
Sulfates (SO <sub>4</sub> )	24-hour	25 μg/m <sup>3</sup>	Attainment			
Hydrogen Sulfide (H <sub>2</sub> S)	1-hour	0.03 ppm (42 μg/m³)	Unclassified			
Vinyl Chloride (C <sub>2</sub> H <sub>3</sub> Cl)	24-hour	0.01 ppm (26 μg/m³)	Attainment	No Federal Standards		
Visibility-Reducing Particle Matter	8-hour	Extinction coefficient: 0.23/km-visibility of 10 miles or more due to particles when the relative humidity is less than 70%.	Unclassified			

<sup>\*</sup> For more information on standards visit: https://ww3.arb.ca.gov/research/aaqs/aaqs2.pdf

Source: CARB 2015; SJVAPCD 2015

<sup>\*\*</sup> No Federal 1-hour standard. Reclassified extreme nonattainment for the Federal 8-hour standard [date].

<sup>\*\*\*</sup>Secondary Standard

### 3.4.2 Impact Assessment

This analysis was prepared using CalEEmod, Version 2020.4.0 for the proposed Project in September 2021. The CalEEMod Output Files can be found in **Appendix A**. The sections below detail the methodology of the air quality and greenhouse gas emissions analysis.

#### 3.4.2.1 Short-Term Construction-Generated Emissions

Short-term construction emissions associated with the Project were calculated using CalEEmod, Version 2020.4.0. The emissions modeling includes emissions generated by off-road equipment, haul trucks, and worker commute trips. Emissions were quantified based on anticipated construction schedules and construction equipment requirements provided by the Project applicant. All remaining assumptions were based on the default parameters contained in the model. Localized air quality impacts associated with the Project would be minor and were qualitatively assessed. Modeling assumptions and output files are included in Appendix A.

#### 3.4.2.2 Long-Term Operational Emissions

Long-term operational emissions utilized default assumptions, as well as newer vehicular trip generation rates, default values provided by the SJVAPCD, and the implementation of SJVAPCD rules. Modeling assumptions and output files are included in **Appendix A**.

#### 3.4.2.3 Thresholds of Significance

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

Short-Term Emissions of Particulate Matter (PM<sub>10</sub>): Construction impacts associated with the proposed Project would be considered significant if the feasible control measures for construction in compliance with Regulation VIII as listed in the SJVAPCD guidelines are not incorporated or implemented, or if project-generated emissions would exceed 15 tons per year (TPY).

Short-Term Emissions of Ozone Precursors (ROG and NOX): Construction impacts associated with the proposed Project would be considered significant if the project generates emissions of Reactive Organic Gases (ROG) or NO<sub>X</sub> that exceeds 10 TPY.

Long-Term Emissions of Particulate Matter (PM<sub>10</sub>): Operational impacts associated with the proposed Project would be considered significant if the project generates emissions of PM<sub>10</sub> that exceed 15 TPY.

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

Conflict with or Obstruct Implementation of Applicable Air Quality Plan: Due to the region's nonattainment status for ozone, PM<sub>2.5</sub>, and PM<sub>10</sub>, if the project-generated emissions of either of the ozone precursor pollutants (i.e., ROG and NO<sub>x</sub>) or PM<sub>10</sub> would exceed the SJVAPCD's significance thresholds, then the project would be considered to conflict with the attainment plans. In addition, if the project would result in a change in land use and corresponding increases in vehicle miles traveled, the project may result in an increase in vehicle miles traveled that is unaccounted for in regional emissions inventories contained in regional air quality control plans.

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

Toxic Air Contaminants: Exposure to toxic air contaminants (TAC) would be considered significant if the probability of contracting cancer for the Maximally Exposed Individual (i.e., maximum individual risk) would exceed 20 in 1 million or would result in a Hazard Index greater than 1.

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

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

Less than Significant Impact. As noted in Impact Assessments impact-b and impact-c below, implementation of the Project would not result in short-term or long-term increases in emissions that would exceed applicable thresholds of significance. Projects that do not exceed the recommended thresholds would not be considered to conflict with or obstruct the implementation of applicable air quality plans. Impacts would be less than significant.

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

Less than Significant Impact. Construction-generated emissions are temporary in duration, site improvements and construction of the homes will take place over 2.5 years. The construction of the Project would result in the temporary generation of emissions associated with site grading and excavation, motor vehicle exhaust associated with construction equipment and worker trips, as well as the movement of construction equipment on unpaved surfaces. Estimated construction-generated emissions and operational emissions are summarized in Table 3-5. Operational emissions would occur from vehicular trips, area sources such as fireplaces, and energy sources from the combustion of natural gas. These emissions are summarized in Table 3-6.

Table 3-5. Unmitigated Short-Term Construction-Generated Emissions of Criteria Air Pollutants

	Annual Emissions (Tons/Year) (1)					
Source	ROG	NO <sub>X</sub>	СО	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
2021	0.1327	1.3670	0.8770	0.2197	0.0597	0.0016
2022	0.2583	2.3675	2.3824	0.2142	0.1390	0.0044
2023	0.4928	1.7013	2.0144	0.1113	0.0845	0.0036
2024	0.2027	0.0086	0.0134	0.0007	0.0005	0.0000
Maximum Annual Proposed Project Emissions:	0.4928	2.3675	2.3824	0.2197	0.139	0.0044
SJVAPCD Significance Thresholds:	10	10	100	15	15	27
Exceed SJVAPCD Thresholds?	No	No	No	No	No	No

Emissions were quantified using CalEEmod Output Files Version 2020.4.0. Refer to Appendix A for modeling results and assumptions.
 Totals may not sum due to rounding.

Table 3-6. Unmitigated Long-Term Operational Emissions

	Annual Emissions (Tons/Year) (1)					
Source	ROG	NOx	СО	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
Maximum Annual Project Emissions:	0.9165	0.5017	3.0499	0.7551	0.2133	0.0076
SJVAPCD Significance Thresholds:	10	10	100	15	15	27
Exceed SJVAPCD Thresholds?	No	No	No	No	No	No

Emissions were quantified using CalEEmod Output Files Version 2020.4.0. Refer to Appendix A for modeling results and assumptions.
Totals may not sum due to rounding.

As Project emissions will not exceed established thresholds, impacts would be less than significant.

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

Less than Significant Impact. Section 3 of the SJVAPCD Guide for Assessing and Mitigating Air Quality Impacts defines a sensitive receptor as a location where human populations, especially children, seniors, and sick persons are present and where there is a reasonable expectation of human exposure to pollutants. Sensitive receptors normally refer to people with heightened sensitivity to localized, rather than regional pollutants. The Project does not include any project components identified by the California Air Resources Board that could potentially impact any sensitive receptors. These include heavily traveled roads, distribution centers, fueling stations and dry cleaning operations. Therefore, the Project would not expose sensitive receptors to substantial pollutant concentrations. There would be a less than significant impact.

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

Less than Significant Impact. Implementation of the Project would not result in long-term emissions of odors. However, construction would involve the use of a variety of gasoline- or diesel-powered equipment that would emit exhaust fumes. Similarly, infrequent use of the diesel-powered emergency back-up generator may occasionally produce an odorous exhaust. Exhaust fumes, particularly diesel exhaust, may be considered objectionable by some people. The Project is located within an area dominated by agricultural production, which includes the use of diesel-powered equipment and various odorous chemicals on a regular basis. Construction activities would be short-term in nature, as would be the infrequent use of the emergency generator. Conditions created by Project-related activities would not vary substantially from the baseline conditions routinely experienced onsite and in the vicinity. Impacts would be less than significant.

## 3.5 **Biological Resources**

Table 3-7. Biological Resources Impacts

lable	able 3-7. Biological Resources Impacts								
	Biological Resources Impacts								
	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?								
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 U.S. 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?								

## 3.5.1 Environmental Setting and Baseline Conditions

The agricultural community of Fowler which includes the Project site lies within the lower San Joaquin Valley, part of the Great Valley of California. The Valley is bordered by the Sierra Nevada Mountain Ranges to the east, the Coast Ranges to the west, the Klamath Mountains and Cascade Range to the north, and the Transverse Ranges and Mojave Desert to the south.

The approximately 29-acre Project site has historically been used for agricultural production, the site currently consists of recently-disced, barren, ruderal land on the southern portion and grape vines on the northern portion. The Project area is bordered by urban development to the north and east, agricultural land to the west, and more recently-disced, barren, ruderal land immediately south. (see **Figure 2-3**) Soils in the Project APE consist of Hesperia fine sandy loam, Exeter loam, and Hanford sandy loam, which is typically dry from early

May until early November, unless irrigated. These types of soils are moderately well drained and ideal for growing agricultural crops.

Adjacent land uses consist of residential homes and public school facilities. The City is located within the Kennedy Pond watershed; Hydrologic Unit Code (HUC): 180300090206. <sup>2</sup> The San Joaquin River and the Kings River are the two principal river systems within this watershed and the San Joaquin Valley, and the City is located approximately 18 miles south of the San Joaquin River and 9 miles west of the Kings River. There are no tributaries or distributaries located within the site boundaries or adjacent to the site.

As part of a desktop analysis of potential Project-related impacts to biological resources, on September 13, 2021, a thorough search of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) for published accounts of special status plant and animal species was conducted for the Malaga 7.5-minute quadrangle that contains the Project site in its entirety, and for the eight surrounding quadrangles: Fresno North, Clovis, Round Mountain, Fresno South, Sanger, Caruthers, Conejo, and Selma. These species, and their potential to occur within the Project area are listed in **Table 3-8** and **Table 3-9** on the following pages. Raw data obtained from CNDDB is available in **Appendix B** at the end of this document. Other sources of information utilized in the preparation of this analysis included the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Vascular Plants of California, CalFlora's online database of California native plants, the Jepson Herbarium online database (Jepson eFlora), United States Fish and Wildlife Service (USFWS) Environmental Conservation Online System (ECOS), the NatureServe Explorer online database, the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Plants Database, CDFW California Wildlife Habitat Relationships (CWHR) database, ebird.org, and the California Herps online database.

Table 3-8. List of Special Status Animals with Potential to Occur Onsite and/or in the Vicinity

Species	Status	Habitat	Occurrence on Project Site
American badger (Taxidea taxus)	CSC	Grasslands, savannas, and mountain meadows near timberline are preferred. Most abundant in drier open spaces of shrub and grassland. Burrows in soil.	Unlikely - This species prefers uncultivated grasslands with friable soils for burrowing. Friable soils and ground squirrel population may be present within the APE, but the years of cultivation and frequent disturbance would generally make the site unsuitable for this species. The most recent observation of this species was recorded in 1987 north of the Project site.
burrowing owl (Athene cunicularia)	CSC	Resides in open, dry annual or perennial grasslands, deserts, and scrublands with low growing vegetation. Nests underground in existing burrows created by mammals, most often ground squirrels.	Possible - The disturbed habitats of the APE would Generally be unsuitable for this species; however, if the fallowed portion of the APE is not maintained, this species may use the fallowed land to form burrows.
California glossy snake (Arizona elegans occidentalis)	CSC	Inhabits arid scrub, rocky washes, grasslands, and chaparral. Prefers open areas with loose soil for easy burrowing.	Unlikely - The disturbed habitats of the APE are unsuitable for this species. Furthermore, the Project area is outside of the known range of this species. The nearest known occurrence of this species was recorded approximately 9 miles northwest of the Project area in 1946.

<sup>&</sup>lt;sup>2</sup> EPA Waters GeoViewer. <a href="https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=ada349b90c26496ea52aab66a092593b">https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=ada349b90c26496ea52aab66a092593b</a> Accessed 13 September 2021

Species	Status	Habitat	Occurrence on Project Site
California tiger	FT, CT,	Requires vernal pools or seasonal	<b>Absent</b> - The disturbed habitats of
salamander central	CWL	ponds for breeding and small	the APE and surrounding lands are
California DPS		mammal burrows for aestivation.	generally unsuitable for this species.
(Ambystoma		Generally found in grassland and	Vernal pool habitat suitable for
californiense)		oak savannah plant communities in	breeding is absent from the APE.
,		central California from sea level to	0
		1500 feet in elevation.	
coast horned lizard	CSC	Found in grasslands, coniferous	<b>Absent</b> - The disturbed habitats of
(Phrynosoma		forests, woodlands, and chaparral,	the APE are unsuitable for this
blainvillii)		primarily in open areas with patches	species. The nearest known
,		of loose, sandy soil and low-lying	occurrence of this species was
		vegetation in valleys, foothills, and	recorded approximately 9 miles
		semi-arid mountains. Frequently	northwest of the Project area over
		found near ant hills and along dirt	100 years ago.
		roads in lowlands along sandy	, 0
		washes with scattered shrubs.	
Crotch bumble bee	CCE	Occurs throughout coastal	<b>Unlikely</b> – The disturbed habitats of
(Bombus crotchii)		California, as well as east to the	the APE are unsuitable for this
,		Sierra-Cascade crest, and south in to	species. The last recorded date site
		Mexico. Food plant genera include	last seen was April 29, 1899, and the
		Antirrhinum, Phacelia, Clarkia,	exact location is unknown.
		Dendromecon, Eschscholzia, and	
		Eriogonum.	
double-crested	CWL	Colonial nester on coastal cliffs,	<b>Absent</b> – The disturbed habitats of
cormorant		offshore islands, and along lake	the APE are unsuitable for this
(Phalacrocorax		margins in the interior of the state.	species. This species needs to be
auratus)		Nests along coast on sequestered	near a water source which is also
		islets, usually on ground with	absent from the APE. The last
		sloping surface, or in tall trees along	recorded date site was in May 2012 in
		lake margins.	the vicinity of Fresno.
Fresno kangaroo rat	FE, CE	An inhabitant of alkali sink open	Unlikely The highly disturbed
(Dipodomys		grassland environments in western	habitats of the APE and surrounding
nitratoides exilis)		Fresno County. Prefers bare,	lands are unsuitable for this species.
		alkaline, clay-based soils subject to	The nearest known occurrence of
		seasonal inundation with more	this species was recorded in the
		friable soil mounds around shrubs	Fresno area over 100 years ago. This
		and grasses.	historical observation has since been
			updated to "extirpated" in the
			CNDDB.
least Bell's vireo	FE, CE	This migratory species breeds in	<b>Absent</b> - The APE is outside of the
(Vireo bellii pusillus)		southern California. Breeding	known current range of this species.
		habitat consists of dense, low,	Riparian habitat is absent from the
		shrubby, riparian vegetation in the	Project site and surrounding areas.
		vicinity of water or dry river	
		bottoms. By the early 1980s, this	
		species was extirpated from most of	
		its historic range in California,	
		including the Central Valley. This	
		species now occurs exclusively along	
		the coast of southern California	
		(USFWS, 1998).	
northern California	CSC	Found primarily underground,	Unlikely - The disturbed habitats of
legless lizard (Anniella		burrowing in loose, sandy soil.	the APE are unsuitable for this
pulchra)		Forages in loose soil and leaf litter	species. The nearest known
		during the day. Occasionally	occurrence of this species was

Species	Status	Habitat	Occurrence on Project Site
		observed on the surface at dusk and	recorded approximately 9 miles
		night.	northwest of the Project APE over
pallid bat (Antrozous pallidus)	CSC	Found in grasslands, chaparral, and woodlands, where it feeds on ground- and vegetation-dwelling arthropods, and occasionally takes insects in flight. Prefers to roost in rock crevices, but may also use tree cavities, caves, bridges, and other man-made structures.	Possible - Roosting habitat is possible in the existing trees and buildings around the APE; however, foraging habitat is marginal, at best. The nearest known occurrence of this species was recorded in 1909 in the vicinity of Fresno.
San Joaquin kit fox (Vulpes macrotis mutica)	FE, CT	Underground dens with multiple entrances in alkali sink, valley grassland, and woodland in valleys and adjacent foothills.	Unlikely - The highly disturbed habitats of the APE and fragmentation of the surrounding lands are generally unsuitable for this species. The Project is located approximately 60 miles east of the nearest known core population in Ciervo-Panoche Natural Area. Although some populations of San Joaquin Kit Fox in other parts of California have adapted to an urbanized environment, modern kit fox occurrences are locally scarce. At most, this species could pass through the APE during dispersal movements.
Swainson's hawk (Buteo swainsoni)	СТ	Nests in large trees in open areas adjacent to grasslands, grain or alfalfa fields, or livestock pastures suitable for supporting rodent populations.	Possible - Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations. There are trees large enough for nesting surrounding the APE within a 0.5-mile radius that could serve as suitable habitat for this species
tricolored blackbird (Agelaius tricolor)	CT, CSC	Nests colonially near fresh water in dense cattails or tules, or in thickets of riparian shrubs. Forages in grassland and cropland. Large colonies are often found on dairy farm forage fields.	Absent - Suitable nesting and foraging habitat is absent from the APE and surrounding lands.
valley elderberry longhorn beetle (Desmocerus californicus dimorphus)	FT	Lives in mature elderberry shrubs of the Central Valley and foothills. Adults are active March to June.	Unlikely – Due to the high disturbance of the area and maintained landscape, suitable elderberry habitat is unlikely to be found within the APE.
vernal pool fairy shrimp (Branchinecta lynchi)	FT	Occupies vernal pools, clear to tea- colored water, in grass or mud- bottomed swales, and basalt depression pools.	Absent - Suitable vernal pool habitat for this species is absent from the APE and surrounding lands. The existing soil matrix does not support pooling.
western mastiff bat (Eumops perotis californicus)	CSC	Found in open, arid to semi-arid habitats, including dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine	Possible - Roosting habitat is possible in the existing trees and buildings around the APE; however, foraging habitat is marginal, at best.

Species	Status	Habitat	Occurrence on Project Site
		forest, grassland, and agricultural	The nearest known occurrence of
		areas, where it feeds on insects in	this species was recorded
		flight. Roosts most commonly in	approximately 6 miles west of the
		crevices in cliff faces but may also	APE in 1958.
		use high buildings and tunnels.	
western pond turtle	CSC	An aquatic turtle of ponds, marshes,	<b>Absent</b> - There are no water features
(Emys marmorata)		slow-moving rivers, streams, and	onsite or in the vicinity of the APE.
		irrigation ditches with riparian	The nearest observation of this
		vegetation. Requires adequate	species was recorded in 2016
		basking sites and sandy banks or	approximately 16 miles north of the
		grassy open fields to deposit eggs.	APE.
western spadefoot	CSC	Prefers open areas with sandy or	<b>Unlikely</b> - The highly disturbed
(Spea hammondii)		gravelly soils, in a variety of habitats	habitats of the APE and surrounding
		including mixed woodlands,	lands are generally unsuitable for this
		grasslands, coastal sage scrub,	species. Wetland habitat suitable for
		chaparral, sandy washes, lowlands,	breeding is absent from the APE and
		river floodplains, alluvial fans,	potential aestivation habitat is
		playas, alkali flats, foothills, and	marginal due to frequent ground-
		mountains. Vernal pools or	disturbance.
		temporary wetlands, lasting a	
		minimum of three weeks, which do	
		not contain bullfrogs, fish, or	
		crayfish are necessary for breeding.	
western yellow-billed	FT, CE	Suitable nesting habitat in California	<b>Absent</b> - Suitable nesting habitat for
cuckoo (Coccyzus		includes dense riparian willow-	this species is absent from the APE
americanus		cottonwood and mesquite habitats	and surrounding lands. All of the
occidentalis)		along a perennial river. Once a	local observations were recorded
		common breeding species in	over 100 years ago, and the
		riparian habitats of lowland	populations are presumed extirpated.
		California, this species currently	It is believed this species no longer
		breeds consistently in only two	occurs within Fresno County.
		locations in the State: along the	
		Sacramento and South Fork Kern	
		Rivers.	

Table 3-9. List of Special Status Plants with Potential to Occur Onsite and/or in the Vicinity

able 3-9. List of Special Status Flants with Fotential to Occur Offsite and/of in the vicinity						
Species	Status	Habitat	Occurrence on Project Site			
alkali-sink goldfields	CNPS 1B	Found in vernal pool and wet saline	Unlikely - The nearest observation of			
(Lasthenia		flat habitats. Occurences	this species was recorded in the			
chrysantha)		documented in the San Joaquin and	vicinity 4-miles north of Laton, in			
		Sacremento Valleys at elevatiosn	1934. The population occurrence in			
		below 656 feet. Blooms February -	the CNDDB has been updated to			
		April.	extirpated, as all habitat in the vicinity			
			has been eliminated by urbanization			
			and agriculture.			
bristly sedge	CNPS	Found in marshes, swamps, coastal	Unlikely - The nearest observation of			
(Carex comosa)	2B	prairie, valley and foothill grassland.	this species was recorded in the			
		Occurs in wet places. Elevation	vicinity southeast of Sanger, in the late			
		1410 to 2035 feet. Blooms May-	1980's. The population occurrence in			
		September.	the CNDDB has been updated to			
			extirpated, as all habitat in the vicinity			
			has been eliminated by urbanization			
			and agriculture.			

Species	Status	Habitat	Occurrence on Project Site
California jewelflower	FE, CE,	Found in the San Joaquin Valley and	Unlikely - The nearest observation of
(Caulanthus	CNPS 1B	Western Transverse Ranges in sandy	this species was recorded in the
californicus)		soils. Occurs on flats and slopes,	vicinity of Fresno in the 1980s. The
		generally in non-alkaline grassland at	population occurrence in the CNDDB
		elevations between 230 feet and	has been updated to extirpated, as all
		6100 feet. Blooms February–April.	habitat in the vicinity has been
			eliminated by urbanization and
			agriculture.
California satintail	CNPS 2B	Although this facultative species is	Unlikely – Suitable habitat is absent
(Imperata brevifolia)		equally likely to occur in wetlands	from the APE. The last recorded
		and non-wetlands, it is often found	observation was in Fresno County in
		in wet springs, meadows,	the late 1890s and its exact location is
		streambanks, and floodplains at	unknow.
		elevations below 1600 feet. Blooms	
forked hare-leaf	CNPS 1B	September – May.  Found in cismontane woodland, and	Absent - Suitable habitat is absent
(Lagophylla	CINES ID	valley and foothill grassland	from the APE. The Project APE is
dichotoma)		communities at elevations between	outside of the elevation range for this
diciloioina)		600 feet and 1100 feet.	species
Greene's tuctoria	FE, CR,	Found in the San Joaquin Valley and	<b>Absent</b> - Suitable habitat is absent
(Tuctoria greenei)	CNPS 1B	other parts of California in vernal	from the APE. Last date seen was
,		pools within valley grassland,	recorded in the late 1980s 4-miles
		wetland, and riparian communities	north of Sanger which is
		at elevations below 3500 feet.	approximately 12-miles from the APE.
		Blooms May – September.	
Madera leptosiphon	CNPS 1B	Found in openings in foothill	<b>Absent</b> - Suitable habitat is absent
(Leptosiphon		woodland, often yellow-pine forest,	from the APE. Last date seen was
serrulatus)		and chaparral at elevations between	recorded in the 1920s, near Fresno.
		1000 feet and 4300 feet. Blooms	
Con Ioogyin adaha	ET CE	April – May.  Found in the San Joaquin Valley and	<b>Absent</b> - Suitable habitat is absent
San Joaquin adobe sunburst	FT, CE, CNPS 1B	the Sierra Nevada Foothills in bare	from the APE. due to established
(Pseudobahia	CIVISID	dark clay soils in valley and foothill	agricultural lands.
peirsonii)		grassland and cismontane woodland	agriculturai ianus.
pensonny		communities at elevations between	
		325 feet and 2950 feet. Blooms	
		March–May.	
San Joaquin Valley	FT, CE,	Found in the eastern San Joaquin	Absent - Suitable habitat is absent
Orcutt grass (Orcuttia	CNPS 1B	Valley and the Sierra Nevada	from the APE. due to the established
inaequalis)		foothills in vernal pools within	agricultural lands and nearby
		valley grassland, freshwater wetland,	residences.
		and wetland-riparian communities at	
		elevations below 2600 feet. Blooms	
Confordle a	CNPS 1B	April – September.	<b>Absent</b> - Suitable habitat is absent
Sanford's arrowhead (Sagittaria sanfordii)	CINES IR	Found in the San Joaquin Valley and other parts of California in	from the APE due to established
(Sagittaiia SaiiiOiUii)		freshwater-marsh, primarily ponds	agricultural lands with nearby
		and ditches, at elevations below	residences. The soils in the APE
		1000 feet. Blooms May—October.	consist of Hesperia fine sandy loam,
			Exeter loam and Hanford sandy loam
			which do not support the creation of
			vernal pools.
spiny-sepaled button-	CNPS 1B	Found in the Sierra Nevada	Absent - Suitable habitat is absent
celery (Eryngium		Foothills and the San Joaquin	from the APE due toagricultural lands
spinosepalum)		Valley. Occurs in vernal pools,	and nearby residences. The soils in the

Species	Status	Habitat	Occurrence on Project Site
		swales, and roadside ditches. Often	APE consist of Hesperia fine sandy
		associated with clay soils in vernal	loam, Exeter loam and Hanford sandy
		pools within grassland communities.	loam which do not support the
		Occurs at elevations between 50 feet	creation of vernal pools.
		and 4160 feet. Blooms April–July.	_
succulent owl's-clover	FT, CE,	Found in vernal pools, often in	<b>Absent</b> - Vernal pool habitat is absent
(Castilleja campestris	CNPS 1B	acidic soils at elevations below 2500	from the Project APE. Project area is
var. succulenta)		feet. Blooms April – July.	established agricultural lands with
ŕ		1 ,	nearby residences.

#### **EXPLANATION OF OCCURRENCE DESIGNATIONS AND STATUS CODES**

Present: Species observed on the site at time of field surveys or during recent past.

Likely: Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.

Possible: Species not observed on the site, but it could occur there from time to time.

Unlikely: Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient.

Absent: Species not observed on the site, and precluded from occurring there due to absence of suitable habitat.

#### **STATUS CODES**

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CT	California Threatened
FPE	Federally Endangered (Proposed)	CCT	California Threatened (Candidate)
FPT	Federally Threatened (Proposed)	CFP	California Fully Protected
FC	Federal Candidate	CSC	California Species of Special Concern
		CWL	California Watch List
		CCE	California Endangered (Candidate)
		CR	California Rare
CNPS L	<u>ISTING</u>		
1A	Plants Presumed Extinct in California.	2	Plants Rare, Threatened, or Endangered in
1B	Plants Rare, Threatened, or Endangered in		California, but more common elsewhere.
	California and elsewhere.		

### 3.5.2 Impact Assessment

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?

Less than Significant Impact with Mitigation Incorporated. Ruderal habitats are characterized by a high level of human disturbance and absence of vegetation or dominated by non-native plant species. Ruderal areas within the Project vicinity have minimal value to wildlife due to the frequent human disturbance, presence of domestic dogs and cats, and the absence of vegetative cover. However, some disturbance-tolerant species may make incidental use of these ruderal lands. As discussed in **Table 3-8** and **Table 3-9** above, four possible special status species could occur onsite or within the surrounding area. In order to ensure protection of any special status species with potential to occur onsite, the following mitigation measures will be implemented:

BIO-1 (WEAP Training): Prior to initiating construction activities (including staging and mobilization), all personnel associated with Project construction shall attend mandatory Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to aid workers in identifying special status resources that may occur in the Project area. The specifics of this program shall include identification of the sensitive species and suitable habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. A fact sheet conveying this information, along with photographs or illustrations of sensitive species with potential to occur onsite, shall also be prepared for distribution to all contractors, their

employees, and all other personnel involved with construction of the Project. All employees shall sign a form documenting that they have attended WEAP training and understand the information presented to them.

BIO-2 (General Pre-construction Survey): A pre-construction survey for special status species shall be conducted by a qualified biologist within 30 days prior to the beginning of construction activities. If sensitive biological resources are present onsite, the biologist shall establish an appropriate buffer zone and label sensitive resources or areas of avoidance with flagging, fencing, or other easily visible means. If avoidance is not feasible, CDFW and/or USFWS shall be consulted to determine the best course of action.

**BIO-3 (Operational Hours):** Construction activities shall be limited to daylight hours to reduce potential impacts to special status bats that could be foraging onsite.

Implementation of mitigation measures **BIO-1**, **BIO-2** and **BIO-3** will ensure protection of any special status species and reduce potential impacts to a less than significant level. Nesting birds, protected by the California Fish and Game Code and the Migratory Bird Treaty Act will be granted additional protective measures, as discussed under Impact Assessment d, below.

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 Wildlife or U.S. Fish and Wildlife Service?

No Impact. Riparian habitat or other sensitive natural communities are nonexistent on the site or within the immediate vicinity.

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

No Impact. The Project site does not contain any wetlands or other jurisdictional waters, and will have no impact on any such waters. The APE soils consist of Hesperia fine sandy loam, Exeter loam and Hanford Sandy loam which are well-drained soils. These soils are lacking a clay component that would allow for the creation of vernal pools. There would be no impact.

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

Less than Significant Impact with Mitigation Incorporated. Wildlife movement corridors are routes that animals regularly and predictably follow during seasonal migration, dispersal from native ranges, daily travel within home ranges, and inter-population movements. Movement corridors in California are typically associated with valleys, ridgelines, rivers and creeks supporting riparian vegetation. The APE does not contain features that would be likely to function as a wildlife movement corridor. There is the potential for nesting birds and bats to use existing trees and residential building with the APE and surrounding area. However, the APE is bordered by urban development and located in a region often disturbed by intensive agricultural cultivation practices and human disturbance which would typically discourage dispersal and migration.

Although trees, shrubs, and herbaceous cover are absent from a majority of the APE, some disturbance-tolerant avian species may find suitable nesting habitat within the APE, especially in the trees around the two residents located in the very northwest corner of the APE and on the southwest corner of the fallowed portion. Birds nesting onsite could be killed or injured by Project activities, and construction could disturb birds nesting adjacent to work areas, resulting in nest abandonment. In order to protect nesting birds, the Project will implement mitigation measures **BIO-4**, **BIO-5**, and **BIO-6**, listed below.

Nesting bird season is generally accepted as February 1 through August 31; however, Swainson's Hawk nesting season is generally accepted as March 1 through September 15. For simplicity, these timeframes have been combined.

**BIO-4** (Avoidance): The Project's construction activities shall occur, if feasible, between September 16 and January 31 (outside of nesting bird season) in an effort to avoid impacts to nesting birds.

BIO-5 (Pre-construction Nesting Bird Survey): If activities must occur within nesting bird season (February 1 to September 15), a qualified biologist shall conduct a presence/absence nesting bird survey within 10 days prior to the start of construction. The survey will include the proposed work area, including a 50-foot buffer zone and include a 0.5 mile visual inspection of the surrounding lands for Swainson's Hawk nests. If no active nests are observed, no further mitigation is required. Active nests are generally defined by the presence of eggs or young; however, raptor nests are considered "active" upon the nest-building stage.

**BIO-6** (Establish Buffers): On discovery of any active nests near work areas, the biologist shall determine appropriate construction setback distances based on applicable CDFW and/or USFWS guidelines and/or the biology of the species in question. Construction buffers will be identified with flagging, fencing, or other easily visible means, and shall be maintained until the biologist has determined that the nestlings have fledged.

Implementation of mitigation measures **BIO-4** through **BIO-6** will ensure protection of nesting birds and reduce potential impacts to a less than significant level.

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

No Impact. The City does not currently have an adopted ordinance related to tree preservation. The Project would not conflict with any potential local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinances and considering these as valuable resources that are worthy of conservation efforts. There would be no impacts to any local policies or ordinances protecting biological resources.

## 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?

No Impact. No habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan is in effect for the area of the Project. There would be no impact.

### 3.6 Cultural Resources

Table 3-10. Cultural Resources Impacts

	Cultural Resources Impacts						
	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact		
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?		$\boxtimes$				
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		$\boxtimes$				
c)	Disturb any human remains, including those interred outside of dedicated cemeteries?		$\boxtimes$				

### 3.6.1 Environmental Setting and Baseline Conditions

Cultural resources can refer to prehistoric and historic archaeological sites, architectural properties like buildings, bridges, and other various infrastructure, and locations significant to Native Americans. Fresno County is an archaeologically and culturally significant area and has one of the densest Native American populations in North America. Archaeological sites associated with the Santa Rosa Rancheria Tachi Yokut Tribe exists throughout the County, particularly adjacent to existing and former natural waterways and food sources. Many Yokut sites have been located, and the potential for remaining undiscovered sites within the County is high.

The Project site is located on the east side of South Armstrong Avenue, between East Adams and East Hogan Avenues in the City of Fowler in Fresno County. The Project intends to subdivide approximately 29 acres, located on the east side of South Armstrong Avenue, for the creation of 74 single family residential lots.

#### 3.6.1.1 Records Search

On July 6, 2021, Provost & Pritchard Consulting Group received results from a records search from the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS) at California State University, Bakersfield. The California Office of Historic Preservation (OHP) contracts with the CHRIS's regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law (Appendix C).

The records search encompassed the 29-acres of the Project site plus all land within a half-mile radius of the Project site. SSJVIC staff examined site records files, maps, and other materials to identify previously recorded resources and prior surveys with the delineated area (Appendix C).

#### 3.6.1.2 Native American Outreach

On July 13, 2016, the City received a letter from the Santa Rosa Rancheria Tachi Yokut Tribe pursuant to PRC § 21080.3.1 officially requesting notification of Projects within the Santa Rosa Rancheria's geographic area of

traditional and cultural affiliation. On June 21, 2021, the City sent the Yokut Tribe a formal Notification of a Decision to Undertake a Project, and Notification of Consultation Opportunity, including a project description. In accordance with the law, the letter provided 30 days from receipt of the letter to request consultation in writing. No request for consultation was made for the Project and less than significant impacts to tribal resources are expected.

#### 3.6.2 Impact Assessment

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

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

Less than Significant Impact with Mitigation Incorporated. A cultural resources records search of the Project location was requested to determine whether cultural resources are present within the Project area (see Appendix C). A CHRIS search results letter was received and according to the search, there are no recorded resources within the Project area, and it is not known if any exist there. There are two recorded resources within the one-half mile radius, P-10-002864 and P-10-004423. These resources are an historic era trash scatter and an historic era park, respectively. There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks.

It is unlikely that the Project has the potential to result in significant impacts or adverse effects to cultural or historical resources, such as archaeological remains, artifacts or historic properties. However, in the event that cultural resources are encountered during Project construction, implementation of mitigation measure **CUL-1**, outlined below, would reduce impacts to less than significant.

**Mitigation Measure CUL-1:** If, during construction, cultural resources are discovered, all work shall be halted within 50 feet of the discovery. A professional archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology shall be retained by the City to determine the significance of the discovery. Upon a finding of significance, the City shall implement the required mitigation (if any) as determined by the archaeologist.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries? Less than Significant Impact with Mitigation Incorporated. There is no evidence or record that the Project has the potential to be an unknown burial site or the site of buried human remains. In the unlikely event of such a discovery, mitigation shall be implemented. With incorporation of mitigation measure CUL-2, outlined below, impacts resulting from the discovery of remains interred on the Project site would be less than significant.

Mitigation Measures CUL-2: In the event human remains are encountered during construction activities, all work within the vicinity of the remains shall halt in accordance with Health and Safety Code §7050.5, Public Resources Code §5097.98, and Section 15064.5 of the CEQA Guidelines, and the Fresno County coroner's office would be contacted.

## 3.7 Energy

**Table 3-11. Energy Impacts** 

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

### 3.7.1 Environmental Setting and Baseline Conditions

PG&E has sufficient energy supplies to serve the growth that has occurred in Fresno County. Much of the energy consumed in the region is for residential, commercial, and transportation purposes. Much of the Project site is currently being used for agriculture, while the southern portion is vacant.

#### 3.7.2 Impact Assessment

## 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?

Less than Significant Impact. Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction. For heavy-duty construction equipment, horsepower and load factor were assumed using default data from the CalEEMod model. Fuel use associated with construction vehicle trips generated by the Project was also estimated; trips include construction worker trips, haul trucks trips for material transport, and vendor trips for construction material deliveries. Fuel use from these vehicles traveling to the Project was based on (1) the projected number of trips the Project would generate (CalEEMod default values), (2) default average trip distance by land use in CalEEMod, and (3) fuel efficiencies estimated in the CARB 2017 Emissions Factors model (EMFAC2017) mobile source emission model.

Construction is estimated to consume a total of 99,178.75 gallons of diesel fuel and 19,533.25 gallons of gasoline fuel.<sup>3</sup> California Code of Regulations Title 13, Motor Vehicles, Section 2449(d)(2), Idling, limits idling times of construction vehicles to no more than five (5) minutes, thereby precluding unnecessary and wasteful consumption of fuel because of unproductive idling of construction equipment. In addition, the energy consumption for construction activities would not be ongoing as they would be limited to the duration of Project construction.

The development's anticipated annual energy consumption is approximately 590,073 kilowatt-hours and 17,792 therms of natural gas.<sup>4</sup> Energy consumption of residential uses is currently governed by the 2019 California Building Code, Part 6 for the structure itself, and Title 20 of the California Code of Regulations for appliances. Energy consumption is anticipated to decrease over time as more energy efficient standards take effect and

<sup>&</sup>lt;sup>3</sup> Emissions for the Project were quantified using CalEEMod Output Files Version 2020.4.0. Refer to **Appendix A** for modeling results and assumptions.

<sup>&</sup>lt;sup>4</sup> Emissions for the Project were quantified using CalEEMod Output Files Version 2020.4.0. Refer to **Appendix A** for modeling results and assumptions.

energy-consuming equipment reaches its end-of-life and necessitates replacement. Therefore, impacts would be less than significant.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency? Less than Significant Impact. State and local authorities regulate energy use and consumption. These regulations at the State level intended to reduce energy use and greenhouse gas (GHG) emissions. These include, among others, AB 1493 – Light-Duty Vehicle Standards; California Code of Regulations Title 24, Part 6 – Energy Efficiency Standards; and California Code of Regulations Title 24, Parts 6 and 11 – California Energy Code and Green Building Standards. The Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Therefore, impacts would be less than significant.

## 3.8 Geology and Soils

Table 3-12. Geology and Soils Impacts

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	Geology and S	olis impacts			
	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:  i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			$\boxtimes$	
	ii) Strong seismic ground shaking?			$\boxtimes$	
	iii) Seismic-related ground failure, including liquefaction?			$\boxtimes$	
	iv) Landslides?				$\boxtimes$
b)	Result in substantial soil erosion or the loss of topsoil?			$\boxtimes$	
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 wastewater?				$\boxtimes$
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?			$\boxtimes$	

## 3.8.1 Environmental Setting and Baseline Conditions

#### 3.8.1.1 Geology and Soils

The Project is located in the City of Fowler in central Fresno County, in the southern section of California's Great Valley Geomorphic Province, or Central Valley. The Sacramento Valley makes up the northern third and the San Joaquin Valley makes up the southern two-thirds of the geomorphic province. Both valleys are watered by large rivers flowing west from the Sierra Nevada Range, with smaller tributaries flowing east from the Coast Ranges. Most of the surface of the Great Valley is covered by Quaternary (present day to 1.6 million years ago) alluvium. The sedimentary formations are steeply upturned along the western margin due to the uplifted Sierra

Nevada Range.<sup>5</sup> From the time the Valley first began to form, sediments derived from erosion of igneous and metamorphic rocks and consolidated marine sediments in the surrounding mountains have been transported into the Valley by streams.

#### 3.8.1.2 Faults and Seismicity

The Project is not located within an Alquist-Priolo Earthquake Fault Zone and there are no known active faults within the City. The nearest major fault is the San Andreas Fault, located approximately 65 miles southwest of the Project site. The San Andreas fault is the dominant active tectonic feature of the Coast Ranges and represents the boundary of the North American and Pacific plates. The Nunez Fault is approximately 51 miles southwest and the Poso Fault is approximately 51 miles south.

#### 3.8.1.3 Liquefaction

The potential for liquefaction, which is the loss of soil strength due to seismic forces, is dependent on soil types and density, the groundwater table, and the duration and intensity of ground shaking. Although no specific liquefaction hazard areas have been identified in Fresno County, this potential is recognized throughout the San Joaquin Valley where unconsolidated sediments and a high-water table coincide. Soil types along the Valley floor are not generally conducive to liquefaction because they are generally too course. Furthermore, the average depth to groundwater within the City is approximately 85 to 95 feet which also minimizes liquefaction potential.

Using the USDA NRCS soil survey of Fresno County (**Appendix D**), an analysis of the soils onsite was performed. Soils in the area consist of Hanford sandy loam (14.5%,) Hesperia fine sandy loam (80%), and Exeter loam (5.5%).

#### 3.8.1.4 Soil Subsidence

Subsidence occurs when a large land area settles due to over-saturation or extensive withdrawal of groundwater, oil, or natural gas. These areas are typically composed of open-textured soils, high in silt or clay content, that become saturated. Although some areas in Fresno County have experienced subsidence due to groundwater overdraft, the City's elevation has remained relatively unchanged.

Soils of the Project site consist of Hanford sandy loam, Hesperia sandy loam, and Exeter loam, all of which are course-textured, low in clay content, and have a low shrink-swell potential. Therefore, soils onsite represent a low risk of subsidence.

#### 3.8.1.5 Dam and Levee Failure

Hundreds of dams and reservoirs have been built in California for water supply, flood control, hydroelectric power, and recreational uses. The storage capacity of these dams varies across the State from large reservoirs with capacities exceeding millions of acre-feet (AF) to small reservoirs with capacities from hundreds to thousands of AF. Depending on the season, water from these reservoirs is released into the river system of the State and eventually reaches the Pacific Ocean. The Kings River, which flows approximately 9 miles east, is the primary river in the vicinity. The Kings River is impounded by a dam which forms the one million AF Pine Flat reservoir, approximately 23 miles northeast of the Project site. If Pine Flat dam were to fail, a large portion of Fresno County, including the City, would be inundated with water.

<sup>&</sup>lt;sup>5</sup> Harden, D.R. 1998, California Geology, Prentice Hall, 479 pages

<sup>&</sup>lt;sup>6</sup> USDA NRCS Soil Survey. Accessed June 18, 2021.

### 3.8.2 Impact Assessment

## a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

a-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.

#### a-ii) Strong seismic ground shaking?

a-i and a-ii) Less than Significant Impact. The Project site is located in an area traditionally characterized by relatively low seismic activity. The site is not located in an Alquist-Priolo Earthquake Fault Zone as established by the Alquist-Priolo Fault Zoning Act (Section 2622 of Chapter 7.5, Division 2 of the California Public Resources Code). The nearest major fault is the San Andreas Fault, located approximately 65 miles southwest of the Project site. The Nunez Fault is approximately 51 miles southwest and the Poso Fault is approximately 51 miles south.

Although there are no known earthquake faults within the vicinity of the Project and strong ground shaking is unlikely, construction of the proposed residential structures would comply with the most recent seismic standards as set forth in the California Building Standards Code. Compliance with these standards would ensure potential impacts related to strong seismic ground shaking would be less than significant.

#### a-iii) Seismic-related ground failure, including liquefaction?

Less than Significant Impact. Liquefaction occurs when loose, water-saturated sediments lose strength and fail during strong ground shaking. Although no specific liquefaction hazard areas have been identified in Fresno County, this potential is recognized throughout the San Joaquin Valley where unconsolidated sediments and a high-water table coincide. Using the USDA NRCS soil survey of Fresno County, an analysis of the soils onsite was performed. Soils in the area consist of Hanford sandy loam, Hesperia fine sandy loam, and Exeter loam, all of which are well-drained and course-textured, representing a low risk for liquefaction or seismic-related ground failure. In addition, the average depth to groundwater within the City is approximately 85 to 95 feet which further reduces potential for liquefaction. Furthermore, as mentioned above in Impact Assessments VI-a-i and VI-a-ii, strong seismic ground shaking is unlikely to occur. Any impacts related to seismic-related ground failure, including liquefaction, would be less than significant.

#### a-iv) Landslides?

No Impact. Landslides usually occur in locations with steep slopes and unstable soils. The Project is located on the Valley floor where no major geologic landforms exist, and the topography is essentially flat and level. The nearest foothills are approximately 15 miles northeast. Therefore, the Project site has minimal-to-no landslide susceptibility, and there will be no impact.

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

Less than Significant Impact. Earthmoving activities associated with the Project would include excavation, trenching, grading, and construction over an area of approximately 29-acres. These activities could expose soils to erosion processes and the extent of erosion would vary depending on slope steepness/stability, vegetation/cover, concentration of runoff, and weather conditions. Dischargers whose projects disturb one (1) or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to

restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer (QSD). Since the Project site has relatively flat terrain with a low potential for soil erosion and would comply with the SWRCB requirements, the impact would be less than significant.

- 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?
- 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?

c and d) Less than Significant Impact. Soils onsite consist of Hanford sandy loam, Hesperia fine sandy loam, and Exeter loam, all of which are well-drained, low in clay content, and coarse-textured. These soils have a low shrink-swell potential and a low plasticity index, and therefore, are not considered expansive soils. Furthermore, the aforementioned physical properties of these soils make subsidence, liquefaction, lateral spreading, or other ground failure unlikely. Any impacts would be less than significant.

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

No Impact. Septic installation or alternative wastewater disposal systems are not necessary for the Project. There will be no impact.

## f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Less than Significant Impact. No known paleontological resources exist within the Project area. The Project site would be a residential development lot that has been historically farmed. Previous discing and site grading activities onsite have not uncovered any paleontological resources. Construction activities associated with the proposed Project are not expected to be conducted significantly below grade, at a level where they would have the potential to disturb any previously unknown paleontological resources or geologic features. Impacts would be less than significant.

## 3.9 Greenhouse Gas Emissions

Table 3-13. Greenhouse Gas Emissions Impacts

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

### 3.9.1 Environmental Setting and Baseline Conditions

The Earth's climate has been warming for the past century. Experts believe this warming trend is related to the release of certain gases into the atmosphere. Greenhouse gases (GHG) absorb infrared energy that would otherwise escape from the Earth. As the infrared energy is absorbed, the air surrounding the Earth is heated. An overall warming trend has been recorded since the late 19th century, with the most rapid warming occurring over the past 35 years, with 16 of the 17 warmest years on record occurring since 2001. Not only was 2016 the warmest year on record, but eight of the 12 months that make up the year—from January through September, with the exception of June—were the warmest on record for those respective months. October, November, and December of 2016 were the second warmest of those months on record—in all three cases, behind records set in 2015. Human activities have been attributed to an increase in the atmospheric abundance of greenhouse gases. Commonly identified GHG emissions and sources include the following:

Carbon dioxide (CO<sub>2</sub>) is an odorless, colorless natural greenhouse gas. CO<sub>2</sub> is emitted from natural and anthropogenic sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic out gassing. Anthropogenic sources include the burning of coal, oil, natural gas, and wood.

Methane (CH<sub>4</sub>) is a flammable greenhouse gas. A natural source of methane is the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain methane, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and ruminants such as cattle.

Nitrous oxide (N<sub>2</sub>O), also known as laughing gas, is a colorless greenhouse gas. Nitrous oxide is produced by microbial processes in soil and water, including those reactions that occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load.

Water vapor is the most abundant, and variable greenhouse gas. It is not considered a pollutant; in the atmosphere, it maintains a climate necessary for life.

Ozone (O<sub>3</sub>) is known as a photochemical pollutant and is a greenhouse gas; however, unlike other greenhouse gases, ozone in the troposphere is relatively short-lived and, therefore, is not global in

<sup>&</sup>lt;sup>7</sup> NASA, NOAA Data Show 2016 Warmest Year on Record Globally. <a href="https://www.nasa.gov/press-release/nasa-noaa-data-show-2016-warmest-year-on-record-globally">https://www.nasa.gov/press-release/nasa-noaa-data-show-2016-warmest-year-on-record-globally</a>. January 18, 2017. Accessed 6/24/21.

nature. Ozone is not emitted directly into the atmosphere but is formed by a complex series of chemical reactions between volatile organic compounds, nitrogen oxides, and sunlight.

Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

Chlorofluorocarbons (CFCs) are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. CFCs destroy stratospheric ozone; therefore, their production was stopped as required by the Montreal Protocol in 1987.

Hydrofluorocarbons (HFCs) are synthetic chemicals that are used as a substitute for CFCs. Of all the greenhouse gases, HFCs are one of three groups (the other two are perfluorocarbons and sulfur hexafluoride) with the highest global warming potential. HFCs are human-made for applications such as air conditioners and refrigerants.

Perfluorocarbons (PFCs) have stable molecular structures and do not break down through the chemical processes in the lower atmosphere; therefore, PFCs have long atmospheric lifetimes, between 10,000 and 50,000 years. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

Sulfur hexafluoride (SF<sub>6</sub>) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It has the highest global warming potential of any gas evaluated. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

There are uncertainties as to exactly what the climate changes will be in various local areas of the earth, and what the effects of clouds will be in determining the rate at which the mean temperature will increase. There are also uncertainties associated with the magnitude and timing of other consequences of a warmer planet: sea level rise, spread of certain diseases out of their usual geographic range, the effect on agricultural production, water supply, sustainability of ecosystems, increased strength and frequency of storms, extreme heat events, air pollution episodes, and the consequence of these effects on the economy.

Emissions of GHGs contributing to global climate change are largely attributable to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. About three-quarters of human emissions of CO<sub>2</sub> to the global atmosphere during the past 20 years are due to fossil fuel burning. Atmospheric concentrations of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O have increased 31 percent, 151 percent, and 17 percent respectively since the year 1750 (CEC 2008). GHG emissions are typically expressed in carbon dioxide-equivalents (CO<sub>2</sub>e), based on the GHG's Global Warming Potential (GWP). The GWP is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. For example, one ton of CH<sub>4</sub> has the same contribution to the greenhouse effect as approximately 21 tons of CO<sub>2</sub>. Therefore, CH<sub>4</sub> is a much more potent GHG than CO<sub>2</sub>.

An Air Quality and Greenhouse Gas Emissions Evaluation Report was prepared in September 2021, and is contained in **Appendix A**. The essential conclusions of this Report are as follows:

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

In accordance with SJVAPCD's CEQA Greenhouse Gas Guidance for Valley Land-use Agencies in Addressing GHG

Emission Impacts for New Projects<sup>8</sup>, proposed projects complying with Best Performance Standards (BPS) would be determined to have a less-than-significant impact. Projects not complying with BPS would be considered less than significant if operational GHG emissions would be reduced or mitigated by a minimum of 29 percent, in comparison to business-as-usual (year 2004) conditions. In addition, project-generated emissions complying with an approved plan or mitigation program would also be determined to have a less-than-significant impact.

#### 3.9.1.1 Short-Term Construction-Generated Emissions

Short term construction related emissions were calculated using the CalEEmod Version 2020.4.0. emissions modeling software and was assumed to end in 2024. Other assumptions were made on the default parameters in the model. The modeling output can be found in **Appendix A**.

#### 3.9.1.2 Long-Term Operational Emissions

Long-term operational related emissions were also calculated using the CalEEmod Version 2020.4.0. emissions modeling software and was assumed to start after construction finishes in 2024. Operational emissions are viewed on a per year basis. Some assumptions were made on the default parameters in the model. The modeling output can be found in **Appendix A**.

#### 3.9.2 Impact Assessment

#### 3.9.2.1 Thresholds of Significance

#### Short-Term Construction-Generated Emissions

Estimated construction-generated emissions are summarized in Table 3-14.

Table 3-14. Short-Term Construction-Generated GHG Emissions

Year	Emissions (MT CO <sub>2</sub> e) <sup>(1)</sup>
AB 32 Consistency Threshold for Land-Use Development Projects*	1,100
AB 32 Consistency Threshold for Stationary Source Projects*	10,000
Maximum Estimated Annual Emissions	543.7347
Exceed Threshold?	No

Emissions were quantified using the CalEEmod, Version 2020.4.0. Refer to Appendix A
for modeling results and assumptions. Totals may not sum due to rounding.

#### **Long-Term Operational Emissions**

Estimated long-term operational emissions are summarized in Table 3-15.

<sup>\*</sup> As published in the Bay Area Air Quality Management District's CEQA Air Quality Guidelines. Available online at <a href="http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa\_guidelines\_may2017-pdf.pdf?la=en">http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa\_guidelines\_may2017-pdf.pdf?la=en</a> Accessed 6/25/21

<sup>8</sup> Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA. http://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf Accessed 6/25/21

Table 3-15. Long-Term Operational GHG Emissions

	Emissions (MT CO <sub>2</sub> e) <sup>(1)</sup>
AB 32 Consistency Threshold for Land-Use Development Projects*	1,100
AB 32 Consistency Threshold for Stationary Source Projects*	10,000
Maximum Estimated Annual Emissions	913
Exceed Threshold?	No

<sup>1.</sup> Emissions were quantified using the CalEEmod, Version 2020.4.0. Refer to **Appendix A** for modeling results and assumptions. Totals may not sum due to rounding.

- a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?
- a-b) Less than Significant Impact. The Project would not result in long term operational emissions that would exceed the SJVAPCD thresholds of 1,100 MT CO<sub>2</sub>e annually. The Project is estimated to emit 913 MT CO<sub>2</sub>e annually. Therefore, impacts would be less than significant.

<sup>\*</sup> As published in the Bay Area Air Quality Management District's CEQA Air Quality Guidelines. Available online at <a href="http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa/guidelines/may2017-pdf.pdf?la=en/Accessed 6/25/21">http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa/guidelines/may2017-pdf.pdf?la=en/Accessed 6/25/21</a>.

## 3.10 Hazards and Hazardous Materials

Table 3-16. Hazards and Hazardous Materials Impacts

i able s	able 3-16. Hazards and Hazardous Materials Impacts					
	Hazards and Hazardou	us Materials I	Impacts			
	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?					
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?					
g)	Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?					

### 3.10.1 Environmental Setting and Baseline Conditions

#### 3.10.1.1 Hazardous Materials

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. Government Code (GC) Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to develop at least annually an updated Cortese List. The Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List. DTSC's EnviroStor database provides DTSC's component of Cortese List data (DTSC, 2010). In addition to the EnviroStor database, the State Water Resources Control Board (SWRCB) Geotracker database provides information on regulated hazardous waste facilities in California, including underground storage tank (UST) cases and non-UST cleanup programs, including Spills-

Leaks-Investigations-Cleanups (SLIC) sites, Department of Defense (DOD) sites, and Land Disposal program. A search of the DTSC EnviroStor database and the SWRCB Geotracker performed on July 1, 2021 determined that there are no known active hazardous waste generators or hazardous material spill sites within the Project site or immediate surrounding vicinity.

#### 3.10.1.2 Airports

The Fresno Yosemite International Airport is located approximately 9 miles north-northwest, the Selma Municipal Airport is located approximately 3.5 miles south-southwest, and a private airstrip is located approximately 3.6 miles southeast of the Project.

#### 3.10.1.3 Emergency Response Plan

The Fresno County Office of Emergency Services coordinates the development and maintenance of the Fresno County Operational area Master Plan.

#### 3.10.1.4 Sensitive Receptors

The Project site is immediately north of Fowler High School and east of Marshall Elementary School.

#### 3.10.2 Impact Assessment

- a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- 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?
- 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?
- a-c) Less than Significant Impact. At its nearest point, the Project area is located approximately 160 feet east of Marshall Elementary School and 1,100 feet north of Fowler High School. Construction of the Project will involve the use of hazardous materials associated with construction equipment, such as diesel fuel, lubricants, and solvents. However, the contractor will implement a Stormwater Pollution Prevention Plan (SWPPP) and will comply with all Cal/OSHA regulations regarding regular maintenance and inspection of equipment, spill prevention, and spill remediation in order to reduce the potential for incidental release of pollutants or hazardous substances onsite. Furthermore, any potential accidental hazardous materials spills during construction are the responsibility of the contractor to remediate in accordance with industry best management practices and State and county regulations. The operational phase of the Project will not involve the use or transport of hazardous materials. Impacts will be less than significant.
- 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?

No Impact. The Project does not involve land that is listed as a hazardous materials site pursuant to Government Code Section 65962.5 and is not included on a list compiled by the Department of Toxic Substances Control. A search of the DTSC EnviroStor database and the SWRCB Geotracker determined that there are no known active hazardous waste generators or known hazardous material spill sites within the Project site. There will be no impact.

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

No Impact. The Project is not located within an airport land use plan or within two miles of an airport. The Fresno Yosemite International Airport is located approximately nine miles north-northwest, the Selma Municipal Airport is located approximately 3.5 miles south-southwest, and a private airstrip is located approximately 3.6 miles southeast of the Project. Construction and implementation of the Project would not be a safety hazard for people working in the area. There would be no impact.

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

Less than Significant Impact. The Project includes the construction of a residential subdivision on a parcel northeast of the intersection of Adams Avenue and Armstrong Avenue. Construction traffic associated with the Project would be minimal and temporary, construction would take place over approximately 2.5 years. Operational traffic will consist of vehicle trips associated with residential development. Temporary road closures, detours, or lane diversions may be necessary for connection of utilities and development of residential streets during construction. Disturbances to traffic patterns, such as a potential lane diversion will be temporary and minimal in nature, as there will be alternate routes available. Therefore, Project-related impacts to emergency evacuation routes or emergency response routes on local roadways would be considered less than significant.

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

No Impact. The nearest wildland area, which has a moderate fire risk, according to Cal Fire<sup>9</sup> is located approximately 15 miles northeast of the Project site. Given the absence of wildlands in the vicinity, implementation of the Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. There would be no impact.

<sup>&</sup>lt;sup>9</sup> Cal Fire. Fresno County FHSZ Map. http://www.fire.ca.gov/fire\_prevention/fhsz\_maps\_fresno\_Accessed 17 December 2018.

## 3.11 Hydrology and Water Quality

Table 3-17, Hydrology and Water Quality Impacts

l able .	able 3-17. Hydrology and Water Quality Impacts					
	Hydrology and Wate	er Quality Im	pacts			
	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?					
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 off-site;					
	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?					

### 3.11.1 Environmental Setting and Baseline Conditions

The City is located within the Kennedy Pond watershed; Hydrologic Unit Code (HUC): 180300090206. The San Joaquin River and the Kings River are the two principal drainages within the San Joaquin Valley, and Fowler is generally located approximately 18 miles south of the San Joaquin River and nine miles west of the Kings River.

The City lies entirely within the Kings Groundwater Subbasin of the San Joaquin Valley Groundwater Basin.<sup>10</sup> Due to groundwater overdraft and contamination from agricultural chemicals, provision of reliable sources of groundwater in both quantity and quality have been a challenge throughout most of the Central Valley.

<sup>&</sup>lt;sup>10</sup> DWR Bulletin 118 Groundwater Basin Boundary Assessment Tool. https://gis.water.ca.gov/app/bbat/ Accessed 25 June 2021.

Water supply is produced from six groundwater wells located throughout the City and distribution is provided by the Water Division of the City's Public Works Department through a system in which pumps deliver water from beneath the ground to a network of watermains, pipelines and laterals which distribute water to residents and businesses. Municipal water is tested monthly to ensure quality. According to the Annual Water Quality Report (2017), the average depth to groundwater is 85 to 95 feet, and the existing wells produce drinking water of good quality that does not require treatment.

In 2014, the City entered into an agreement with Consolidated Irrigation District (CID) to fund groundwater recharge programs in order to sustain the groundwater aquifer the City is reliant upon. CID provides water from the Kings River for groundwater recharge and irrigation to over 6,000 growers within its 144,000-acre service area, which includes the vicinity surrounding the City.

The Project site is approximately 3,000 feet from the nearest 100-year floodplain (Figure 3-2).

#### 3.11.2 Impact Assessment

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

Less than Significant Impact. Surface runoff from the subdivision would be accommodated by a new retention basin maintained by the property owner on the northeast section of the subdivision, as well as an existing retention basin that abuts the northeastern section of the property. A SWPPP would be completed prior to construction of the subdivision. Therefore, impacts would be less than significant.

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

Less than Significant Impact. Potable water is pumped from the Kings River Basin underground aquifer through wells operated by the City. According to the Fowler Public Works Director, maximum production of all seven existing wells is 10.1 million gallons per day (mgd). In 2015, the City had 6,000 residents and pumped an average of 310 gallons per day/per person for all municipal uses, or about 2.0 mgd. That leaves 8.0 mgd remaining well capacity. As a result, adequate groundwater resources are available to meet the long term water demand of the City to the year 2035 and beyond with available underground water supplies; no surface water would need to be imported.

The proposed 74-lot subdivision would be expected to use approximately 104,780 gallons of water per day under normal operation, including domestic and landscape irrigation. This equates to approximately 117.37 acre feet per year. Although the Project would utilize groundwater for domestic purposes, the amount of water use is not considered significant and would not significantly lower the groundwater table of the aquifer or interfere substantially with the recharge of the underground aquifer.

The City plans on providing additional well capacity as needed so that there is never an insufficiency of water supply in any given area of the City with respect to meeting maximum day demands or fire flow. The proposed project would pay its fair share of installation of improvements and pay all development fees related to water service. Therefore, impacts would be less than significant.

- 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:
  - c-i) result in substantial erosion or siltation on- or off-site;

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

c-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

#### c-iv) impede or redirect flood flows?

c-i-iv) Less than Significant Impact. The Project would result in some soil erosion and the loss of topsoil due to Project related construction activities. The drainage pattern of the new subdivision would be altered to flow to the proposed and existing stormwater basins at the northeast of the Project site. The construction of a new stormwater basin within the subdivision would provide for increased runoff capacity for the site and surrounding areas. Through the completion of a SWPPP and the implementation of the applicable best management practices, any potential impacts from the altering of drainage patterns would be limited to less than significant.

## d) Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundations?

Less than Significant Impact. There are no streams or rivers onsite or in the immediate vicinity of the Project. The proposed stormwater basin has been designed to adequately attenuate peak stormwater runoff discharge, and a site-specific grading plan has been prepared indicating that no drainage shall be onto adjacent properties. In order to minimize erosion and run-off during construction activities, a SWPPP would be implemented, and the contractor would comply with all Cal/OSHA regulations regarding regular maintenance and inspection of equipment, spill prevention, and spill remediation in order to reduce the potential for incidental release of pollutants or hazardous substances onsite. There is no potential for inundation by seiche, tsunami, or mudflow. Any impacts would be less than significant.

## e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant Impact. The Project would not conflict with or obstruct implementation of any water quality control plan or sustainable groundwater management plan. The Project would be within the boundary of the Central Kings Groundwater Sustainability Agency and would follow the policies of the Central Kings Groundwater Sustainability Plan. Therefore, Impacts would be less than significant.

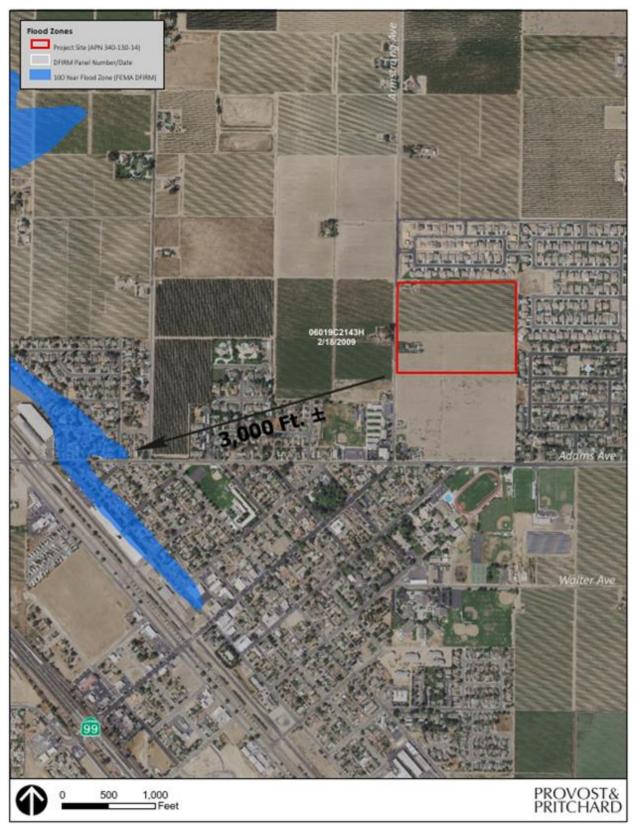


Figure 3-2 FEMA Flood Map

## 3.12 Land Use and Planning

Table 3-18. Land Use and Planning Impacts

	Land Use and Planning Impacts						
	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact		
a)	Physically divide an established community?			$\boxtimes$			
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?						

### 3.12.1 Environmental Setting and Baseline Conditions

The Project site is located in the County of Fresno within the City's sphere of influence. The City of Fowler 2025 General Plan Update land use diagram designates the Project site as Low Density Residential. The Project is identified within the AE-20 (Exclusive Agricultural, 20-acre minimum parcel size) Zone District. Lands adjacent to the site are newly developed Single Family Residential to the east and north, undeveloped agriculture land that is planned and zoned as Low Density Residential to the north, an under-construction Low Density Residential subdivision to the south, and agricultural land developed with one single family residence that is planned and zoned as Medium Density Residential to the west. General Plan land use designations and Zone Districts of the Project site and surrounding areas are illustrated in Figure 2-5 and Figure 2-6.

### 3.12.2 Impact Assessment

#### a) Would the project physically divide an established community?

No Impact. The Project involves the development of residential homes adjacent to an existing residential subdivision in northeast Fowler. The Project area is classified by the City's General Plan as Low Density Residential and the County of Fresno's Zoning Ordinance as AE-20. The Project will also require annexation to the City and a rezone to the R-1-10 Zone District. The Project will create an extension of existing residential housing in a manner that would encourage unification and expansion of an established community. The site of the proposed subdivision is currently an agricultural field between existing residential housing. Development of the site into residential housing would reduce commuter obstacles by creating an extension of roads and sidewalks. Implementation of the Project would provide additional housing and an expansion of services, including pedestrian access to the nearby public schools. Therefore, the Project would not physically divide an established community.

## b) Would the project cause a significant environmental conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The Project proposes to construct 74 single family low density residential units within the approximately 29-acre Project area. As illustrated in **Figure 2-5** and **Figure 2-6**, the City of Fowler 2025 General Plan Update land use diagram designates the Project site as Low Density Residential, and the County of Fresno Zoning Ordinance designates the Project site as AE-20. The Project proposes to annex the site into the City and rezone the site into the R-1-10 (Single Family Low Density Residential) Zone District. According to the City of Fowler 2025 General Plan Update, the proposed Zone District of R-1-10 is compatible with the

existing land use designation of Low Density Residential. Therefore, the Project would not cause a significant environmental conflict with any land use plan, policy, or regulation. There would be no impact.

### 3.13 Mineral Resources

**Table 3-16. Mineral Resources Impacts** 

	Table 6 10. Milleral Resources Impacts						
	Mineral Resources Impacts						
	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact		
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?						
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?						

### 3.13.1 Environmental Setting and Baseline Conditions

The Project is located in the City within central Fresno County, in the southern section of California's Great Valley Geomorphic Province, or Central Valley. Historically, Fresno County has been a leading producer of a variety of minerals including aggregate, fossil fuels, metals, and other materials used in construction and/or industrial processes. Currently, aggregate and petroleum are the County's most significant mineral resources. The Coalinga area, in western Fresno County, has been a valuable region for mineral resources as a top producer of commercial asbestos and home to extensive oil recovery operations.<sup>11</sup>

The City is located within the Fresno production-consumption (PC) region, which includes parts of Madera and Fresno Counties. The California Geological Survey (CGS), previously known as California Department of Conservation Division of Mines and Geology (DMG), has analyzed this region for the presence of aggregate resources in a 1988 mineral land classification report<sup>12</sup> and a subsequent 1999 update.<sup>13</sup> In each of these reports CGS has classified the Fresno PC region according to the presence or absence of significant aggregate deposits. The land classification is presented in the form of Mineral Resource Zones (MRZs). MRZ-1 represents areas where information indicates that there are no significant aggregate deposits. MRZ-2 represents areas where adequate information indicates that significant aggregate deposits are present or where it is judged that a high likelihood exists for their presence. MRZ-3 represents areas containing mineral deposits the significance of which cannot be evaluated from available data. In both CGS reports, the Fowler area is classified as MRZ-3. All areas known to contain significant aggregate deposits within the Fresno PC region are located along the Kings River floodplain and along the San Joaquin River.

There are no known current or historic mineral resource extraction or recovery operations in the Project vicinity nor are there any known significant mineral resources onsite.

<sup>&</sup>lt;sup>11</sup> Fresno County General Plan. Background Report. <a href="https://www.co.fresno.ca.us/home/showdocument?id=8398">https://www.co.fresno.ca.us/home/showdocument?id=8398</a> Accessed 18 December 2018.

<sup>&</sup>lt;sup>12</sup> Special Report 158. Mineral Land Classification: Aggregate Materials in the Fresno Production-Consumption Region. 1988. https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc Accessed 18 December 2018.

<sup>&</sup>lt;sup>13</sup> Open File Report 99-02. Update of Mineral Land Classification: Aggregate Materials in the Fresno Production-Consumption Region, California. 1999. https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc Accessed 18 December 2018.

## 3.13.2 Impact Assessment

- a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?
- a-b) No Impact. According to the CGS's Aggregate Sustainability Map,<sup>14</sup> the Project is not within the vicinity of a site being used for aggregate production. The nearest aggregate production site is the Carmelita Mine located within the Kings River floodplain, approximately 13 miles northeast of the Project. In addition, California's Division of Oil, Gas and Geothermal Resources has no record of active or inactive oil or gas wells or petroleum resources on the Project site or in the vicinity.<sup>15</sup> The Project lies within a large region that has been classified by CGS as MRZ-3, representing an area containing mineral deposits the significance of which cannot be evaluated from available data. However, there are no known current or historic mineral resource extraction or recovery operations in the Project vicinity nor are there any known significant mineral resources onsite. Therefore, implementation of the Project would not result in the loss of availability of a known mineral resource since no known mineral resources occur in this area. Furthermore, the Project area has not been designated as a locally important mineral resource recovery site by a general plan, specific plan, or land use plan. There would be no impact.

<sup>&</sup>lt;sup>14</sup> Map Sheet 52. CGS. Aggregate Sustainability

Map.https://www.conservation.ca.gov/cgs/Documents/Publications/MS\_52\_California\_Aggregates\_Map\_201807.pdf\_Accessed 28 January 2019.

15 DOGGR Map of Oil and Gas Wells.https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-119.67834/36.62998/14 Accessed 1 July 2021.

## 3.14 **Noise**

Table 3-19. Noise Impacts

TOTOTO	Table 3-13. Noise impacts							
	Noise Impacts							
Would the project result in:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact			
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?							
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?				$\boxtimes$			

### 3.14.1 Environmental Setting and Baseline Conditions

Typical noise sources in the Project's vicinity include vehicular traffic, agricultural equipment, school bells and announcement systems, and intermittent railway traffic. The Project is located northeast of the Adams Avenue and Armstrong Avenue intersection. Both of these streets are classified as Collector Streets, but Adams Avenue is also a truck route designated for heavy commercial and industrial traffic. The Project lies approximately one mile east of State Route 99 and approximately 0.75 miles east of the Union Pacific train tracks, which would produce moderate noise from railway traffic intermittently throughout each day. The City of Fowler Police Station and Fire Department are both located within 0.5 mile of the Project site. Both of these facilities would be expected to produce intermittent noises from sirens during emergency call response. There is a public school near the Project to the west. Schools would be expected to produce intermittent noise from notification bells, alarms, announcement systems, and increased vehicular traffic, including school bus transportation systems.

City of Fowler 2025 General Plan Update: The Land Use Element and the Circulation Element of The City of Fowler 2025 General Plan Update contains the following goals and policies that relate to noise and which have potential relevance to the Project's CEQA review:

- Roof-mounted and detached mechanical equipment shall be acoustically baffled to prevent equipment noise from exceeding 55 dBA measured at the nearest residential property line.
- Adopt zoning ordinance amendments providing for such measures as increased yard spaces, masonry
  wall development, dust and noise control, and other performance standards for light or heavy industrial
  uses deemed hazardous or detrimental to public safety or adjacent land uses, especially those businesses
  processed as conditional uses.
- Provide designated routes and loading standards that reduce the noise and safety concerns associated with truck traffic.

- Require that the automobile and truck access of commercial and industrial land uses abutting residential
  parcels be located at the maximum practical distance from the nearest residential parcels to minimize
  noise impacts.
- Protect City residents from transportation generated noise. Increased setbacks, walls, landscaped berms, other sound-absorbing barriers, or a combination thereof shall be provided along major roadways where appropriate in order to protect adjacent noise-sensitive land uses from trafficgenerated noise impacts. Additionally, noise generators, such as commercial or industrial activities shall use these techniques to mitigate exterior noise levels.

City of Fowler General Plan (1976): The City of Fowler General Plan (1976) contains the following policies for the control of noise within the Environmental Resources Management Element:

- Adopt and enforce a noise ordinance which defines maximum allowable noise levels within residential, commercial and industrial areas and provides adequate means of enforcing these levels.
- In order to maintain an acceptable noise environment, the following maximum acceptable noise levels will be used as guidelines for various land use classifications:

				Exterior	Interior
Urban	Residential	and	Noise	60 dBA	45 dBA
Sensitiv	e Receptors				
Urban (	Commercial				
Urban 1	Industrial				

- Within noise impact zones (areas subject to an Ldn greater than 60 dBA) the city will evaluate the noise
  impact on development proposals. Mitigating measures, including but not limited to the following, may
  be required:
  - o Setbacks, berms, and barriers
  - o Acoustical design of structures
  - o Location of structures on the property
- The design of all proposed development shall incorporate elements necessary to minimize adverse noise impacts on surrounding land uses and mitigate impacts existing noise levels might have upon proposed development.

City of Fowler Noise Ordinance: In addition to General Plan requirements, the City has established a Noise Ordinance in its municipal code. Noise ordinances establish limits for which penalties or enforcement action may be taken. Therefore, a noise ordinance generally must not be exceeded; whereas, General Plan limits are to be taken into consideration during the development of a project and may or may not be strictly applied, depending on the particular circumstances of the project. In preparing the noise element, a city or county must identify local noise sources and analyze and quantify, to the extent practicable, current and projected noise levels for various sources, including highways and freeways; passenger and freight railroad operations; ground rapid transit systems; commercial, general, and military aviation and airport operations; and other ground stationary noise sources.

The Project is subject to the City of Fowler Noise Ordinance, which is covered in Chapter 21, Article 6 of the municipal code. It prohibits continued loud noise or noise which disturbs others by placing time constraints on noise producing activities and volume limits on noise amplification devices. Specifically, construction and operation of machinery is prohibited within the hours of 8:00 p.m. and 7:00 a.m. Furthermore, noise level standards by receiving land use category have been established by the City of Fowler Municipal Code, as illustrated in **Table 3-20**, below.

Table 3-20. Noise Level Standards

Receiving Land Use Category	Time Period	Noise Level (dBA)	
	10:00 p.m.—7:00 a.m.	50	
Residential	7:00 a.m.—10:00 p.m.	60	
	10:00 p.m.—7:00 a.m.	55	
Public Uses *	7:00 a.m.—10:00 p.m.	60	
	10:00 p.m.—7:00 a.m.	60	
Commercial	7:00 a.m.—10:00 p.m.	65	
Industrial	Any time	70	

<sup>\*</sup> Public uses include schools, libraries, hospitals, churches, and parks.

#### 3.14.2 Impact Assessment

a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact. The Project involves the development of a residential subdivision in northeast Fowler. The site is located in area that acts as a transition between urban development and rural agriculture in Fowler. The City of Fowler General Plan and the City of Fowler municipal code establishes a range of 50 dBA to 60 dBA as the normally acceptable exterior noise criteria for urban residential and noise sensitive receptors or public uses.

Activities associated with construction could result in temporary elevated noise levels, with maximum construction noise levels ranging between 74 dBA to 89 dBA at 50 feet distance. The construction noise is anticipated to be within acceptable standards. Typical construction equipment would include backhoes, tractors, air compressors, scrapers, pavers, concrete mixers, and numerous other miscellaneous tools and equipment. Construction of the Project would result in temporary increased noise levels in the immediate vicinity.

As illustrated in **Table 3-21** below, typical construction noise levels could range between 74 to 89 dBA at a distance of 50 feet from the source, according to the EPA and the FTA. Implementation of feasible noise control measures, such as the installation of mufflers or engine casing, would result in noise reduction of 5-10 dBA per source.

<sup>&</sup>lt;sup>16</sup> FTA Construction Equipment Noise Emission Levels.

Table 3-21. Typical Construction Noise Levels\*

Equipment	Typical Noise Level (dBA) 50 feet from Source
Roller	74
Concrete Vibrator, Pump, Saw	76
Backhoe	80
Generator, Air Compressor	81
Compactor, concrete pump	82
Crane, Mobile	83
Dozer, Grader, Loader, Concrete Mixer, Impact Wrench, Pneumatic Tool	85
Truck, Jack Hammer	88
Paver, Scraper	89

\*Source: FTA Construction Equipment Noise Emission Levels.

https://www.fhwa.dot.gov/environment/noise/construction\_noise/handbook/handbook09.cfm Accessed 28 January 2019.

The majority of residents in newly urbanized areas recognize the reality of occasional construction activities and expect to hear construction noise on a temporary basis. Furthermore, the community of Fowler is surrounded by agriculture and most residents in rural areas understand and expect equipment-generated noise on occasion. Project construction activities would be required to operate within the regulations included in the City's Municipal Code and General Plan. All construction activities would be limited to daytime hours and would be temporary in nature. Therefore, construction-related noise impacts are anticipated to be less than significant.

Typical noise sources in the Project's vicinity include vehicular traffic, agricultural equipment, school bells and announcement systems, intermittent railway traffic, and intermittent police and fire emergency response sirens. The Project is located approximately one mile east of State Route 99 and approximately 0.75 miles east of the Union Pacific train tracks. There are no stationary sources of excessive noise in the Project's vicinity. Implementation of the Project, which includes development of a residential subdivision, would be consistent with surrounding uses and would not expose the inhabitants to excessive noise levels. Therefore, all impacts related to noise levels would be less than significant.

#### b) Would the project result in generation of excessive ground borne vibration or ground borne noise levels?

Less than Significant Impact. During grading and site preparation there is potential for construction equipment to generate groundborne vibration or groundborne noise levels that could affect property owners adjacent to the Project site. There are 19 single-family units located along Aretha Avenue and Jonna Avenue which share a rear property line with the proposed development. People residing in these homes could potentially be impacted by groundborne noise or vibration during construction activities. However, construction activities will be short-term, temporary in nature, and limited to daytime hours. Furthermore, the Project site is currently in agricultural production which typically involves ground-disturbing activities on a regular basis, such as trenching for irrigation or discing of soil. Therefore, construction activities, such as intermittent grading and excavating, would not be considered a substantial variance from routine existing conditions. Habitation of the residential units will not result in the production of long-term groundborne noise or vibration levels, and the inhabitants of the proposed subdivision would not be exposed to excessive groundborne vibration or groundborne noise levels since there are no known stationary sources in the vicinity. Any impacts would be less than significant.

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?

No Impact. The Project site is not located within an airport land use plan or within two miles of a public use airport. There are no private airstrips in the Project vicinity. There would be no impact.

## 3.15 Population and Housing

Table 3-22. Population and Housing Impacts

Table 3-22. I optilation and modeling impacts							
	Population and Housing Impacts						
	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact		
a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			$\boxtimes$			
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?						

### 3.15.1 Environmental Setting and Baseline Conditions

The City has grown at a slower rate than surrounding cities over the past decade and is expected to maintain a 2-3% growth rate over the planning period. This would be consistent with overall Fresno County growth. Policies in the Land Use Element are intended to monitor population growth rates and allow the community to adjust the approach to growth based on the availability of services and other quality of life issues. At a 2% growth rate, the population of the City would increase from 4,100 in 2004 to approximately 6,100 in 2025. At 3%, the population would increase to 7,200, or an average annual increase of 180 residents per year." <sup>17</sup>

According to 2010 U.S. Census data, the City's population was 5,570 with an estimated percent change from 2010 to 2019 of 20.1%. As of 2015-2019, there was an average of 2,075 households with an average 3.12 persons per house. <sup>18</sup>

## 3.15.2 Impact Assessment

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

Less than Significant Impact. Implementation of the project would result in the introduction of 74 lot single-family residential subdivision on approximately 29 acres of undeveloped land historically used for agriculture. The Project will build new local streets which will connect to existing collector streets, build new homes, and connect to the City's public utility infrastructure. The residential density that will be introduced to northeastern Fowler will be 74 units. The Project is consistent with the City of Fowler 2025 General Plan Update and the City of Fowler Municipal Code. The Project site is zoned for low-density residential use in anticipation of a subdivision, resulting in an expansion of existing urban neighborhood. Therefore, the Project will have less than significant impact.

<sup>&</sup>lt;sup>17</sup> City of Fowler 2025 General Plan Update. <a href="http://www.fowlercity.org/city\_departments/general\_plan/Fowler\_General\_Plan.pdf">http://www.fowlercity.org/city\_departments/general\_plan/Fowler\_General\_Plan.pdf</a> Accessed 25 June 2018.

<sup>18</sup> U.S. Census Data. https://www.census.gov/quickfacts/fact/table/fowlercitycalifornia/PST045217 Accessed 23 June 2020.

## b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Less than Significant Impact. The Project site is located on approximately 29 acres of land historically used for agriculture. There are two existing homes on the property. Although the Project would remove these homes, the displacement of two households would not result in the need for construction of replacement housing elsewhere, as the Project proposes to build dwelling units on-site. Furthermore, two households does not result in a substantial number of persons or housing. There will be a less than significant impact.

## 3.16 Public Services

Table 3-23. Public Services Impacts

Table 3-23. Public Services impacts							
	Public Services Impacts						
	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact		
a)	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:						
	Fire protection?			$\boxtimes$			
	Police protection?			$\boxtimes$			
	Schools?			$\boxtimes$			
	Parks?			$\boxtimes$			
	Other public facilities?						

### 3.16.1 Environmental Setting and Baseline Conditions

Fire Protection: The Fowler Fire Department, located 0.9 miles southeast of the Project, is comprised of community volunteers that provide fire suppression and prevention, emergency and non-emergency medical services. The local Fire Department receives assistance from the California Department of Forestry and Fresno County Fire Protection District, which operates Station #82 located 4.8 miles northeast of the Project site.

Police Protection: The Fowler Police Department, located 0.8 miles southwest of the Project site, provides 24-hour policing services within the city limits.

Schools: The Fowler Unified School District (FUSD) includes three elementary schools, one middle school, one high school, and Fowler Academy Continuation School, which is comprised of grades 7 through 12. Marshall Elementary School and Casa Blanca Continuation High School are directly adjacent to the Project site. Fremont Elementary School, Sutter Middle School, and Fowler High School are all located within one mile of the Project site.

According to the California Department of Education's Enrollment Report, total enrollment for Fowler Unified School District in 2020-21 was 2,582 students, a slight decrease from 2,589 in 2019-2020.<sup>19</sup>

Parks: The City has four designated City Parks, three of them within an approximate one-mile radius of the Project. Panzak Park, the most visually appealing park with mature vegetation and trees, covers an area of

<sup>&</sup>lt;sup>19</sup>California Department of Education Enrollment Reports.

https://dq.cde.ca.gov/dataquest/page2.asp?level=District&subject=Enrollment&submit1=Submit Accessed 23 June 2021.

approximately 2.5 acres, located 0.5 mile southwest of the Project site. Panzak Park is an area of open space used for recreation, surrounded by medium- and high-density residential dwellings. Amenities include a covered picnic area, large shade trees, playground equipment, and tennis courts. Covered portions of the park are available for a nominal fee to rent for gatherings, while the remainder of the park is open to all on a first-come first-serve basis.

Donny Wright Park, the newest and largest park in the City, is located at 630 West Fresno Street in an area surrounded by low- to medium- density residential housing. The park covers an area of approximately 6 acres and includes an expanse of irrigated lawn and trails for recreation. Donny Wright Park is located across State Route 99, about 1.6 miles southwest of the Project site.

Margaret Cowings Park is an approximate 0.05-acre pocket park comprised of irrigated lawn and shade trees on the corner of Merced Street and Sixth Street in downtown Fowler amidst the Community Commercial District. Also considered a City Park, the Fowler Veteran's Monument, covers an area of approximately 0.10 acres and includes benches on paved surfaces, a scenic fountain, several flag poles, ornamental hedges, and rose gardens. The Fowler Veteran's Monument is located approximately 0.4 mile southwest of the Project site at the intersection of Merced Street and First Street in an area zoned for medium-density residential housing. There are no State or regional parks within the planning area.

Senior Center: The City operates the Edwin Blayney Senior Center, which offers a meeting place and specialized recreation opportunities for senior citizens. The Edwin Blayney Senior Center is located at 108 North Third Street, approximately 0.6 mile southwest of the Project site.

Library: The Fowler branch of the Fresno County Public Library is located 1.1 mile southwest of the Project site.

## 3.16.2 Impact Assessment

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

Less than Significant Impact. The Project would not result in physical changes that would require new or physically altered governmental facilities or create a need for new or physically altered governmental facilities. The Project would have a less than significant impact on service ratios, response times or other performance objectives for Public Services as described below:

Fire Protection: The Project is within the service area of the Fowler Fire Department, which is composed of community volunteers. The local Fire Department receives assistance from the California Department of Forestry and Fresno County Fire Protection District, which operates Station #82 located 4.8 miles northeast of the Project site. The City recently constructed a new Fire Department headquarters, on Main Street between 5th and 6th Streets. The existing volunteer Fire Department has proven to be adequate for the City in the past and the Project, which proposes 74 new single-family residential homes, would not add appreciably to the burden of the volunteer operation. Although the Project proposes new local streets within the residential subdivision, construction will comply with all emergency access laws determined by federal, State, and local regulations, including the City of Fowler General Plan. The proposed street layouts within the subdivision and all right-of-way improvements along major street frontages will be constructed to provide adequate emergency access without diminishing response times. Impact would be less than significant.

Police Protection: The City of Fowler Police Department provides police protection services to the Project area. The Project will not result in a need for new or physically altered facilities related to police protection. The potential population increase created by 74 new single-family residences is not considered significant when compared to the City's population, and it should not require a new or modified facilities to service the Project site. The fire station is located approximately 0.8 miles southwest of the project area. The estimated response time will be similar to adjacent residential subdivisions. Although the Project proposes new local streets within the residential subdivision, construction will comply with all emergency access laws determined by federal, State, and local regulations, including the City of Fowler General Plan. The proposed street layouts within the subdivision and all right-of-way improvements along major street frontages will be constructed to provide adequate emergency access without diminishing response times. Impact would be less than significant.

Schools: The Project site is within the Fowler Unified School District (FUSD). The school child generation factor within Fowler Unified schools has ranged between 0.5 and 0.6 students per household, indicating that there is sufficient capacity for an additional 580-700 homes residential units within the district. Therefore the Project which would generate 37 to 44 students. The Project would pay applicable school impact fees in effect at the time of building permits. Impact would be less than significant.

Parks: The Project will pay park impact development fees in effect at the time of the building permits to offset potential impacts to park and recreation facilities. Impact would be less than significant.

Other Public Facilities: No impacts are anticipated to other public facilities.

# 3.17 Recreation

**Table 3-24. Recreation Impacts** 

	Recreation Impacts										
	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact						
a)	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			$\boxtimes$							
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?			$\boxtimes$							

## 3.17.1 Environmental Setting and Baseline Conditions

There are currently four City Parks in Fowler, all of which are administered by the Department of Parks and Recreation. Panzak Park covers an area of approximately 2.5 acres and includes a covered picnic area, large shade trees, playground equipment, and tennis courts. The recently developed Donny Wright Park covers an area of approximately six acres and includes an expanse of irrigated lawn and trails for recreation. Margaret Cowings Park is an approximate 0.05-acre pocket park comprised of irrigated lawn and shade trees on the corner of Merced Street and Sixth Street in downtown Fowler. Also considered a City Park, the Fowler Veteran's Monument covers an area of approximately 0.10 acres and includes benches on paved surfaces, a scenic fountain, several flag poles, ornamental hedges, and rose gardens. There are no State or regional parks within the planning area.

In addition to the four City Parks mentioned above, the City also operates the Edwin Blayney Senior Center, which offers a meeting place and specialized recreation opportunities for senior citizens.

## 3.17.2 Impact Assessment

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

Less than Significant Impact. The potential population growth associated with the Project's proposed 74 new single-family residential homes is not considered significant when compared to the City's population, and it should not increase the demand for recreational facilities, nor would it impose a strain on the existing recreational facilities such that substantial physical deterioration of existing recreational facilities would occur or be accelerated. Additionally, the Project will pay park impact development fees in effect at the time of the building permits to off-set potential impacts to park and recreation facilities. Therefore, impact will be less than significant.

# 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?

Less than Significant Impact. Although the Project would provide park space, the Project does not include recreational facilities. As stated above in Impact Assessment XV-a, the potential population growth associated with the Project's proposed 74 new single-family residential homes is not considered significant when compared

to the City's population, and construction or expansion of nearby recreational facilities is not necessary. Impact will be less than significant.

# 3.18 Transportation

**Table 3-25. Transportation Impacts** 

	Transportation Impacts										
	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact						
a)	Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?										
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?										

## 3.18.1 Environmental Settings and Baseline Conditions

The Project site is located in the northeast area of the City of Fowler within Fresno County. The City is bisected by State Route 99, Golden State Boulevard, and an active railroad used for freight trains. All three of these major transportation routes run northwest-southeast, parallel with each other.

# 3.18.2 Impact Assessment

# a) Would the project conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant Impact. The Project would be completed in one phase and would result in the construction of 74 single family residences, internal access roads, landscaped grounds, and off-site improvements subject to City standards. Vehicular access to the site would from Armstrong Avenue. All internal streets and related improvements will comply with City standards.

The Project does not conflict with any circulation plan. The site will maintain vehicular access to one street, which connects to the larger city-wide circulation system. Any impacts would be less than significant.

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

Less than Significant Impact. The City has not yet adopted an applicable threshold of significance for vehicle miles traveled. As discussed in XVII-a), the Project does not conflict with any circulation plan. The site will maintain vehicular access to one street, which connects to the larger city-wide circulation system. Any impacts would be less than significant.

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

Less than Significant Impact. The Project will introduce six new local streets which will connect onto the City's existing collector street system at Armstrong Avenue on the west border of the subdivision. The Project will

introduce additional local streets consistent with the City's Circulation Element. All roads will be built according to City of Fowler Street Design Standards. All rights-of-way proposed within the subdivision will be designed and constructed to meet City of Fowler Standard Specifications. The Project would not increase hazards due to Project design features or through the introduction of incompatible land uses into the existing community. There would be a less than significant impact.

#### d) Would the project result in inadequate emergency access?

Less than Significant Impact. The Project shall comply with all emergency access laws determined by federal, State, and local regulations. The proposed street layouts within the subdivision and all right-of-way improvements along major street frontages will be constructed to provide adequate emergency access. The Project would comply with the City of Fowler General Plan. As such, the Project will have a less than significant impact on emergency access.

# 3.19 Tribal Cultural Resources

**Table 3-26. Tribal Cultural Resources Impacts** 

rabie	able 3-26. I ribal Cultural Resources Impacts								
		Tribal Cultural Res	sources Impa	acts					
		Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact			
a)	of a triba Code se cultural l of the siz object w	a substantial adverse change in the significance al cultural resource, defined in Public Resources ection 21074 as either a site, feature, place, andscape that is geographically defined in terms are and scope of the landscape, sacred place, or ith cultural value to a California Native American d that is:							
	i.	<ul> <li>i. Listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code section 5020.1(k), or</li> </ul>							
	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.							

# 3.19.1 Environmental Settings and Baseline Conditions

The City lies within an area once inhabited by the Northern Valley Yokuts. Yokuts villages were situated near major waterways, like the Kings River, and featured structures made with woven tule reeds. As with other Native American Tribes in California, the Yokuts population was drastically reduced following the influx of Spanish explorers, missionaries, miners, ranchers, and other European immigrants to the San Joaquin Valley after 1700. During the gold rush, miners began to settle along major waterways such as the San Joaquin River and Kings River. The momentum of the gold rush could not be sustained, and miners began to pursue vocations in ranching and farming. The successful development of irrigation systems led to the agricultural boom as more tracts of land became suitable for crops.

Public Resources Code Section 21080.3.1, et seq. (codification of AB 52, 2013-14) requires that a lead agency, within 14 days of determining that it will undertake a project, must notify in writing any California Native American Tribe traditionally and culturally affiliated with the geographic area of the project if that Tribe has previously requested notification about projects in that geographic area. The notice must briefly describe the project and inquire whether the Tribe wishes to initiate request formal consultation. Tribes have 30 days from receipt of notification to request formal consultation. The lead agency then has 30 days to initiate the consultation, which then continues until the parties come to an agreement regarding necessary mitigation or agree that no mitigation is needed, or one or both parties determine that negotiation occurred in good faith, but no agreement will be made.

Pursuant to PRC § 21080.3., on July 13, 2016, the City received a letter from the Santa Rosa Rancheria Tachi Yokut Tribe (Yokut Tribe) officially requesting notification. No other tribes have requested notification.

#### 3.19.2 Impact Assessment

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

Less than Significant Impact with Mitigation Incorporated. On July 13, 2016, the City received a letter from the Santa Rosa Rancheria Tachi Yokut Tribe pursuant to PRC § 21080.3.1 officially requesting notification of Projects within the Santa Rosa Rancheria's geographic area of traditional and cultural affiliation. On June 25, 2018, the City sent to the Yokut Tribe a formal Notification of a Decision to Undertake a Project, and Notification of Consultation Opportunity, including a Project description of the TSM No. 21-0015 applications. In accordance with the law, the letter provided 30 days from receipt of the letter to request consultation in writing. No request for consultation was made for the Project and less than significant impacts to tribal resources are expected. Mitigation Measures CUL-1 and CUL-2, described above in Section 3.6, have been incorporated into the Project in the event cultural materials or human remains are unearthed during excavation or construction.

# 3.20 Utilities and Service Systems

Table 3-27. Utilities and Service Systems Impacts

	Utilities and Service	Systems Im	pacts		
	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			$\boxtimes$	
b)	Have sufficient 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 adequate 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)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				

## 3.20.1 Environmental Setting and Baseline Conditions

The City's sewer service is provided by the Selma-Kingsburg-Fowler County Sanitation District (SKF or District) and solid waste services are provided by Waste Management, Inc. The District operates wastewater treatment and disposal facilities on a 550-acre site located approximately 10 miles south of the Project site. Solid waste within Fresno County is transferred to the American Avenue Landfill in Kerman, CA, approximately 25.1 miles northwest of the Project site. According to the City of Fresno Department of Public Utilities, "it is estimated that the [American Avenue Landfill] will be able to continue operation until 2031 when it will be full and have to be closed. <sup>20</sup>"

The City lies entirely within the Kings Groundwater Subbasin of the San Joaquin Valley Groundwater Basin.<sup>21</sup> Due to groundwater overdraft and contamination from agricultural chemicals, provision of reliable sources of groundwater in both quantity and quality have been a challenge throughout most of the Central Valley.

Water supply is produced from six groundwater wells located throughout the City and distribution is provided by the Water Division of the City's Public Works Department through a system in which pumps deliver water from beneath the ground to a network of watermains, pipelines and laterals which distribute water to residents

<sup>&</sup>lt;sup>20</sup> City of Fresno Department of Public Utilities. <a href="https://www.fresno.gov/publicutilities/facilities-infrastructure/american-avenue-landfill/">https://www.fresno.gov/publicutilities/facilities-infrastructure/american-avenue-landfill/</a> Accessed 18 July 2021.

<sup>&</sup>lt;sup>21</sup> DWR Bulletin 118 Groundwater Basin Boundary Assessment Tool. https://gis.water.ca.gov/app/bbat/ Accessed 18 July 2021.

and businesses. Municipal water is tested monthly to ensure quality. According to the Annual Water Quality Report (2017), the average depth to groundwater is 85 to 95 feet, and the existing wells produce drinking water of good quality that does not require treatment.

In 2014, the City entered into an agreement with CID to fund groundwater recharge programs in order to sustain the groundwater aquifer the City is reliant upon. CID provides water from the Kings River for groundwater recharge and irrigation to over 6,000 growers within its 144,000-acre service area, which includes the vicinity surrounding the City.

#### 3.20.2 Impact Assessment

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

Less Than Significant Impact. The Project proposes construction of 74 residential homes. Upon development, the Project will connect to the City's sanitary sewer system. According to the District Engineer, the SKF County Sanitation District Treatment Plant has a capacity of 8.0 million gallons per day (mgd) with existing flows of 4.2 mgd (52.5% of capacity). By 2025, the SKF Capital Improvement Program (CIP) projects total flow at 5.71 mgd (71% of capacity). According to the 2016 Collection System Master Plan Update, the design flow coefficient is 270 gallons per day (gpd) per existing single-family residence. The Project would be expected to generate approximately 27,810 gpd of wastewater at full development. The Project can be served by the SKF County Sanitation District Treatment Plant and no new facilities will be needed.

Sewer infrastructure plans must be submitted to the District, including detailed floor and plumbing plans. All sewer system facilities must be designed and constructed in accordance with the District's Collection System Construction Standards, the District's Sewer System Master Plan, and other requirements as may be specified by the District.

Expansion plans for a wastewater treatment plant are generally required by the Regional Water Quality Control Board when 70% of design capacity is reached. This threshold is not expected at the SKF plant until after 2025. The District, however, is currently updating its Master Plan to include provisions for long-term expansion of the plant and will make interim improvements (such as refurbishing aerators, basin improvements, fleet replacements, etc.) in conformance with the 10-year CIP.

The developer will be responsible for planning and installing wastewater collection and water delivery facilities as determined by the City Engineer. In addition, the developer will pay current development fees to off-set potential impacts to these facilities. Impacts would be less than significant.

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

Less than Significant Impact. No new or expanded water entitlements would be required for the Project. See response a), above. Impacts would be less than significant.

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

Less than Significant Impact. As discussed in a) above, SKF has adequate capacity to serve the Project. Impacts would be less than significant.

# d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less than Significant Impact. The City contracts with Waste Management, Inc., as the solid waste provider. The City's solid waste program includes waste disposal collection, a regular recyclables pickup program, and a green waste pickup program. Based on a generation rate for single family residential units of 12 pounds/unit/day, it is estimated that the Project will generate approximately 1,236 pounds per day of solid waste, or just less than one cubic yard per day.

After removing recyclable materials, the City's solid waste is transferred to the Fresno County-owned and operated American Avenue Landfill located 25.1 miles northwest of Fowler near the City of Kerman. It is estimated that the landfill will be able to continue operation until 2031 when it will be full and require closure. Subsequent to closure of the American Avenue Landfill, the Fowler area will most likely be served by a new landfill that will be developed in accordance with all applicable laws and regulations in effect at the time. Impacts will be less than significant.

# e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. The Project shall comply with all applicable federal, State, and local regulations related to solid waste. There would be no impact.

## 3.21 Wildfire

Table 3-28. Wildfire Impacts

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

## 3.21.1 Environmental Setting and Baseline Conditions

The Project is located in the City of Fowler in the northeast area of the City within Fresno County. The site is in a flat urbanized area of the Central San Joaquin Valley. It is in an urbanized area and would add a new subdivision to an area that has housing in the vicinity. The Project site would be served by the Fowler Fire Department, and it is not located in or near a State Responsibility Area. Additionally, the Project is not on or near land classified as a very high fire hazard severity zone. The nearest very high fire hazard severity zone is located approximately 25 miles northeast.

# 3.21.2 Impact Assessment

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

- a) Substantially impair an adopted emergency response plan or emergency evacuation plan?
- b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

a-d) No Impact. The proposed project is not located in or near State Responsibility Areas or lands classified as very high fire hazard severity zones. The nearest State Responsibility Area (SRA) is 14 miles to the northeast of the Project site. The nearest Federal Responsibility Area (FRA) is 20.4 miles to the northeast of the Project site<sup>22</sup>. Additionally, the site is approximately 25 miles from the nearest Very High classification of Fire Hazard Severity Zone (FHSZ). Therefore, further analysis of the Projects potential impacts to wildfire are not warranted. There would be no impact.

<sup>22</sup> California Department of Forestry and Fire Protection. California State Responsibility Areas. https://www.arcgis.com/apps/mapviewer/index.html?layers=5ac1dae3cb2544629a845d9a19e83991 Accessed June 24, 2021.

# 3.22 **CEQA Mandatory Findings of Significance**

**Table 3-29. Mandatory Findings of Significance Impacts** 

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

# 3.22.1 Impact Assessment

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

Less Than Significant Impact with Mitigation Incorporated. The analysis conducted in this Initial Study/Mitigated Negative Declaration results in a determination that the Project, with incorporation of mitigation measures, will have a less than significant effect on the environment. The potential for impacts to biological resources, cultural resources, and tribal cultural resources from the implementation of the proposed Project will be less than significant with the incorporation of the mitigation measures discussed in **Chapter 4 Mitigation Monitoring and Reporting Program**. Accordingly, the proposed Project will involve no potential for significant impacts through the degradation of the quality of the environment, the reduction of habitat or population of fish or wildlife, including endangered plants or animals, the elimination of a plant or animal community or example of a major period of California history or prehistory.

# Chapter 3 Impact Analysis – CEQA Mandatory Findings of Significance Marshall Estates II

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

Less Than Significant Impact with Mitigation Incorporated. CEQA Guidelines Section 15064(i) States that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. The proposed Project would include the construction a new subdivision and associated infrastructure to connect the subdivision to the City. The Project site was anticipated for urbanization with the development of the 2004 General Plan Update. Therefore, implementation of the Project would not result in significant cumulative impacts and all potential impacts would be reduced to less than significant through the implementation of mitigation measures and basic regulatory requirements incorporated into future Project design.

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

Less Than Significant Impact. The analysis conducted in this Initial Study results in a determination that the Project would have a less than a substantial adverse effect on human beings, either directly or indirectly with incorporation of mitigation measures.

# 3.23 **Determination:** (To be completed by the Lead Agency)

On th	e basis of this initial evaluation:
	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.
Signat	Date Date
Printe	Name/Position

# Chapter 4 Mitigation Monitoring and Reporting Program

This Mitigation Monitoring and Reporting Program (MMRP) has been formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) for the Project in the City of Fowler. The MMRP lists mitigation measures recommended in the IS/MND for the Project and identifies monitoring and reporting requirements.

Table 4-1 presents the mitigation measures identified for the proposed Project. Each mitigation measure is numbered with a symbol indicating the topical section to which it pertains, a hyphen, and the impact number. For example, AIR-2 would be the second mitigation measure identified in the Air Quality analysis of the IS/MND.

The first column of **Table 4-1** identifies the mitigation measure. The second column, entitled "When Monitoring is to Occur," identifies the time the mitigation measure should be initiated. The third column, "Frequency of Monitoring," identifies the frequency of the monitoring of the mitigation measure. The fourth column, "Agency Responsible for Monitoring," names the party ultimately responsible for ensuring that the mitigation measure is implemented. The last two columns will be used respectively by the City to verify the method utilized to confirm or implement compliance with mitigation measures and identify the individual(s) responsible to confirm mitigation measures have been complied with and monitored.

**Table 4-1 Mitigation Monitoring and Reporting Program** 

N	litigation Monitoring and Re	porting Progra	am						
Mitigation Measure/Condition of Approval	When Monitoring is to Occur	en Monitoring is to Occur Frequency of Monitoring		Entity Responsible for Monitoring  Method to Verify Compliance					
Biological Resources									
Mitigation Measure Bio-1: WEAP Training									
Prior to initiating construction activities (including staging and mobilization), all personnel associated with Project construction shall attend mandatory Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to aid workers in identifying special status resources that may occur in the Project area. The specifics of this program shall include identification of the sensitive species and suitable habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. A fact sheet conveying this information, along with photographs or illustrations of sensitive species with potential to occur onsite, shall also be prepared for distribution to all contractors, their employees, and all other personnel involved with construction of the Project. All employees shall sign a form documenting that they have attended WEAP training and understand the information presented to them.	Prior to Construction/During Construction		City of Fowler	Training Sign in Sheet					
Mitigation Measure Bio-2: General Pre-construction Sur	vey								
A pre-construction survey for special status species shall be conducted by a qualified biologist within 30 days prior to the beginning of construction activities. If sensitive biological resources are present onsite, the biologist shall establish an appropriate buffer zone and label sensitive resources or areas of avoidance with flagging, fencing, or other easily visible means. If avoidance is not feasible, CDFW and/or USFWS shall be consulted to determine the best course of action.	Prior to Construction		City of Fowler	Survey Report					

N	Mitigation Monitoring and Reporting Program										
Mitigation Measure/Condition of Approval	on Measure/Condition of Approval  When Monitoring is to Occur  Frequency of Monitoring for Monitoring		Method to Verify Compliance	Verification of Compliance							
	Cultural Resource	es									
Mitigation Measure CUL-1:											
If, during construction, cultural resources are discovered, all work shall be halted within 50 feet of the discovery. A professional archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology shall be retained by the City to determine the significance of the discovery. Upon a finding of significance, the City shall implement the required mitigation (if any) as determined by the archaeologist.	During Construction		City of Fowler								
Mitigation Measure CUL-2:											
In the event human remains are encountered during construction activities, all work within the vicinity of the remains would halt in accordance with Health and Safety Code §7050.5, Public Resources Code §5097.98, and Section 15064.5 of the CEQA Guidelines, and the Fresno County Coroner's Office would be contacted.	During Construction		City of Fowler								

# Appendix A CalEEMod Output Files

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#### TSM 21-0015 - Fresno County, Annual

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

#### TSM 21-0015

#### Fresno County, Annual

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	74.00	Dwelling Unit	29.04	160,851.00	237

#### 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)45

Climate Zone 3 Operational Year 2024

Utility Company Pacific Gas and Electric Company

 CO2 Intensity
 203.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Gross acreage used. Square footage based on lot size multiplied by minimum FAR of 0.2. Population based on Housing Element persons per household.

Grading - Assumes site is balanced.

Demolition - Assumes 4,000 square feet of buildings to be demolished.

Architectural Coating - Assumes Year 2022 SJVAPCD Rule 4601 applies.

Fleet Mix - Assumes 2024 SJVAPCD Residential Fleet Mix

Woodstoves - No woodstoves per Rule 4901

Area Coating - Assumes Year 2022 SJVAPCD Rule 4601

Land Use Change -

Construction Off-road Equipment Mitigation - Project submit to a Dust Control Plan.

Mobile Land Use Mitigation -

#### TSM 21-0015 - Fresno County, Annual

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

Area Mitigation - Assumes Year 2022 SJVAPCD Rule 4601

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Residential_Exterior	150	50
tblAreaCoating	Area_EF_Residential_Interior	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.52	0.53
tblFleetMix	LDT1	0.05	0.21
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LHD1	0.03	9.0000e-004
tblFleetMix	LHD2	6.8290e-003	9.0000e-004
tblFleetMix	MCY	0.02	2.5000e-003
tblFleetMix	MDV	0.16	0.06
tblFleetMix	MH	2.9750e-003	2.0000e-003
tblFleetMix	MHD	0.01	8.0000e-003
tblFleetMix	OBUS	7.0700e-004	0.00
tblFleetMix	SBUS	1.4960e-003	2.0000e-004
tblFleetMix	UBUS	2.8900e-004	4.3000e-003
tblLandUse	LandUseSquareFeet	133,200.00	160,851.00
tblLandUse	LotAcreage	24.03	29.04
tblLandUse	Population	212.00	237.00
tblWoodstoves	NumberCatalytic	3.70	0.00
tblWoodstoves	NumberNoncatalytic	3.70	0.00

# 2.0 Emissions Summary

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

#### 2.1 Overall Construction

#### **Unmitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	/yr		
2022	0.3054	2.9229	2.5993	4.9400e- 003	0.4348	0.1388	0.5736	0.1914	0.1293	0.3207	0.0000	432.1601	432.1601	0.1114	2.6800e- 003	435.7437
2023	0.2165	1.9228	2.2084	3.9500e- 003	0.0350	0.0914	0.1264	9.4500e- 003	0.0860	0.0955	0.0000	343.6929	343.6929	0.0725	3.6500e- 003	346.5924
2024	0.5364	0.2925	0.4217	7.0000e- 004	4.8100e- 003	0.0139	0.0187	1.2900e- 003	0.0130	0.0143	0.0000	61.4661	61.4661	0.0158	2.6000e- 004	61.9397
Maximum	0.5364	2.9229	2.5993	4.9400e- 003	0.4348	0.1388	0.5736	0.1914	0.1293	0.3207	0.0000	432.1601	432.1601	0.1114	3.6500e- 003	435.7437

#### **Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	/уг		
2022	0.3054	2.9229	2.5993	4.9400e- 003	0.2117	0.1388	0.3505	0.0905	0.1293	0.2197	0.0000	432.1597	432.1597	0.1114	2.6800e- 003	435.7432
2023	0.2165	1.9228	2.2084	3.9500e- 003	0.0350	0.0914	0.1264	9.4500e- 003	0.0860	0.0955	0.0000	343.6926	343.6926	0.0725	3.6500e- 003	346.5921
2024	0.5364	0.2925	0.4217	7.0000e- 004	4.8100e- 003	0.0139	0.0187	1.2900e- 003	0.0130	0.0143	0.0000	61.4660	61.4660	0.0158	2.6000e- 004	61.9396
Maximum	0.5364	2.9229	2.5993	4.9400e- 003	0.2117	0.1388	0.3505	0.0905	0.1293	0.2197	0.0000	432.1597	432.1597	0.1114	3.6500e- 003	435.7432

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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	47.01	0.00	31.04	49.94	0.00	23.45	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2022	3-31-2022	1.0960	1.0960
2	4-1-2022	6-30-2022	0.9612	0.9612
3	7-1-2022	9-30-2022	0.5886	0.5886
4	10-1-2022	12-31-2022	0.5894	0.5894
5	1-1-2023	3-31-2023	0.5294	0.5294
6	4-1-2023	6-30-2023	0.5346	0.5346
7	7-1-2023	9-30-2023	0.5405	0.5405
8	10-1-2023	12-31-2023	0.5412	0.5412
9	1-1-2024	3-31-2024	0.5378	0.5378
10	4-1-2024	6-30-2024	0.2803	0.2803
		Highest	1.0960	1.0960

#### TSM 21-0015 - Fresno County, Annual

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

## 2.2 Overall Operational

#### **Unmitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr					MT/yr					
Area	0.6983	0.0340	0.5610	2.1000e- 004		5.2800e- 003	5.2800e- 003		5.2800e- 003	5.2800e- 003	0.0000	32.9549	32.9549	1.4800e- 003	5.9000e- 004	33.1669
Energy	9.5900e- 003	0.0820	0.0349	5.2000e- 004		6.6300e- 003	6.6300e- 003		6.6300e- 003	6.6300e- 003	0.0000	149.5182	149.5182	0.0107	2.8100e- 003	150.6221
Mobile	0.2094	0.3913	2.4905	7.0000e- 003	0.7532	5.0800e- 003	0.7583	0.2007	4.7400e- 003	0.2055	0.0000	666.0493	666.0493	0.0483	0.0321	676.8352
Waste					<del></del>	0.0000	0.0000		0.0000	0.0000	17.3192	0.0000	17.3192	1.0235	0.0000	42.9076
Water						0.0000	0.0000		0.0000	0.0000	1.5296	3.3981	4.9277	0.1577	3.7800e- 003	9.9944
Total	0.9173	0.5072	3.0864	7.7300e- 003	0.7532	0.0170	0.7702	0.2007	0.0167	0.2174	18.8488	851.9205	870.7693	1.2416	0.0393	913.5262

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

### 2.2 Overall Operational

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr					MT/yr					
Area	0.6983	0.0340	0.5610	2.1000e- 004		5.2800e- 003	5.2800e- 003		5.2800e- 003	5.2800e- 003	0.0000	32.9549	32.9549	1.4800e- 003	5.9000e- 004	33.1669
Energy	9.5900e- 003	0.0820	0.0349	5.2000e- 004		6.6300e- 003	6.6300e- 003		6.6300e- 003	6.6300e- 003	0.0000	149.5182	149.5182	0.0107	2.8100e- 003	150.6221
Mobile	0.2086	0.3857	2.4540	6.8600e- 003	0.7382	4.9900e- 003	0.7432	0.1967	4.6500e- 003	0.2014	0.0000	653.1478	653.1478	0.0476	0.0317	663.7697
Waste						0.0000	0.0000		0.0000	0.0000	17.3192	0.0000	17.3192	1.0235	0.0000	42.9076
Water						0.0000	0.0000		0.0000	0.0000	1.5296	3.3981	4.9277	0.1577	3.7800e- 003	9.9944
Total	0.9165	0.5017	3.0499	7.5900e- 003	0.7382	0.0169	0.7551	0.1967	0.0166	0.2133	18.8488	839.0190	857.8678	1.2409	0.0388	900.4607

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.08	1.10	1.18	1.81	2.00	0.53	1.97	2.00	0.54	1.89	0.00	1.51	1.48	0.06	1.25	1.43

### 3.0 Construction Detail

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2022	2/11/2022	5	30	
2	Site Preparation	Site Preparation	2/12/2022	3/11/2022	5	20	
3	Grading	Grading	3/12/2022	5/13/2022	5	45	

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

4	Building Construction	Building Construction	5/14/2022	1/19/2024	5	440	
5	Paving	Paving	1/20/2024	3/8/2024	5	35	
6	Architectural Coating	Architectural Coating	3/9/2024	4/26/2024	5	35	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 0

Residential Indoor: 325,723; Residential Outdoor: 108,574; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

(Architectural Coating - sqft)

#### **OffRoad Equipment**

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

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

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

#### **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	18.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	27.00	8.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### **3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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

# 3.2 Demolition - 2022 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	: :				1.9700e- 003	0.0000	1.9700e- 003	3.0000e- 004	0.0000	3.0000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0396	0.3858	0.3089	5.8000e- 004		0.0186	0.0186		0.0173	0.0173	0.0000	50.9853	50.9853	0.0143	0.0000	51.3434
Total	0.0396	0.3858	0.3089	5.8000e- 004	1.9700e- 003	0.0186	0.0206	3.0000e- 004	0.0173	0.0176	0.0000	50.9853	50.9853	0.0143	0.0000	51.3434

#### **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	3.0000e- 005	1.3800e- 003	2.6000e- 004	1.0000e- 005	1.5000e- 004	1.0000e- 005	1.7000e- 004	4.0000e- 005	1.0000e- 005	6.0000e- 005	0.0000	0.5316	0.5316	0.0000	8.0000e- 005	0.5566
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e- 004	5.2000e- 004	5.8200e- 003	2.0000e- 005	1.8000e- 003	1.0000e- 005	1.8100e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.4707	1.4707	5.0000e- 005	4.0000e- 005	1.4852
Total	7.9000e- 004	1.9000e- 003	6.0800e- 003	3.0000e- 005	1.9500e- 003	2.0000e- 005	1.9800e- 003	5.2000e- 004	2.0000e- 005	5.5000e- 004	0.0000	2.0022	2.0022	5.0000e- 005	1.2000e- 004	2.0418

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

# 3.2 Demolition - 2022 <u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					8.9000e- 004	0.0000	8.9000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0396	0.3858	0.3089	5.8000e- 004		0.0186	0.0186	1 1 1	0.0173	0.0173	0.0000	50.9853	50.9853	0.0143	0.0000	51.3433
Total	0.0396	0.3858	0.3089	5.8000e- 004	8.9000e- 004	0.0186	0.0195	1.3000e- 004	0.0173	0.0175	0.0000	50.9853	50.9853	0.0143	0.0000	51.3433

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
	3.0000e- 005	1.3800e- 003	2.6000e- 004	1.0000e- 005	1.5000e- 004	1.0000e- 005	1.7000e- 004	4.0000e- 005	1.0000e- 005	6.0000e- 005	0.0000	0.5316	0.5316	0.0000	8.0000e- 005	0.5566
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e- 004	5.2000e- 004	5.8200e- 003	2.0000e- 005	1.8000e- 003	1.0000e- 005	1.8100e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.4707	1.4707	5.0000e- 005	4.0000e- 005	1.4852
Total	7.9000e- 004	1.9000e- 003	6.0800e- 003	3.0000e- 005	1.9500e- 003	2.0000e- 005	1.9800e- 003	5.2000e- 004	2.0000e- 005	5.5000e- 004	0.0000	2.0022	2.0022	5.0000e- 005	1.2000e- 004	2.0418

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

## 3.3 Site Preparation - 2022

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.1966	0.0000	0.1966	0.1010	0.0000	0.1010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0317	0.3308	0.1970	3.8000e- 004		0.0161	0.0161		0.0148	0.0148	0.0000	33.4394	33.4394	0.0108	0.0000	33.7098
Total	0.0317	0.3308	0.1970	3.8000e- 004	0.1966	0.0161	0.2127	0.1010	0.0148	0.1159	0.0000	33.4394	33.4394	0.0108	0.0000	33.7098

## **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	6.1000e- 004	4.1000e- 004	4.6500e- 003	1.0000e- 005	1.4400e- 003	1.0000e- 005	1.4500e- 003	3.8000e- 004	1.0000e- 005	3.9000e- 004	0.0000	1.1765	1.1765	4.0000e- 005	4.0000e- 005	1.1881
Total	6.1000e- 004	4.1000e- 004	4.6500e- 003	1.0000e- 005	1.4400e- 003	1.0000e- 005	1.4500e- 003	3.8000e- 004	1.0000e- 005	3.9000e- 004	0.0000	1.1765	1.1765	4.0000e- 005	4.0000e- 005	1.1881

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

# 3.3 Site Preparation - 2022

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0885	0.0000	0.0885	0.0455	0.0000	0.0455	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0317	0.3308	0.1970	3.8000e- 004		0.0161	0.0161		0.0148	0.0148	0.0000	33.4394	33.4394	0.0108	0.0000	33.7097
Total	0.0317	0.3308	0.1970	3.8000e- 004	0.0885	0.0161	0.1046	0.0455	0.0148	0.0603	0.0000	33.4394	33.4394	0.0108	0.0000	33.7097

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1000e- 004	4.1000e- 004	4.6500e- 003	1.0000e- 005	1.4400e- 003	1.0000e- 005	1.4500e- 003	3.8000e- 004	1.0000e- 005	3.9000e- 004	0.0000	1.1765	1.1765	4.0000e- 005	4.0000e- 005	1.1881
Total	6.1000e- 004	4.1000e- 004	4.6500e- 003	1.0000e- 005	1.4400e- 003	1.0000e- 005	1.4500e- 003	3.8000e- 004	1.0000e- 005	3.9000e- 004	0.0000	1.1765	1.1765	4.0000e- 005	4.0000e- 005	1.1881

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

3.4 Grading - 2022

#### **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust	) 				0.2071	0.0000	0.2071	0.0822	0.0000	0.0822	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0816	0.8740	0.6534	1.4000e- 003		0.0368	0.0368		0.0338	0.0338	0.0000	122.7029	122.7029	0.0397	0.0000	123.6950
Total	0.0816	0.8740	0.6534	1.4000e- 003	0.2071	0.0368	0.2439	0.0822	0.0338	0.1161	0.0000	122.7029	122.7029	0.0397	0.0000	123.6950

## **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
· · · · · · · ·	1.5100e- 003	1.0300e- 003	0.0116	3.0000e- 005	3.6000e- 003	2.0000e- 005	3.6200e- 003	9.6000e- 004	2.0000e- 005	9.7000e- 004	0.0000	2.9413	2.9413	1.0000e- 004	9.0000e- 005	2.9704
Total	1.5100e- 003	1.0300e- 003	0.0116	3.0000e- 005	3.6000e- 003	2.0000e- 005	3.6200e- 003	9.6000e- 004	2.0000e- 005	9.7000e- 004	0.0000	2.9413	2.9413	1.0000e- 004	9.0000e- 005	2.9704

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

3.4 Grading - 2022

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0932	0.0000	0.0932	0.0370	0.0000	0.0370	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0816	0.8740	0.6534	1.4000e- 003		0.0368	0.0368		0.0338	0.0338	0.0000	122.7027	122.7027	0.0397	0.0000	123.6948
Total	0.0816	0.8740	0.6534	1.4000e- 003	0.0932	0.0368	0.1300	0.0370	0.0338	0.0708	0.0000	122.7027	122.7027	0.0397	0.0000	123.6948

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5100e- 003	1.0300e- 003	0.0116	3.0000e- 005	3.6000e- 003	2.0000e- 005	3.6200e- 003	9.6000e- 004	2.0000e- 005	9.7000e- 004	0.0000	2.9413	2.9413	1.0000e- 004	9.0000e- 005	2.9704
Total	1.5100e- 003	1.0300e- 003	0.0116	3.0000e- 005	3.6000e- 003	2.0000e- 005	3.6200e- 003	9.6000e- 004	2.0000e- 005	9.7000e- 004	0.0000	2.9413	2.9413	1.0000e- 004	9.0000e- 005	2.9704

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

# 3.5 Building Construction - 2022 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.1408	1.2883	1.3500	2.2200e- 003		0.0667	0.0667		0.0628	0.0628	0.0000	191.1733	191.1733	0.0458	0.0000	192.3183
Total	0.1408	1.2883	1.3500	2.2200e- 003		0.0667	0.0667		0.0628	0.0628	0.0000	191.1733	191.1733	0.0458	0.0000	192.3183

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e				
Category	tons/yr												MT/yr							
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000				
1 011401	1.3600e- 003	0.0356	0.0101	1.4000e- 004	4.3800e- 003	3.8000e- 004	4.7600e- 003	1.2600e- 003	3.7000e- 004	1.6300e- 003	0.0000	13.1795	13.1795	1.0000e- 004	1.9900e- 003	13.7738				
	7.4900e- 003	5.1100e- 003	0.0576	1.6000e- 004	0.0178	9.0000e- 005	0.0179	4.7300e- 003	8.0000e- 005	4.8200e- 003	0.0000	14.5597	14.5597	4.8000e- 004	4.4000e- 004	14.7033				
Total	8.8500e- 003	0.0407	0.0677	3.0000e- 004	0.0222	4.7000e- 004	0.0227	5.9900e- 003	4.5000e- 004	6.4500e- 003	0.0000	27.7391	27.7391	5.8000e- 004	2.4300e- 003	28.4770				

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

# 3.5 Building Construction - 2022

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	tons/yr											MT/yr							
	0.1408	1.2883	1.3500	2.2200e- 003		0.0667	0.0667		0.0628	0.0628	0.0000	191.1731	191.1731	0.0458	0.0000	192.3181			
Total	0.1408	1.2883	1.3500	2.2200e- 003		0.0667	0.0667		0.0628	0.0628	0.0000	191.1731	191.1731	0.0458	0.0000	192.3181			

## **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		MT/yr														
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1 011401	1.3600e- 003	0.0356	0.0101	1.4000e- 004	4.3800e- 003	3.8000e- 004	4.7600e- 003	1.2600e- 003	3.7000e- 004	1.6300e- 003	0.0000	13.1795	13.1795	1.0000e- 004	1.9900e- 003	13.7738
	7.4900e- 003	5.1100e- 003	0.0576	1.6000e- 004	0.0178	9.0000e- 005	0.0179	4.7300e- 003	8.0000e- 005	4.8200e- 003	0.0000	14.5597	14.5597	4.8000e- 004	4.4000e- 004	14.7033
Total	8.8500e- 003	0.0407	0.0677	3.0000e- 004	0.0222	4.7000e- 004	0.0227	5.9900e- 003	4.5000e- 004	6.4500e- 003	0.0000	27.7391	27.7391	5.8000e- 004	2.4300e- 003	28.4770

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

# 3.5 Building Construction - 2023

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	tons/yr											MT/yr							
	0.2045	1.8700	2.1117	3.5000e- 003		0.0910	0.0910	1 1 1	0.0856	0.0856	0.0000	301.3462	301.3462	0.0717	0.0000	303.1383			
Total	0.2045	1.8700	2.1117	3.5000e- 003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3462	301.3462	0.0717	0.0000	303.1383			

## **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e				
Category	tons/yr												MT/yr							
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000				
Vendor	1.1200e- 003	0.0457	0.0137	2.1000e- 004	6.9000e- 003	2.9000e- 004	7.1900e- 003	1.9900e- 003	2.8000e- 004	2.2700e- 003	0.0000	20.0019	20.0019	1.1000e- 004	3.0100e- 003	20.9018				
Worker	0.0109	7.0400e- 003	0.0830	2.4000e- 004	0.0281	1.4000e- 004	0.0282	7.4600e- 003	1.3000e- 004	7.5800e- 003	0.0000	22.3448	22.3448	6.7000e- 004	6.4000e- 004	22.5523				
Total	0.0120	0.0527	0.0967	4.5000e- 004	0.0350	4.3000e- 004	0.0354	9.4500e- 003	4.1000e- 004	9.8500e- 003	0.0000	42.3467	42.3467	7.8000e- 004	3.6500e- 003	43.4541				

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

# 3.5 Building Construction - 2023

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	tons/yr											MT/yr							
J. Trodu	0.2045	1.8700	2.1117	3.5000e- 003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3458	301.3458	0.0717	0.0000	303.1380			
Total	0.2045	1.8700	2.1117	3.5000e- 003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3458	301.3458	0.0717	0.0000	303.1380			

## **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	MT/yr										
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1200e- 003	0.0457	0.0137	2.1000e- 004	6.9000e- 003	2.9000e- 004	7.1900e- 003	1.9900e- 003	2.8000e- 004	2.2700e- 003	0.0000	20.0019	20.0019	1.1000e- 004	3.0100e- 003	20.9018
Worker	0.0109	7.0400e- 003	0.0830	2.4000e- 004	0.0281	1.4000e- 004	0.0282	7.4600e- 003	1.3000e- 004	7.5800e- 003	0.0000	22.3448	22.3448	6.7000e- 004	6.4000e- 004	22.5523
Total	0.0120	0.0527	0.0967	4.5000e- 004	0.0350	4.3000e- 004	0.0354	9.4500e- 003	4.1000e- 004	9.8500e- 003	0.0000	42.3467	42.3467	7.8000e- 004	3.6500e- 003	43.4541

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## 3.5 Building Construction - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0110	0.1008	0.1213	2.0000e- 004		4.6000e- 003	4.6000e- 003		4.3300e- 003	4.3300e- 003	0.0000	17.3887	17.3887	4.1100e- 003	0.0000	17.4915
Total	0.0110	0.1008	0.1213	2.0000e- 004		4.6000e- 003	4.6000e- 003		4.3300e- 003	4.3300e- 003	0.0000	17.3887	17.3887	4.1100e- 003	0.0000	17.4915

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	6.0000e- 005	2.6400e- 003	7.7000e- 004	1.0000e- 005	4.0000e- 004	2.0000e- 005	4.1000e- 004	1.1000e- 004	2.0000e- 005	1.3000e- 004	0.0000	1.1343	1.1343	1.0000e- 005	1.7000e- 004	1.1853
	5.8000e- 004	3.6000e- 004	4.4200e- 003	1.0000e- 005	1.6200e- 003	1.0000e- 005	1.6300e- 003	4.3000e- 004	1.0000e- 005	4.4000e- 004	0.0000	1.2566	1.2566	3.0000e- 005	3.0000e- 005	1.2677
Total	6.4000e- 004	3.0000e- 003	5.1900e- 003	2.0000e- 005	2.0200e- 003	3.0000e- 005	2.0400e- 003	5.4000e- 004	3.0000e- 005	5.7000e- 004	0.0000	2.3909	2.3909	4.0000e- 005	2.0000e- 004	2.4529

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# 3.5 Building Construction - 2024

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0110	0.1008	0.1213	2.0000e- 004		4.6000e- 003	4.6000e- 003		4.3300e- 003	4.3300e- 003	0.0000	17.3887	17.3887	4.1100e- 003	0.0000	17.4915
Total	0.0110	0.1008	0.1213	2.0000e- 004		4.6000e- 003	4.6000e- 003		4.3300e- 003	4.3300e- 003	0.0000	17.3887	17.3887	4.1100e- 003	0.0000	17.4915

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e- 005	2.6400e- 003	7.7000e- 004	1.0000e- 005	4.0000e- 004	2.0000e- 005	4.1000e- 004	1.1000e- 004	2.0000e- 005	1.3000e- 004	0.0000	1.1343	1.1343	1.0000e- 005	1.7000e- 004	1.1853
Worker	5.8000e- 004	3.6000e- 004	4.4200e- 003	1.0000e- 005	1.6200e- 003	1.0000e- 005	1.6300e- 003	4.3000e- 004	1.0000e- 005	4.4000e- 004	0.0000	1.2566	1.2566	3.0000e- 005	3.0000e- 005	1.2677
Total	6.4000e- 004	3.0000e- 003	5.1900e- 003	2.0000e- 005	2.0200e- 003	3.0000e- 005	2.0400e- 003	5.4000e- 004	3.0000e- 005	5.7000e- 004	0.0000	2.3909	2.3909	4.0000e- 005	2.0000e- 004	2.4529

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3.6 Paving - 2024
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.0173	0.1667	0.2560	4.0000e- 004		8.2000e- 003	8.2000e- 003		7.5400e- 003	7.5400e- 003	0.0000	35.0464	35.0464	0.0113	0.0000	35.3298
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0173	0.1667	0.2560	4.0000e- 004		8.2000e- 003	8.2000e- 003		7.5400e- 003	7.5400e- 003	0.0000	35.0464	35.0464	0.0113	0.0000	35.3298

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	7.5000e- 004	4.6000e- 004	5.7300e- 003	2.0000e- 005	2.1000e- 003	1.0000e- 005	2.1100e- 003	5.6000e- 004	1.0000e- 005	5.7000e- 004	0.0000	1.6289	1.6289	5.0000e- 005	4.0000e- 005	1.6433
Total	7.5000e- 004	4.6000e- 004	5.7300e- 003	2.0000e- 005	2.1000e- 003	1.0000e- 005	2.1100e- 003	5.6000e- 004	1.0000e- 005	5.7000e- 004	0.0000	1.6289	1.6289	5.0000e- 005	4.0000e- 005	1.6433

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3.6 Paving - 2024

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0173	0.1667	0.2560	4.0000e- 004		8.2000e- 003	8.2000e- 003		7.5400e- 003	7.5400e- 003	0.0000	35.0464	35.0464	0.0113	0.0000	35.3298
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0173	0.1667	0.2560	4.0000e- 004		8.2000e- 003	8.2000e- 003		7.5400e- 003	7.5400e- 003	0.0000	35.0464	35.0464	0.0113	0.0000	35.3298

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.5000e- 004	4.6000e- 004	5.7300e- 003	2.0000e- 005	2.1000e- 003	1.0000e- 005	2.1100e- 003	5.6000e- 004	1.0000e- 005	5.7000e- 004	0.0000	1.6289	1.6289	5.0000e- 005	4.0000e- 005	1.6433
Total	7.5000e- 004	4.6000e- 004	5.7300e- 003	2.0000e- 005	2.1000e- 003	1.0000e- 005	2.1100e- 003	5.6000e- 004	1.0000e- 005	5.7000e- 004	0.0000	1.6289	1.6289	5.0000e- 005	4.0000e- 005	1.6433

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## 3.7 Architectural Coating - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.5032					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e- 003	0.0213	0.0317	5.0000e- 005	 	1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745
Total	0.5064	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	2.5000e- 004	1.5000e- 004	1.9100e- 003	1.0000e- 005	7.0000e- 004	0.0000	7.0000e- 004	1.9000e- 004	0.0000	1.9000e- 004	0.0000	0.5430	0.5430	2.0000e- 005	1.0000e- 005	0.5478
Total	2.5000e- 004	1.5000e- 004	1.9100e- 003	1.0000e- 005	7.0000e- 004	0.0000	7.0000e- 004	1.9000e- 004	0.0000	1.9000e- 004	0.0000	0.5430	0.5430	2.0000e- 005	1.0000e- 005	0.5478

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## 3.7 Architectural Coating - 2024 Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	-/yr		
Archit. Coating	0.5032					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
' ' ' '	3.1600e- 003	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745
Total	0.5064	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e- 004	1.5000e- 004	1.9100e- 003	1.0000e- 005	7.0000e- 004	0.0000	7.0000e- 004	1.9000e- 004	0.0000	1.9000e- 004	0.0000	0.5430	0.5430	2.0000e- 005	1.0000e- 005	0.5478
Total	2.5000e- 004	1.5000e- 004	1.9100e- 003	1.0000e- 005	7.0000e- 004	0.0000	7.0000e- 004	1.9000e- 004	0.0000	1.9000e- 004	0.0000	0.5430	0.5430	2.0000e- 005	1.0000e- 005	0.5478

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### 4.0 Operational Detail - Mobile

### **4.1 Mitigation Measures Mobile**

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr				MT	/yr					
Mitigated	0.2086	0.3857	2.4540	6.8600e- 003	0.7382	4.9900e- 003	0.7432	0.1967	4.6500e- 003	0.2014	0.0000	653.1478	653.1478	0.0476	0.0317	663.7697
Unmitigated	0.2094	0.3913	2.4905	7.0000e- 003	0.7532	5.0800e- 003	0.7583	0.2007	4.7400e- 003	0.2055	0.0000	666.0493	666.0493	0.0483	0.0321	676.8352

### **4.2 Trip Summary Information**

	Avei	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	698.56	705.96	632.70	2,022,083	1,981,641
Total	698.56	705.96	632.70	2,022,083	1,981,641

### **4.3 Trip Type Information**

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	48.40	15.90	35.70	86	11	3

#### 4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.527700	0.209000	0.167500	0.055600	0.000900	0.000900	0.008000	0.021400	0.000000	0.004300	0.002500	0.000200	0.002000

## 5.0 Energy Detail

Historical Energy Use: N

### **5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated				i i		0.0000	0.0000		0.0000	0.0000	0.0000	54.5958	54.5958	8.8300e- 003	1.0700e- 003	55.1356
Electricity Unmitigated				i i	   	0.0000	0.0000		0.0000	0.0000	0.0000	54.5958	54.5958	8.8300e- 003	1.0700e- 003	55.1356
Mitigatad	9.5900e- 003	0.0820	0.0349	5.2000e- 004		6.6300e- 003	6.6300e- 003	,	6.6300e- 003	6.6300e- 003	0.0000	94.9224	94.9224	1.8200e- 003	1.7400e- 003	95.4865
I I manadation as a second	9.5900e- 003	0.0820	0.0349	5.2000e- 004		6.6300e- 003	6.6300e- 003	r	6.6300e- 003	6.6300e- 003	0.0000	94.9224	94.9224	1.8200e- 003	1.7400e- 003	95.4865

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# 5.2 Energy by Land Use - NaturalGas

### <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Single Family Housing	1.77878e +006	9.5900e- 003	0.0820	0.0349	5.2000e- 004		6.6300e- 003	6.6300e- 003		6.6300e- 003	6.6300e- 003	0.0000	94.9224	94.9224	1.8200e- 003	1.7400e- 003	95.4865
Total		9.5900e- 003	0.0820	0.0349	5.2000e- 004		6.6300e- 003	6.6300e- 003		6.6300e- 003	6.6300e- 003	0.0000	94.9224	94.9224	1.8200e- 003	1.7400e- 003	95.4865

### **Mitigated**

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	-/yr		
Single Family Housing	1.77878e +006	9.5900e- 003	0.0820	0.0349	5.2000e- 004		6.6300e- 003	6.6300e- 003		6.6300e- 003	6.6300e- 003	0.0000	94.9224	94.9224	1.8200e- 003	1.7400e- 003	95.4865
Total		9.5900e- 003	0.0820	0.0349	5.2000e- 004		6.6300e- 003	6.6300e- 003		6.6300e- 003	6.6300e- 003	0.0000	94.9224	94.9224	1.8200e- 003	1.7400e- 003	95.4865

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### 5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
Single Family Housing	590073	54.5958	8.8300e- 003	1.0700e- 003	55.1356
Total		54.5958	8.8300e- 003	1.0700e- 003	55.1356

#### **Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Single Family Housing	590073	54.5958	8.8300e- 003	1.0700e- 003	55.1356
Total		54.5958	8.8300e- 003	1.0700e- 003	55.1356

### 6.0 Area Detail

### **6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

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

Use Low VOC Paint - Residential Exterior

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.6983	0.0340	0.5610	2.1000e- 004		5.2800e- 003	5.2800e- 003		5.2800e- 003	5.2800e- 003	0.0000	32.9549	32.9549	1.4800e- 003	5.9000e- 004	33.1669
Unmitigated	0.6983	0.0340	0.5610	2.1000e- 004		5.2800e- 003	5.2800e- 003		5.2800e- 003	5.2800e- 003	0.0000	32.9549	32.9549	1.4800e- 003	5.9000e- 004	33.1669

### 6.2 Area by SubCategory

### **Unmitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							MT	/yr		
Architectural Coating	0.0503					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6282					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.2400e- 003	0.0277	0.0118	1.8000e- 004		2.2400e- 003	2.2400e- 003		2.2400e- 003	2.2400e- 003	0.0000	32.0574	32.0574	6.1000e- 004	5.9000e- 004	32.2479
Landscaping	0.0165	6.3300e- 003	0.5492	3.0000e- 005		3.0400e- 003	3.0400e- 003		3.0400e- 003	3.0400e- 003	0.0000	0.8975	0.8975	8.6000e- 004	0.0000	0.9191
Total	0.6983	0.0340	0.5610	2.1000e- 004		5.2800e- 003	5.2800e- 003		5.2800e- 003	5.2800e- 003	0.0000	32.9549	32.9549	1.4700e- 003	5.9000e- 004	33.1669

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### 6.2 Area by SubCategory

### **Mitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.0503					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.6282					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.2400e- 003	0.0277	0.0118	1.8000e- 004		2.2400e- 003	2.2400e- 003		2.2400e- 003	2.2400e- 003	0.0000	32.0574	32.0574	6.1000e- 004	5.9000e- 004	32.2479
Landscaping	0.0165	6.3300e- 003	0.5492	3.0000e- 005		3.0400e- 003	3.0400e- 003		3.0400e- 003	3.0400e- 003	0.0000	0.8975	0.8975	8.6000e- 004	0.0000	0.9191
Total	0.6983	0.0340	0.5610	2.1000e- 004		5.2800e- 003	5.2800e- 003		5.2800e- 003	5.2800e- 003	0.0000	32.9549	32.9549	1.4700e- 003	5.9000e- 004	33.1669

### 7.0 Water Detail

### 7.1 Mitigation Measures Water

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

	Total CO2	CH4	N2O	CO2e	
Category	MT/yr				
ga.ea	4.9277	0.1577	3.7800e- 003	9.9944	
Unmitigated	4.9277	0.1577	3.7800e- 003	9.9944	

## 7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	4.8214 / 3.03958		0.1577	3.7800e- 003	9.9944
Total		4.9277	0.1577	3.7800e- 003	9.9944

### TSM 21-0015 - Fresno County, Annual

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

### 7.2 Water by Land Use

#### **Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	4.8214 / 3.03958	4.9277	0.1577	3.7800e- 003	9.9944
Total		4.9277	0.1577	3.7800e- 003	9.9944

### 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

### Category/Year

	Total CO2	CH4	N2O	CO2e	
	MT/yr				
Willigatod	17.3192	1.0235	0.0000	42.9076	
Orninigated	17.3192	1.0235	0.0000	42.9076	

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

### 8.2 Waste by Land Use

#### **Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing		17.3192	1.0235	0.0000	42.9076
Total		17.3192	1.0235	0.0000	42.9076

### **Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	85.32	17.3192	1.0235	0.0000	42.9076
Total		17.3192	1.0235	0.0000	42.9076

### 9.0 Operational Offroad

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

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

### **10.0 Stationary Equipment**

#### **Fire Pumps and Emergency Generators**

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

#### **Boilers**

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

### **User Defined Equipment**

Equipment Type	Number

### 11.0 Vegetation

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

#### TSM 21-0015

#### Fresno County, Summer

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	74.00	Dwelling Unit	29.04	160,851.00	237

#### 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)45Climate Zone3Operational Year2024

Utility Company Pacific Gas and Electric Company

 CO2 Intensity
 203.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Gross acreage used. Square footage based on lot size multiplied by minimum FAR of 0.2. Population based on Housing Element persons per household.

Grading - Assumes site is balanced.

Demolition - Assumes 4,000 square feet of buildings to be demolished.

Architectural Coating - Assumes Year 2022 SJVAPCD Rule 4601 applies.

Fleet Mix - Assumes 2024 SJVAPCD Residential Fleet Mix

Woodstoves - No woodstoves per Rule 4901

Area Coating - Assumes Year 2022 SJVAPCD Rule 4601

Land Use Change -

Construction Off-road Equipment Mitigation - Project submit to a Dust Control Plan.

Mobile Land Use Mitigation -

#### TSM 21-0015 - Fresno County, Summer

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

Area Mitigation - Assumes Year 2022 SJVAPCD Rule 4601

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Residential_Exterior	150	50
tblAreaCoating	Area_EF_Residential_Interior	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.52	0.53
tblFleetMix	LDT1	0.05	0.21
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LHD1	0.03	9.0000e-004
tblFleetMix	LHD2	6.8290e-003	9.0000e-004
tblFleetMix	MCY	0.02	2.5000e-003
tblFleetMix	MDV	0.16	0.06
tblFleetMix	MH	2.9750e-003	2.0000e-003
tblFleetMix	MHD	0.01	8.0000e-003
tblFleetMix	OBUS	7.0700e-004	0.00
tblFleetMix	SBUS	1.4960e-003	2.0000e-004
tblFleetMix	UBUS	2.8900e-004	4.3000e-003
tblLandUse	LandUseSquareFeet	133,200.00	160,851.00
tblLandUse	LotAcreage	24.03	29.04
tblLandUse	Population	212.00	237.00
tblWoodstoves	NumberCatalytic	3.70	0.00
tblWoodstoves	NumberNoncatalytic	3.70	0.00

## 2.0 Emissions Summary

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#### TSM 21-0015 - Fresno County, Summer

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

## 2.1 Overall Construction (Maximum Daily Emission)

### **Unmitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/d	day		
2022	3.7028	38.8863	29.6401	0.0636	19.8049	1.6357	21.4182	10.1417	1.5049	11.6259	0.0000	6,168.152 8	6,168.152 8	1.9487	0.0322	6,218.117 8
2023	1.6783	14.7719	17.0848	0.0306	0.2760	0.7030	0.9791	0.0745	0.6615	0.7360	0.0000	2,930.707 7	2,930.707 7	0.6142	0.0307	2,955.207 9
2024	28.9540	13.8247	16.9470	0.0305	0.2760	0.6166	0.8926	0.0745	0.5800	0.6544	0.0000	2,923.055 3	2,923.055 3	0.7167	0.0299	2,947.207 9
Maximum	28.9540	38.8863	29.6401	0.0636	19.8049	1.6357	21.4182	10.1417	1.5049	11.6259	0.0000	6,168.152 8	6,168.152 8	1.9487	0.0322	6,218.117 8

#### **Mitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/d	day		
2022	3.7028	38.8863	29.6401	0.0636	8.9935	1.6357	10.6068	4.5853	1.5049	6.0696	0.0000	6,168.152 8	6,168.152 8	1.9487	0.0322	6,218.117 8
2023	1.6783	14.7719	17.0848	0.0306	0.2760	0.7030	0.9791	0.0745	0.6615	0.7360	0.0000	2,930.707 7	2,930.707 7	0.6142	0.0307	2,955.207 9
2024	28.9540	13.8247	16.9470	0.0305	0.2760	0.6166	0.8926	0.0745	0.5800	0.6544	0.0000	2,923.055 3	2,923.055 3	0.7167	0.0299	2,947.207 9
Maximum	28.9540	38.8863	29.6401	0.0636	8.9935	1.6357	10.6068	4.5853	1.5049	6.0696	0.0000	6,168.152 8	6,168.152 8	1.9487	0.0322	6,218.117 8

### TSM 21-0015 - Fresno County, Summer

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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	53.11	0.00	46.42	53.99	0.00	42.69	0.00	0.00	0.00	0.00	0.00	0.00

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

### 2.2 Overall Operational

#### **Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Area	3.9805	0.7455	6.3898	4.6300e- 003		0.0884	0.0884		0.0884	0.0884	0.0000	872.8752	872.8752	0.0271	0.0158	878.2607
Energy	0.0526	0.4491	0.1911	2.8700e- 003		0.0363	0.0363		0.0363	0.0363		573.3372	573.3372	0.0110	0.0105	576.7443
Mobile	1.4946	2.0818	15.4772	0.0423	4.3489	0.0286	4.3774	1.1565	0.0266	1.1832		4,428.919 0	4,428.919 0	0.2913	0.1946	4,494.190 9
Total	5.5276	3.2763	22.0581	0.0498	4.3489	0.1533	4.5021	1.1565	0.1514	1.3079	0.0000	5,875.131 5	5,875.131 5	0.3294	0.2209	5,949.195 8

#### **Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	3.9805	0.7455	6.3898	4.6300e- 003		0.0884	0.0884		0.0884	0.0884	0.0000	872.8752	872.8752	0.0271	0.0158	878.2607
Energy	0.0526	0.4491	0.1911	2.8700e- 003		0.0363	0.0363		0.0363	0.0363		573.3372	573.3372	0.0110	0.0105	576.7443
Mobile	1.4900	2.0522	15.2311	0.0414	4.2619	0.0281	4.2899	1.1334	0.0262	1.1596		4,342.909 6	4,342.909 6	0.2869	0.1916	4,407.179 7
Total	5.5230	3.2468	21.8120	0.0489	4.2619	0.1528	4.4146	1.1334	0.1509	1.2843	0.0000	5,789.122 0	5,789.122 0	0.3250	0.2179	5,862.184 6

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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.08	0.90	1.12	1.65	2.00	0.33	1.94	2.00	0.32	1.81	0.00	1.46	1.46	1.33	1.35	1.46

### 3.0 Construction Detail

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2022	2/11/2022	5	30	
2	Site Preparation	Site Preparation	2/12/2022	3/11/2022	5	20	
3	Grading	Grading	3/12/2022	5/13/2022	5	45	
4	Building Construction	Building Construction	5/14/2022	1/19/2024	5	440	
5	Paving	Paving	1/20/2024	3/8/2024	5	35	
6	Architectural Coating	Architectural Coating	3/9/2024	4/26/2024	5	35	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 0

Residential Indoor: 325,723; Residential Outdoor: 108,574; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

(Architectural Coating - sqft)

#### **OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	2	8.00	158	0.38

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

Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

#### **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	18.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	27.00	8.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### **3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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

# 3.2 Demolition - 2022

# **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					0.1313	0.0000	0.1313	0.0199	0.0000	0.0199			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.781 2	3,746.781 2	1.0524	       	3,773.092 0
Total	2.6392	25.7194	20.5941	0.0388	0.1313	1.2427	1.3739	0.0199	1.1553	1.1751		3,746.781 2	3,746.781	1.0524		3,773.092 0

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	2.3000e- 003	0.0876	0.0173	3.7000e- 004	0.0105	9.1000e- 004	0.0114	2.8800e- 003	8.7000e- 004	3.7600e- 003		39.0515	39.0515	3.1000e- 004	6.1400e- 003	40.8894
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0585	0.0321	0.4490	1.1600e- 003	0.1232	6.2000e- 004	0.1238	0.0327	5.7000e- 004	0.0333		117.5567	117.5567	3.3900e- 003	3.1400e- 003	118.5765
Total	0.0608	0.1198	0.4663	1.5300e- 003	0.1337	1.5300e- 003	0.1353	0.0356	1.4400e- 003	0.0370		156.6081	156.6081	3.7000e- 003	9.2800e- 003	159.4659

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

3.2 Demolition - 2022

<u>Mitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day				lb/c	day					
Fugitive Dust					0.0591	0.0000	0.0591	8.9400e- 003	0.0000	8.9400e- 003			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388	 	1.2427	1.2427		1.1553	1.1553	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0
Total	2.6392	25.7194	20.5941	0.0388	0.0591	1.2427	1.3017	8.9400e- 003	1.1553	1.1642	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day				lb/d	lay					
Hauling	2.3000e- 003	0.0876	0.0173	3.7000e- 004	0.0105	9.1000e- 004	0.0114	2.8800e- 003	8.7000e- 004	3.7600e- 003		39.0515	39.0515	3.1000e- 004	6.1400e- 003	40.8894
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0585	0.0321	0.4490	1.1600e- 003	0.1232	6.2000e- 004	0.1238	0.0327	5.7000e- 004	0.0333		117.5567	117.5567	3.3900e- 003	3.1400e- 003	118.5765
Total	0.0608	0.1198	0.4663	1.5300e- 003	0.1337	1.5300e- 003	0.1353	0.0356	1.4400e- 003	0.0370		156.6081	156.6081	3.7000e- 003	9.2800e- 003	159.4659

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#### TSM 21-0015 - Fresno County, Summer

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

## 3.3 Site Preparation - 2022

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust	) 				19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.061 9	3,686.061 9	1.1922		3,715.865 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0701	0.0385	0.5388	1.3900e- 003	0.1479	7.4000e- 004	0.1486	0.0392	6.8000e- 004	0.0399		141.0680	141.0680	4.0600e- 003	3.7700e- 003	142.2918
Total	0.0701	0.0385	0.5388	1.3900e- 003	0.1479	7.4000e- 004	0.1486	0.0392	6.8000e- 004	0.0399		141.0680	141.0680	4.0600e- 003	3.7700e- 003	142.2918

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#### TSM 21-0015 - Fresno County, Summer

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

## 3.3 Site Preparation - 2022

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	8.8457	1.6126	10.4582	4.5461	1.4836	6.0297	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0701	0.0385	0.5388	1.3900e- 003	0.1479	7.4000e- 004	0.1486	0.0392	6.8000e- 004	0.0399		141.0680	141.0680	4.0600e- 003	3.7700e- 003	142.2918
Total	0.0701	0.0385	0.5388	1.3900e- 003	0.1479	7.4000e- 004	0.1486	0.0392	6.8000e- 004	0.0399		141.0680	141.0680	4.0600e- 003	3.7700e- 003	142.2918

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#### TSM 21-0015 - Fresno County, Summer

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

3.4 Grading - 2022

#### **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	9.2036	1.6349	10.8385	3.6538	1.5041	5.1579		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0779	0.0428	0.5986	1.5400e- 003	0.1643	8.2000e- 004	0.1651	0.0436	7.6000e- 004	0.0443		156.7422	156.7422	4.5200e- 003	4.1800e- 003	158.1020
Total	0.0779	0.0428	0.5986	1.5400e- 003	0.1643	8.2000e- 004	0.1651	0.0436	7.6000e- 004	0.0443		156.7422	156.7422	4.5200e- 003	4.1800e- 003	158.1020

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#### TSM 21-0015 - Fresno County, Summer

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

3.4 Grading - 2022

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust					4.1416	0.0000	4.1416	1.6442	0.0000	1.6442			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442	       	6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	4.1416	1.6349	5.7765	1.6442	1.5041	3.1483	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0779	0.0428	0.5986	1.5400e- 003	0.1643	8.2000e- 004	0.1651	0.0436	7.6000e- 004	0.0443		156.7422	156.7422	4.5200e- 003	4.1800e- 003	158.1020
Total	0.0779	0.0428	0.5986	1.5400e- 003	0.1643	8.2000e- 004	0.1651	0.0436	7.6000e- 004	0.0443		156.7422	156.7422	4.5200e- 003	4.1800e- 003	158.1020

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#### TSM 21-0015 - Fresno County, Summer

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

## 3.5 Building Construction - 2022 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0168	0.4129	0.1203	1.6600e- 003	0.0542	4.6400e- 003	0.0589	0.0156	4.4400e- 003	0.0201		176.0305	176.0305	1.3400e- 003	0.0265	183.9643
Worker	0.1052	0.0578	0.8081	2.0800e- 003	0.2218	1.1100e- 003	0.2229	0.0588	1.0200e- 003	0.0599		211.6020	211.6020	6.1000e- 003	5.6500e- 003	213.4377
Total	0.1220	0.4707	0.9285	3.7400e- 003	0.2760	5.7500e- 003	0.2818	0.0745	5.4600e- 003	0.0799		387.6324	387.6324	7.4400e- 003	0.0322	397.4019

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#### TSM 21-0015 - Fresno County, Summer

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

# 3.5 Building Construction - 2022

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0168	0.4129	0.1203	1.6600e- 003	0.0542	4.6400e- 003	0.0589	0.0156	4.4400e- 003	0.0201		176.0305	176.0305	1.3400e- 003	0.0265	183.9643
Worker	0.1052	0.0578	0.8081	2.0800e- 003	0.2218	1.1100e- 003	0.2229	0.0588	1.0200e- 003	0.0599		211.6020	211.6020	6.1000e- 003	5.6500e- 003	213.4377
Total	0.1220	0.4707	0.9285	3.7400e- 003	0.2760	5.7500e- 003	0.2818	0.0745	5.4600e- 003	0.0799		387.6324	387.6324	7.4400e- 003	0.0322	397.4019

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#### TSM 21-0015 - Fresno County, Summer

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

## 3.5 Building Construction - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
1	8.9000e- 003	0.3364	0.1038	1.6000e- 003	0.0542	2.2500e- 003	0.0565	0.0156	2.1500e- 003	0.0178		169.4664	169.4664	9.3000e- 004	0.0255	177.0874
Worker	0.0967	0.0506	0.7370	2.0100e- 003	0.2218	1.0500e- 003	0.2228	0.0588	9.6000e- 004	0.0598		206.0313	206.0313	5.4500e- 003	5.1900e- 003	207.7144
Total	0.1056	0.3870	0.8408	3.6100e- 003	0.2760	3.3000e- 003	0.2793	0.0745	3.1100e- 003	0.0776		375.4978	375.4978	6.3800e- 003	0.0307	384.8018

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#### TSM 21-0015 - Fresno County, Summer

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

# 3.5 Building Construction - 2023

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997	1 1 1	0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.9000e- 003	0.3364	0.1038	1.6000e- 003	0.0542	2.2500e- 003	0.0565	0.0156	2.1500e- 003	0.0178		169.4664	169.4664	9.3000e- 004	0.0255	177.0874
Worker	0.0967	0.0506	0.7370	2.0100e- 003	0.2218	1.0500e- 003	0.2228	0.0588	9.6000e- 004	0.0598		206.0313	206.0313	5.4500e- 003	5.1900e- 003	207.7144
Total	0.1056	0.3870	0.8408	3.6100e- 003	0.2760	3.3000e- 003	0.2793	0.0745	3.1100e- 003	0.0776		375.4978	375.4978	6.3800e- 003	0.0307	384.8018

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#### TSM 21-0015 - Fresno County, Summer

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

## 3.5 Building Construction - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.6500e- 003	0.3363	0.1013	1.5800e- 003	0.0542	2.2700e- 003	0.0565	0.0156	2.1700e- 003	0.0178		166.5731	166.5731	8.8000e- 004	0.0251	174.0639
Worker	0.0893	0.0447	0.6788	1.9500e- 003	0.2218	9.9000e- 004	0.2228	0.0588	9.1000e- 004	0.0597		200.7833	200.7833	4.8800e- 003	4.8000e- 003	202.3363
Total	0.0979	0.3810	0.7802	3.5300e- 003	0.2760	3.2600e- 003	0.2793	0.0745	3.0800e- 003	0.0775		367.3564	367.3564	5.7600e- 003	0.0299	376.4002

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#### TSM 21-0015 - Fresno County, Summer

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

# 3.5 Building Construction - 2024

### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.6500e- 003	0.3363	0.1013	1.5800e- 003	0.0542	2.2700e- 003	0.0565	0.0156	2.1700e- 003	0.0178		166.5731	166.5731	8.8000e- 004	0.0251	174.0639
Worker	0.0893	0.0447	0.6788	1.9500e- 003	0.2218	9.9000e- 004	0.2228	0.0588	9.1000e- 004	0.0597		200.7833	200.7833	4.8800e- 003	4.8000e- 003	202.3363
Total	0.0979	0.3810	0.7802	3.5300e- 003	0.2760	3.2600e- 003	0.2793	0.0745	3.0800e- 003	0.0775		367.3564	367.3564	5.7600e- 003	0.0299	376.4002

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#### TSM 21-0015 - Fresno County, Summer

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

3.6 Paving - 2024
Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d			lb/d	lay							
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0496	0.0248	0.3771	1.0800e- 003	0.1232	5.5000e- 004	0.1238	0.0327	5.1000e- 004	0.0332		111.5463	111.5463	2.7100e- 003	2.6700e- 003	112.4091
Total	0.0496	0.0248	0.3771	1.0800e- 003	0.1232	5.5000e- 004	0.1238	0.0327	5.1000e- 004	0.0332		111.5463	111.5463	2.7100e- 003	2.6700e- 003	112.4091

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#### TSM 21-0015 - Fresno County, Summer

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

3.6 Paving - 2024

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0496	0.0248	0.3771	1.0800e- 003	0.1232	5.5000e- 004	0.1238	0.0327	5.1000e- 004	0.0332		111.5463	111.5463	2.7100e- 003	2.6700e- 003	112.4091
Total	0.0496	0.0248	0.3771	1.0800e- 003	0.1232	5.5000e- 004	0.1238	0.0327	5.1000e- 004	0.0332		111.5463	111.5463	2.7100e- 003	2.6700e- 003	112.4091

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# TSM 21-0015 - Fresno County, Summer

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

# 3.7 Architectural Coating - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	28.7567					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	28.9374	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0165	8.2700e- 003	0.1257	3.6000e- 004	0.0411	1.8000e- 004	0.0413	0.0109	1.7000e- 004	0.0111		37.1821	37.1821	9.0000e- 004	8.9000e- 004	37.4697
Total	0.0165	8.2700e- 003	0.1257	3.6000e- 004	0.0411	1.8000e- 004	0.0413	0.0109	1.7000e- 004	0.0111		37.1821	37.1821	9.0000e- 004	8.9000e- 004	37.4697

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#### TSM 21-0015 - Fresno County, Summer

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

# 3.7 Architectural Coating - 2024 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Archit. Coating	28.7567					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	28.9374	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	! !	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0165	8.2700e- 003	0.1257	3.6000e- 004	0.0411	1.8000e- 004	0.0413	0.0109	1.7000e- 004	0.0111		37.1821	37.1821	9.0000e- 004	8.9000e- 004	37.4697
Total	0.0165	8.2700e- 003	0.1257	3.6000e- 004	0.0411	1.8000e- 004	0.0413	0.0109	1.7000e- 004	0.0111		37.1821	37.1821	9.0000e- 004	8.9000e- 004	37.4697

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# TSM 21-0015 - Fresno County, Summer

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

# 4.0 Operational Detail - Mobile

# **4.1 Mitigation Measures Mobile**

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	1.4900	2.0522	15.2311	0.0414	4.2619	0.0281	4.2899	1.1334	0.0262	1.1596		4,342.909 6	4,342.909 6	0.2869	0.1916	4,407.179 7
Unmitigated	1.4946	2.0818	15.4772	0.0423	4.3489	0.0286	4.3774	1.1565	0.0266	1.1832		4,428.919 0	4,428.919 0	0.2913	0.1946	4,494.190 9

# **4.2 Trip Summary Information**

	Avei	rage Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	698.56	705.96	632.70	2,022,083	1,981,641
Total	698.56	705.96	632.70	2,022,083	1,981,641

# **4.3 Trip Type Information**

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	48.40	15.90	35.70	86	11	3

#### 4.4 Fleet Mix

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.527700	0.209000	0.167500	0.055600	0.000900	0.000900	0.008000	0.021400	0.000000	0.004300	0.002500	0.000200	0.002000

# 5.0 Energy Detail

Historical Energy Use: N

# **5.1 Mitigation Measures Energy**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
NaturalGas Mitigated	0.0526	0.4491	0.1911	2.8700e- 003		0.0363	0.0363		0.0363	0.0363		573.3372	573.3372	0.0110	0.0105	576.7443
NaturalGas Unmitigated	0.0526	0.4491	0.1911	2.8700e- 003		0.0363	0.0363		0.0363	0.0363		573.3372	573.3372	0.0110	0.0105	576.7443

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#### TSM 21-0015 - Fresno County, Summer

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

# 5.2 Energy by Land Use - NaturalGas

# **Unmitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	day		
Single Family Housing	4873.37	0.0526	0.4491	0.1911	2.8700e- 003		0.0363	0.0363		0.0363	0.0363		573.3372	573.3372	0.0110	0.0105	576.7443
Total		0.0526	0.4491	0.1911	2.8700e- 003		0.0363	0.0363		0.0363	0.0363		573.3372	573.3372	0.0110	0.0105	576.7443

# **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
Single Family Housing	4.87337	0.0526	0.4491	0.1911	2.8700e- 003		0.0363	0.0363		0.0363	0.0363		573.3372	573.3372	0.0110	0.0105	576.7443
Total		0.0526	0.4491	0.1911	2.8700e- 003		0.0363	0.0363		0.0363	0.0363		573.3372	573.3372	0.0110	0.0105	576.7443

# 6.0 Area Detail

# **6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

# TSM 21-0015 - Fresno County, Summer

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

Use Low VOC Paint - Residential Exterior

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Mitigated	3.9805	0.7455	6.3898	4.6300e- 003		0.0884	0.0884	 	0.0884	0.0884	0.0000	872.8752	872.8752	0.0271	0.0158	878.2607
Unmitigated	3.9805	0.7455	6.3898	4.6300e- 003		0.0884	0.0884	 	0.0884	0.0884	0.0000	872.8752	872.8752	0.0271	0.0158	878.2607

# 6.2 Area by SubCategory

# **Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	0.2758					0.0000	0.0000	1 1 1	0.0000	0.0000			0.0000			0.0000
Consumer Products	3.4422		1			0.0000	0.0000	 	0.0000	0.0000		i i	0.0000			0.0000
Hearth	0.0790	0.6751	0.2873	4.3100e- 003		0.0546	0.0546	       	0.0546	0.0546	0.0000	861.8824	861.8824	0.0165	0.0158	867.0041
Landscaping	0.1835	0.0703	6.1025	3.2000e- 004		0.0338	0.0338	       	0.0338	0.0338		10.9929	10.9929	0.0106	       	11.2566
Total	3.9805	0.7455	6.3898	4.6300e- 003		0.0884	0.0884		0.0884	0.0884	0.0000	872.8752	872.8752	0.0271	0.0158	878.2607

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

# 6.2 Area by SubCategory

# **Mitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Coating	0.2758	!			 	0.0000	0.0000	1 1 1	0.0000	0.0000			0.0000			0.0000
	3.4422					0.0000	0.0000	 	0.0000	0.0000			0.0000		       	0.0000
Hearth	0.0790	0.6751	0.2873	4.3100e- 003		0.0546	0.0546		0.0546	0.0546	0.0000	861.8824	861.8824	0.0165	0.0158	867.0041
Landscaping	0.1835	0.0703	6.1025	3.2000e- 004		0.0338	0.0338		0.0338	0.0338		10.9929	10.9929	0.0106	       	11.2566
Total	3.9805	0.7455	6.3898	4.6300e- 003		0.0884	0.0884		0.0884	0.0884	0.0000	872.8752	872.8752	0.0271	0.0158	878.2607

# 7.0 Water Detail

# 7.1 Mitigation Measures Water

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#### TSM 21-0015 - Fresno County, Summer

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

#### 8.0 Waste Detail

# 8.1 Mitigation Measures Waste

# 9.0 Operational Offroad

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

# **10.0 Stationary Equipment**

# **Fire Pumps and Emergency Generators**

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

#### **Boilers**

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

#### **User Defined Equipment**

Equipment Type	Number
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# 11.0 Vegetation

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#### TSM 21-0015 - Fresno County, Winter

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

#### TSM 21-0015

#### Fresno County, Winter

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	74.00	Dwelling Unit	29.04	160,851.00	237

#### 1.2 Other Project Characteristics

UrbanWind Speed (m/s)2.2Precipitation Freq (Days)45

Climate Zone 3 Operational Year 2024

Utility Company Pacific Gas and Electric Company

 CO2 Intensity
 203.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Gross acreage used. Square footage based on lot size multiplied by minimum FAR of 0.2. Population based on Housing Element persons per household.

Grading - Assumes site is balanced.

Demolition - Assumes 4,000 square feet of buildings to be demolished.

Architectural Coating - Assumes Year 2022 SJVAPCD Rule 4601 applies.

Fleet Mix - Assumes 2024 SJVAPCD Residential Fleet Mix

Woodstoves - No woodstoves per Rule 4901

Area Coating - Assumes Year 2022 SJVAPCD Rule 4601

Land Use Change -

Construction Off-road Equipment Mitigation - Project submit to a Dust Control Plan.

Mobile Land Use Mitigation -

#### TSM 21-0015 - Fresno County, Winter

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

Area Mitigation - Assumes Year 2022 SJVAPCD Rule 4601

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Residential_Exterior	150	50
tblAreaCoating	Area_EF_Residential_Interior	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.52	0.53
tblFleetMix	LDT1	0.05	0.21
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LHD1	0.03	9.0000e-004
tblFleetMix	LHD2	6.8290e-003	9.0000e-004
tblFleetMix	MCY	0.02	2.5000e-003
tblFleetMix	MDV	0.16	0.06
tblFleetMix	MH	2.9750e-003	2.0000e-003
tblFleetMix	MHD	0.01	8.0000e-003
tblFleetMix	OBUS	7.0700e-004	0.00
tblFleetMix	SBUS	1.4960e-003	2.0000e-004
tblFleetMix	UBUS	2.8900e-004	4.3000e-003
tblLandUse	LandUseSquareFeet	133,200.00	160,851.00
tblLandUse	LotAcreage	24.03	29.04
tblLandUse	Population	212.00	237.00
tblWoodstoves	NumberCatalytic	3.70	0.00
tblWoodstoves	NumberNoncatalytic	3.70	0.00

# 2.0 Emissions Summary

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#### TSM 21-0015 - Fresno County, Winter

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

# 2.1 Overall Construction (Maximum Daily Emission)

# **Unmitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/d	lay		
2022	3.6937	38.8937	29.5508	0.0635	19.8049	1.6357	21.4182	10.1417	1.5049	11.6259	0.0000	6,150.481 1	6,150.481 1	1.9493	0.0329	6,200.600 2
2023	1.6668	14.8041	16.9818	0.0303	0.2760	0.7030	0.9791	0.0745	0.6616	0.7360	0.0000	2,907.876 6	2,907.876 6	0.6149	0.0313	2,932.587 8
2024	28.9521	13.8559	16.8552	0.0303	0.2760	0.6166	0.8926	0.0745	0.5800	0.6544	0.0000	2,900.874 1	2,900.874 1	0.7170	0.0305	2,925.222 1
Maximum	28.9521	38.8937	29.5508	0.0635	19.8049	1.6357	21.4182	10.1417	1.5049	11.6259	0.0000	6,150.481 1	6,150.481 1	1.9493	0.0329	6,200.600 2

#### **Mitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/d	lay		
2022	3.6937	38.8937	29.5508	0.0635	8.9935	1.6357	10.6068	4.5853	1.5049	6.0696	0.0000	6,150.481 1	6,150.481 1	1.9493	0.0329	6,200.600 2
2023	1.6668	14.8041	16.9818	0.0303	0.2760	0.7030	0.9791	0.0745	0.6616	0.7360	0.0000	2,907.876 6	2,907.876 6	0.6149	0.0313	2,932.587 8
2024	28.9521	13.8559	16.8552	0.0303	0.2760	0.6166	0.8926	0.0745	0.5800	0.6544	0.0000	2,900.874 1	2,900.874 1	0.7170	0.0305	2,925.222 1
Maximum	28.9521	38.8937	29.5508	0.0635	8.9935	1.6357	10.6068	4.5853	1.5049	6.0696	0.0000	6,150.481 1	6,150.481 1	1.9493	0.0329	6,200.600 2

# TSM 21-0015 - Fresno County, Winter

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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	53.11	0.00	46.42	53.99	0.00	42.69	0.00	0.00	0.00	0.00	0.00	0.00

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#### TSM 21-0015 - Fresno County, Winter

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

# 2.2 Overall Operational

#### **Unmitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Area	3.9805	0.7455	6.3898	4.6300e- 003		0.0884	0.0884		0.0884	0.0884	0.0000	872.8752	872.8752	0.0271	0.0158	878.2607
Energy	0.0526	0.4491	0.1911	2.8700e- 003		0.0363	0.0363		0.0363	0.0363		573.3372	573.3372	0.0110	0.0105	576.7443
Mobile	1.0758	2.3267	14.1798	0.0382	4.3489	0.0286	4.3774	1.1565	0.0267	1.1832		4,013.244 3	4,013.244 3	0.3109	0.2063	4,082.499 3
Total	5.1088	3.5213	20.7607	0.0457	4.3489	0.1533	4.5022	1.1565	0.1514	1.3079	0.0000	5,459.456 7	5,459.456 7	0.3490	0.2326	5,537.504 2

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	lay		
Area	3.9805	0.7455	6.3898	4.6300e- 003		0.0884	0.0884		0.0884	0.0884	0.0000	872.8752	872.8752	0.0271	0.0158	878.2607
Energy	0.0526	0.4491	0.1911	2.8700e- 003		0.0363	0.0363		0.0363	0.0363		573.3372	573.3372	0.0110	0.0105	576.7443
Mobile	1.0717	2.2938	13.9866	0.0375	4.2619	0.0281	4.2899	1.1334	0.0262	1.1596		3,935.624 8	3,935.624 8	0.3067	0.2032	4,003.841 1
Total	5.1047	3.4884	20.5675	0.0450	4.2619	0.1528	4.4147	1.1334	0.1509	1.2843	0.0000	5,381.837 2	5,381.837 2	0.3448	0.2295	5,458.846 0

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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.08	0.93	0.93	1.62	2.00	0.34	1.94	2.00	0.32	1.81	0.00	1.42	1.42	1.21	1.35	1.42

# 3.0 Construction Detail

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2022	2/11/2022	5	30	
2	Site Preparation	Site Preparation	2/12/2022	3/11/2022	5	20	
3	Grading	Grading	3/12/2022	5/13/2022	5	45	
4	Building Construction	Building Construction	5/14/2022	1/19/2024	5	440	
5	Paving	Paving	1/20/2024	3/8/2024	5	35	
6	Architectural Coating	Architectural Coating	3/9/2024	4/26/2024	5	35	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 0

Residential Indoor: 325,723; Residential Outdoor: 108,574; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

(Architectural Coating - sqft)

#### **OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	2	8.00	158	0.38

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

Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

# **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	18.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	27.00	8.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

# **3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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#### TSM 21-0015 - Fresno County, Winter

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

# 3.2 Demolition - 2022

# **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					0.1313	0.0000	0.1313	0.0199	0.0000	0.0199			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.781 2	3,746.781 2	1.0524		3,773.092 0
Total	2.6392	25.7194	20.5941	0.0388	0.1313	1.2427	1.3739	0.0199	1.1553	1.1751		3,746.781 2	3,746.781 2	1.0524		3,773.092 0

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
I lading	2.2200e- 003	0.0937	0.0177	3.7000e- 004	0.0105	9.2000e- 004	0.0114	2.8800e- 003	8.8000e- 004	3.7600e- 003		39.0772	39.0772	3.0000e- 004	6.1500e- 003	40.9163
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0516	0.0377	0.3820	1.0300e- 003	0.1232	6.2000e- 004	0.1238	0.0327	5.7000e- 004	0.0333		104.3029	104.3029	3.7900e- 003	3.4900e- 003	105.4383
Total	0.0539	0.1314	0.3997	1.4000e- 003	0.1337	1.5400e- 003	0.1353	0.0356	1.4500e- 003	0.0370		143.3801	143.3801	4.0900e- 003	9.6400e- 003	146.3546

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#### TSM 21-0015 - Fresno County, Winter

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

# 3.2 Demolition - 2022 <u>Mitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust	: :				0.0591	0.0000	0.0591	8.9400e- 003	0.0000	8.9400e- 003			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0
Total	2.6392	25.7194	20.5941	0.0388	0.0591	1.2427	1.3017	8.9400e- 003	1.1553	1.1642	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Hauling	2.2200e- 003	0.0937	0.0177	3.7000e- 004	0.0105	9.2000e- 004	0.0114	2.8800e- 003	8.8000e- 004	3.7600e- 003		39.0772	39.0772	3.0000e- 004	6.1500e- 003	40.9163
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0516	0.0377	0.3820	1.0300e- 003	0.1232	6.2000e- 004	0.1238	0.0327	5.7000e- 004	0.0333		104.3029	104.3029	3.7900e- 003	3.4900e- 003	105.4383
Total	0.0539	0.1314	0.3997	1.4000e- 003	0.1337	1.5400e- 003	0.1353	0.0356	1.4500e- 003	0.0370		143.3801	143.3801	4.0900e- 003	9.6400e- 003	146.3546

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#### TSM 21-0015 - Fresno County, Winter

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

# 3.3 Site Preparation - 2022

#### **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust	11 11 11				19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.061 9	3,686.061 9	1.1922		3,715.865 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0620	0.0452	0.4584	1.2300e- 003	0.1479	7.4000e- 004	0.1486	0.0392	6.8000e- 004	0.0399		125.1635	125.1635	4.5400e- 003	4.1900e- 003	126.5259
Total	0.0620	0.0452	0.4584	1.2300e- 003	0.1479	7.4000e- 004	0.1486	0.0392	6.8000e- 004	0.0399		125.1635	125.1635	4.5400e- 003	4.1900e- 003	126.5259

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#### TSM 21-0015 - Fresno County, Winter

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

# 3.3 Site Preparation - 2022

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.061 9	3,686.061 9	1.1922	       	3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	8.8457	1.6126	10.4582	4.5461	1.4836	6.0297	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0620	0.0452	0.4584	1.2300e- 003	0.1479	7.4000e- 004	0.1486	0.0392	6.8000e- 004	0.0399		125.1635	125.1635	4.5400e- 003	4.1900e- 003	126.5259
Total	0.0620	0.0452	0.4584	1.2300e- 003	0.1479	7.4000e- 004	0.1486	0.0392	6.8000e- 004	0.0399		125.1635	125.1635	4.5400e- 003	4.1900e- 003	126.5259

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#### TSM 21-0015 - Fresno County, Winter

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

3.4 Grading - 2022

#### **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	9.2036	1.6349	10.8385	3.6538	1.5041	5.1579		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0688	0.0503	0.5093	1.3700e- 003	0.1643	8.2000e- 004	0.1651	0.0436	7.6000e- 004	0.0443		139.0705	139.0705	5.0500e- 003	4.6600e- 003	140.5844
Total	0.0688	0.0503	0.5093	1.3700e- 003	0.1643	8.2000e- 004	0.1651	0.0436	7.6000e- 004	0.0443		139.0705	139.0705	5.0500e- 003	4.6600e- 003	140.5844

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#### TSM 21-0015 - Fresno County, Winter

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

3.4 Grading - 2022

# **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust					4.1416	0.0000	4.1416	1.6442	0.0000	1.6442			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	4.1416	1.6349	5.7765	1.6442	1.5041	3.1483	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0688	0.0503	0.5093	1.3700e- 003	0.1643	8.2000e- 004	0.1651	0.0436	7.6000e- 004	0.0443		139.0705	139.0705	5.0500e- 003	4.6600e- 003	140.5844
Total	0.0688	0.0503	0.5093	1.3700e- 003	0.1643	8.2000e- 004	0.1651	0.0436	7.6000e- 004	0.0443		139.0705	139.0705	5.0500e- 003	4.6600e- 003	140.5844

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#### TSM 21-0015 - Fresno County, Winter

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

# 3.5 Building Construction - 2022 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0163	0.4405	0.1246	1.6700e- 003	0.0542	4.6500e- 003	0.0589	0.0156	4.4500e- 003	0.0201		176.1861	176.1861	1.3200e- 003	0.0266	184.1333
Worker	0.0929	0.0679	0.6875	1.8500e- 003	0.2218	1.1100e- 003	0.2229	0.0588	1.0200e- 003	0.0599		187.7452	187.7452	6.8200e- 003	6.2900e- 003	189.7889
Total	0.1092	0.5083	0.8121	3.5200e- 003	0.2760	5.7600e- 003	0.2818	0.0745	5.4700e- 003	0.0799		363.9314	363.9314	8.1400e- 003	0.0329	373.9222

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#### TSM 21-0015 - Fresno County, Winter

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

# 3.5 Building Construction - 2022

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0163	0.4405	0.1246	1.6700e- 003	0.0542	4.6500e- 003	0.0589	0.0156	4.4500e- 003	0.0201		176.1861	176.1861	1.3200e- 003	0.0266	184.1333
Worker	0.0929	0.0679	0.6875	1.8500e- 003	0.2218	1.1100e- 003	0.2229	0.0588	1.0200e- 003	0.0599		187.7452	187.7452	6.8200e- 003	6.2900e- 003	189.7889
Total	0.1092	0.5083	0.8121	3.5200e- 003	0.2760	5.7600e- 003	0.2818	0.0745	5.4700e- 003	0.0799		363.9314	363.9314	8.1400e- 003	0.0329	373.9222

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#### TSM 21-0015 - Fresno County, Winter

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

# 3.5 Building Construction - 2023

# **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.3400e- 003	0.3599	0.1073	1.6100e- 003	0.0542	2.2600e- 003	0.0565	0.0156	2.1600e- 003	0.0178		169.7911	169.7911	9.0000e- 004	0.0256	177.4325
Worker	0.0857	0.0594	0.6305	1.7900e- 003	0.2218	1.0500e- 003	0.2228	0.0588	9.6000e- 004	0.0598		182.8756	182.8756	6.1300e- 003	5.7700e- 003	184.7493
Total	0.0941	0.4192	0.7378	3.4000e- 003	0.2760	3.3100e- 003	0.2793	0.0745	3.1200e- 003	0.0776		352.6667	352.6667	7.0300e- 003	0.0313	362.1818

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#### TSM 21-0015 - Fresno County, Winter

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

# 3.5 Building Construction - 2023

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997	 	0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.3400e- 003	0.3599	0.1073	1.6100e- 003	0.0542	2.2600e- 003	0.0565	0.0156	2.1600e- 003	0.0178		169.7911	169.7911	9.0000e- 004	0.0256	177.4325
Worker	0.0857	0.0594	0.6305	1.7900e- 003	0.2218	1.0500e- 003	0.2228	0.0588	9.6000e- 004	0.0598		182.8756	182.8756	6.1300e- 003	5.7700e- 003	184.7493
Total	0.0941	0.4192	0.7378	3.4000e- 003	0.2760	3.3100e- 003	0.2793	0.0745	3.1200e- 003	0.0776		352.6667	352.6667	7.0300e- 003	0.0313	362.1818

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#### TSM 21-0015 - Fresno County, Winter

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

# 3.5 Building Construction - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.1000e- 003	0.3598	0.1048	1.5800e- 003	0.0542	2.2700e- 003	0.0565	0.0156	2.1800e- 003	0.0178		166.8946	166.8946	8.5000e- 004	0.0251	174.4051
Worker	0.0794	0.0524	0.5836	1.7300e- 003	0.2218	9.9000e- 004	0.2228	0.0588	9.1000e- 004	0.0597		178.2806	178.2806	5.5200e- 003	5.3400e- 003	180.0094
Total	0.0875	0.4121	0.6884	3.3100e- 003	0.2760	3.2600e- 003	0.2793	0.0745	3.0900e- 003	0.0775		345.1752	345.1752	6.3700e- 003	0.0305	354.4145

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#### TSM 21-0015 - Fresno County, Winter

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

# 3.5 Building Construction - 2024

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day				lb/d	day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.1000e- 003	0.3598	0.1048	1.5800e- 003	0.0542	2.2700e- 003	0.0565	0.0156	2.1800e- 003	0.0178		166.8946	166.8946	8.5000e- 004	0.0251	174.4051
Worker	0.0794	0.0524	0.5836	1.7300e- 003	0.2218	9.9000e- 004	0.2228	0.0588	9.1000e- 004	0.0597		178.2806	178.2806	5.5200e- 003	5.3400e- 003	180.0094
Total	0.0875	0.4121	0.6884	3.3100e- 003	0.2760	3.2600e- 003	0.2793	0.0745	3.0900e- 003	0.0775		345.1752	345.1752	6.3700e- 003	0.0305	354.4145

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#### TSM 21-0015 - Fresno County, Winter

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

3.6 Paving - 2024
Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0441	0.0291	0.3242	9.6000e- 004	0.1232	5.5000e- 004	0.1238	0.0327	5.1000e- 004	0.0332		99.0448	99.0448	3.0700e- 003	2.9700e- 003	100.0052
Total	0.0441	0.0291	0.3242	9.6000e- 004	0.1232	5.5000e- 004	0.1238	0.0327	5.1000e- 004	0.0332		99.0448	99.0448	3.0700e- 003	2.9700e- 003	100.0052

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#### TSM 21-0015 - Fresno County, Winter

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

3.6 Paving - 2024

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0441	0.0291	0.3242	9.6000e- 004	0.1232	5.5000e- 004	0.1238	0.0327	5.1000e- 004	0.0332		99.0448	99.0448	3.0700e- 003	2.9700e- 003	100.0052
Total	0.0441	0.0291	0.3242	9.6000e- 004	0.1232	5.5000e- 004	0.1238	0.0327	5.1000e- 004	0.0332		99.0448	99.0448	3.0700e- 003	2.9700e- 003	100.0052

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# TSM 21-0015 - Fresno County, Winter

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

# 3.7 Architectural Coating - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Archit. Coating	28.7567					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003	       	0.0609	0.0609	 	0.0609	0.0609		281.4481	281.4481	0.0159	       	281.8443
Total	28.9374	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0147	9.6900e- 003	0.1081	3.2000e- 004	0.0411	1.8000e- 004	0.0413	0.0109	1.7000e- 004	0.0111		33.0149	33.0149	1.0200e- 003	9.9000e- 004	33.3351
Total	0.0147	9.6900e- 003	0.1081	3.2000e- 004	0.0411	1.8000e- 004	0.0413	0.0109	1.7000e- 004	0.0111		33.0149	33.0149	1.0200e- 003	9.9000e- 004	33.3351

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# TSM 21-0015 - Fresno County, Winter

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

# 3.7 Architectural Coating - 2024 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	28.7567					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159	 	281.8443
Total	28.9374	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0147	9.6900e- 003	0.1081	3.2000e- 004	0.0411	1.8000e- 004	0.0413	0.0109	1.7000e- 004	0.0111		33.0149	33.0149	1.0200e- 003	9.9000e- 004	33.3351
Total	0.0147	9.6900e- 003	0.1081	3.2000e- 004	0.0411	1.8000e- 004	0.0413	0.0109	1.7000e- 004	0.0111		33.0149	33.0149	1.0200e- 003	9.9000e- 004	33.3351

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#### TSM 21-0015 - Fresno County, Winter

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

# 4.0 Operational Detail - Mobile

# **4.1 Mitigation Measures Mobile**

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	1.0717	2.2938	13.9866	0.0375	4.2619	0.0281	4.2899	1.1334	0.0262	1.1596		3,935.624 8	3,935.624 8	0.3067	0.2032	4,003.841 1
Unmitigated	1.0758	2.3267	14.1798	0.0382	4.3489	0.0286	4.3774	1.1565	0.0267	1.1832		4,013.244 3	4,013.244 3	0.3109	0.2063	4,082.499 3

# **4.2 Trip Summary Information**

	Avei	rage Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	698.56	705.96	632.70	2,022,083	1,981,641
Total	698.56	705.96	632.70	2,022,083	1,981,641

# **4.3 Trip Type Information**

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	48.40	15.90	35.70	86	11	3

#### 4.4 Fleet Mix

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#### TSM 21-0015 - Fresno County, Winter

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.527700	0.209000	0.167500	0.055600	0.000900	0.000900	0.008000	0.021400	0.000000	0.004300	0.002500	0.000200	0.002000

# 5.0 Energy Detail

Historical Energy Use: N

# **5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
NaturalGas Mitigated	0.0526	0.4491	0.1911	2.8700e- 003		0.0363	0.0363		0.0363	0.0363		573.3372	573.3372	0.0110	0.0105	576.7443
NaturalGas Unmitigated	0.0526	0.4491	0.1911	2.8700e- 003		0.0363	0.0363		0.0363	0.0363		573.3372	573.3372	0.0110	0.0105	576.7443

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#### TSM 21-0015 - Fresno County, Winter

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

# 5.2 Energy by Land Use - NaturalGas

#### **Unmitigated**

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
Single Family Housing	4873.37	0.0526	0.4491	0.1911	2.8700e- 003		0.0363	0.0363		0.0363	0.0363		573.3372	573.3372	0.0110	0.0105	576.7443
Total		0.0526	0.4491	0.1911	2.8700e- 003		0.0363	0.0363		0.0363	0.0363		573.3372	573.3372	0.0110	0.0105	576.7443

# **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	lay		
Single Family Housing	4.87337	0.0526	0.4491	0.1911	2.8700e- 003	1 1	0.0363	0.0363		0.0363	0.0363		573.3372	573.3372	0.0110	0.0105	576.7443
Total		0.0526	0.4491	0.1911	2.8700e- 003		0.0363	0.0363		0.0363	0.0363		573.3372	573.3372	0.0110	0.0105	576.7443

# 6.0 Area Detail

# **6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

# TSM 21-0015 - Fresno County, Winter

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

Use Low VOC Paint - Residential Exterior

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Mitigated	3.9805	0.7455	6.3898	4.6300e- 003		0.0884	0.0884		0.0884	0.0884	0.0000	872.8752	872.8752	0.0271	0.0158	878.2607
Unmitigated	3.9805	0.7455	6.3898	4.6300e- 003		0.0884	0.0884		0.0884	0.0884	0.0000	872.8752	872.8752	0.0271	0.0158	878.2607

# 6.2 Area by SubCategory

# **Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2758	1	1			0.0000	0.0000	1 1 1	0.0000	0.0000			0.0000			0.0000
Consumer Products	3.4422					0.0000	0.0000	 	0.0000	0.0000		i i	0.0000			0.0000
Hearth	0.0790	0.6751	0.2873	4.3100e- 003		0.0546	0.0546	       	0.0546	0.0546	0.0000	861.8824	861.8824	0.0165	0.0158	867.0041
Landscaping	0.1835	0.0703	6.1025	3.2000e- 004		0.0338	0.0338	       	0.0338	0.0338		10.9929	10.9929	0.0106	       	11.2566
Total	3.9805	0.7455	6.3898	4.6300e- 003		0.0884	0.0884		0.0884	0.0884	0.0000	872.8752	872.8752	0.0271	0.0158	878.2607

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## TSM 21-0015 - Fresno County, Winter

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

## 6.2 Area by SubCategory

## **Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	0.2758					0.0000	0.0000	 	0.0000	0.0000			0.0000			0.0000
	3.4422					0.0000	0.0000		0.0000	0.0000			0.0000		     	0.0000
Hearth	0.0790	0.6751	0.2873	4.3100e- 003		0.0546	0.0546		0.0546	0.0546	0.0000	861.8824	861.8824	0.0165	0.0158	867.0041
Landscaping	0.1835	0.0703	6.1025	3.2000e- 004		0.0338	0.0338		0.0338	0.0338		10.9929	10.9929	0.0106		11.2566
Total	3.9805	0.7455	6.3898	4.6300e- 003		0.0884	0.0884		0.0884	0.0884	0.0000	872.8752	872.8752	0.0271	0.0158	878.2607

## 7.0 Water Detail

## 7.1 Mitigation Measures Water

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## TSM 21-0015 - Fresno County, Winter

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

## 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## **10.0 Stationary Equipment**

## **Fire Pumps and Emergency Generators**

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

## **Boilers**

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

## **User Defined Equipment**

Equipment Type	Number

## 11.0 Vegetation

## Appendix B

## **Biological Resources Information**

## **City of Fowler**

# Tentative Subdivision Map No. 21-0015 Project

## **Biological Resources Information**

California Natural Diversity Database (CNDDB) Report – Nine Quad Element Search

- A thorough search of the CNDDB for published accounts of special status plant and animal species was conducted for the Porterville 7.5-minute quadrangles that contains the Project site in its entirety, and for the eight surrounding quadrangles: Frazier Valley, Lindsay, Cairns Corner, Success Dam, Sausalito School, Ducor, Woodville, and Fountain Springs.
- Report ran on September 3, 2021.
  - 20 special status animal species have been documented in the Area of Potential Effect (APE).
  - With mitigation measures outlined in Chapter 3 and Chapter 4, potential impacts nesting birds would be reduced to less than significant.
  - o 12 special status plant species have been documented in the Project.
    - Mitigation is not warranted for special status plants due to ongoing disturbance and/or absence of suitable habitat.

IPaC System - Explore Locations Resources

- Report ran on September 10, 2021.
- There are no critical habitats in the Project APE.

# California Natural Diversity Database Report – 9 Quad Element Search



## **Selected Elements by Common Name**

## California Department of Fish and Wildlife California Natural Diversity Database



**Query Criteria:** 

Quad<span style='color:Red'> IS </span>(Malaga (3611966)<span style='color:Red'> OR </span>Sanger (3611965)<span style='color:Red'> OR </span>Selma (3611955)<span style='color:Red'> OR </span>Conejo (3611956)<span style='color:Red'> OR </span>Caruthers (3611957)<span style='color:Red'> OR </span>Fresno South (3611967)<span style='color:Red'> OR </span>Fresno North (3611977)<span style='color:Red'> OR </span>Clovis (3611976)<span style='color:Red'> OR </span>Round Mountain (3611975))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
alkali-sink goldfields	PDAST5L030	None	None	G2	S2	1B.1
Lasthenia chrysantha	1 27 10 102000	140110	110110	02	02	15.1
American badger	AMAJF04010	None	None	G5	S3	SSC
Taxidea taxus	7					
Antioch efferian robberfly	IIDIP07010	None	None	G1G2	S1S2	
Efferia antiochi						
black-crowned night heron	ABNGA11010	None	None	G5	S4	
Nycticorax nycticorax						
bristly sedge	PMCYP032Y0	None	None	G5	S2	2B.1
Carex comosa						
burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Athene cunicularia						
California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
Arizona elegans occidentalis						
California jewelflower	PDBRA31010	Endangered	Endangered	G1	S1	1B.1
Caulanthus californicus						
California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Linderiella occidentalis						
California satintail	PMPOA3D020	None	None	G4	S3	2B.1
Imperata brevifolia						
California tiger salamander - central California DPS	AAAAA01181	Threatened	Threatened	G2G3	S3	WL
Ambystoma californiense pop. 1						
coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
Phrynosoma blainvillii						
Crotch bumble bee	IIHYM24480	None	Candidate	G3G4	S1S2	
Bombus crotchii			Endangered			
double-crested cormorant	ABNFD01020	None	None	G5	S4	WL
Phalacrocorax auritus						
forked hare-leaf	PDAST5J070	None	None	G2	S2	1B.1
Lagophylla dichotoma						
Fresno kangaroo rat	AMAFD03151	Endangered	Endangered	G3TH	SH	
Dipodomys nitratoides exilis						
great egret	ABNGA04040	None	None	G5	S4	
Ardea alba						
Greene's tuctoria	PMPOA6N010	Endangered	Rare	G1	S1	1B.1
Tuctoria greenei						
hoary bat	AMACC05030	None	None	G3G4	S4	
Lasiurus cinereus						



## **Selected Elements by Common Name**

# California Department of Fish and Wildlife California Natural Diversity Database



Overtice	Fig. 10	Fadamil Or r	0/-/- 0: :	Obstact 5	01-1-5	Rare Plant Rank/CDFW
Species	Element Code	Federal Status	State Status	Global Rank	State Rank	SSC or FP
Hurd's metapogon robberfly  Metapogon hurdi	IIDIP08010	None	None	G1G2	S1S2	
least Bell's vireo	ABPBW01114	Endangered	Endongorod	G5T2	S2	
Vireo bellii pusillus	ADPDVVUII14	Endangered	Endangered	G512	32	
Vinco belli pusinus Madera leptosiphon	PDPLM09130	None	None	G3	<b>S</b> 3	1B.2
Leptosiphon serrulatus	FDFLINI09130	None	None	<b>G</b> 3	33	10.2
midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
Branchinecta mesovallensis	10010100	None	None	G2	0200	
nolestan blister beetle	IICOL4C030	None	None	G2	S2	
Lytta molesta	1100240000	None	None	G2	O2	
Northern California legless lizard	ARACC01020	None	None	G3	S3	SSC
Anniella pulchra	7.1.1.10001020					
Northern Claypan Vernal Pool	CTT44120CA	None	None	G1	S1.1	
Northern Claypan Vernal Pool					-	
Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
Northern Hardpan Vernal Pool						
pallid bat	AMACC10010	None	None	G4	S3	SSC
Antrozous pallidus						
San Joaquin adobe sunburst	PDAST7P030	Threatened	Endangered	G1	S1	1B.1
Pseudobahia peirsonii						
San Joaquin kit fox	AMAJA03041	Endangered	Threatened	G4T2	S2	
Vulpes macrotis mutica						
San Joaquin pocket mouse	AMAFD01060	None	None	G2G3	S2S3	
Perognathus inornatus						
San Joaquin Valley Orcutt grass	PMPOA4G060	Threatened	Endangered	G1	S1	1B.1
Orcuttia inaequalis						
Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Sagittaria sanfordii						
snowy egret	ABNGA06030	None	None	G5	S4	
Egretta thula						
spiny-sepaled button-celery	PDAPI0Z0Y0	None	None	G2	S2	1B.2
Eryngium spinosepalum						
succulent owl's-clover	PDSCR0D3Z1	Threatened	Endangered	G4?T2T3	S2S3	1B.2
Castilleja campestris var. succulenta						
Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
Buteo swainsoni						
tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
Agelaius tricolor						
valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S3	
Desmocerus californicus dimorphus				_		
vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Branchinecta lynchi						



## **Selected Elements by Common Name**

# California Department of Fish and Wildlife California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
Eumops perotis californicus						
western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Emys marmorata						
western spadefoot	AAABF02020	None	None	G2G3	S3	SSC
Spea hammondii						
western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Coccyzus americanus occidentalis						

**Record Count: 44** 

## **IPaC System - Explore Locations Resources**

**IPaC** 

**U.S. Fish & Wildlife Service** 

## IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## **Project information**

NAME

City of Fowler Marshall Estates

LOCATION

Fresno County, California



**DESCRIPTION** 

None

## Local office

Sacramento Fish And Wildlife Office

**(**916) 414-6600

**(916)** 414-6713

NOT FOR CONSULTATION

Federal Building 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846

## Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

- 1. Log in to IPaC.
- 2. Go to your My Projects list.
- 3. Click PROJECT HOME for this project.
- 4. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact <u>NOAA Fisheries</u> for <u>species under their jurisdiction</u>.

- 1. Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status page</u> for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
- 2. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

I	M	la	m	m	าล	ς
ı	v	u			ıu	ı

NAME STATUS

Fresno Kangaroo Rat Dipodomys nitratoides exilis

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

http://ecos.fws.gov/ecp/species/5150

Endangered

San Joaquin Kit Fox Vulpes macrotis mutica

Wherever found

No critical habitat has been designated for this species.

http://ecos.fws.gov/ecp/species/2873

Endangered

**Birds** 

NAME STATUS

Yellow-billed Cuckoo Coccyzus americanus

There is **final** critical habitat for this species. The location of the critical habitat is not available.

http://ecos.fws.gov/ecp/species/3911

Threatened

Reptiles

NAME STATUS

Blunt-nosed Leopard Lizard Gambelia silus

Wherever found

No critical habitat has been designated for this species.

http://ecos.fws.gov/ecp/species/625

Endangered

Giant Garter Snake Thamnophis gigas

Wherever found

No critical habitat has been designated for this species.

http://ecos.fws.gov/ecp/species/4482

Threatened

**Amphibians** 

NAME STATUS

California Red-legged Frog Rana draytonii

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

http://ecos.fws.gov/ecp/species/2891

**Threatened** 

California Tiger Salamander Ambystoma californiense

There is **final** critical habitat for this species. The location of the critical habitat is not available.

http://ecos.fws.gov/ecp/species/2076

**Threatened** 

## **Fishes**

NAME STATUS

Delta Smelt Hypomesus transpacificus

**Threatened** 

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

http://ecos.fws.gov/ecp/species/321

## Insects

NAME STATUS

Monarch Butterfly Danaus plexippus

Candidate

Wherever found

No critical habitat has been designated for this species.

http://ecos.fws.gov/ecp/species/9743

## Crustaceans

NAME STATU!

Vernal Pool Fairy Shrimp Branchinecta lynchi

Threatened

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

http://ecos.fws.gov/ecp/species/498

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty  $Act^{1}$  and the Bald and Golden Eagle Protection  $Act^{2}$ .

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described <u>below</u>.

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <a href="http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php">http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php</a>
- Measures for avoiding and minimizing impacts to birds
   <a href="http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php">http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php</a>
- Nationwide conservation measures for birds <a href="http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf">http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf</a>

THERE ARE NO MIGRATORY BIRDS OF CONSERVATION CONCERN EXPECTED TO OCCUR AT THIS LOCATION.

## Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

## What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS <u>Birds of Conservation Concern (BCC)</u> and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (<u>Eagle Act</u> requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the <a href="AKN Phenology Tool">AKN Phenology Tool</a>.

## What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u>.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

## How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: <u>The Cornell Lab of Ornithology All About Birds Bird Guide</u>, or (if you are unsuccessful in locating the bird of interest there), the <u>Cornell Lab of Ornithology Neotropical Birds</u>

<u>guide</u>. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- 2. "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
- 3. "Non-BCC Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the <u>Eagle Act</u> requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

## Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the <u>Northeast Ocean Data Portal</u>. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the <u>NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.</u>

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

## What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> to avoid violating the Eagle Act should such impacts occur.

#### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize

potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## **Facilities**

## National Wildlife Refuge lands

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

## Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

# Wetlands in the National Wetlands Inventory

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of Engineers District</u>.

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the <a href="NWI map">NWI map</a> to view wetlands at this location.

#### **Data limitations**

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

#### **Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### **Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

# Appendix C

## **Cultural Resources Information**

## **City of Fowler**

# Tentative Subdivision Map No. 21-0015 Project

## **Cultural Resources Information**

Southern San Joaquin Valley Information Center, CSU Bakersfield, California Historical Resources Information System: Record Search 21-254, dated July 6, 2021.

- There have been no previous cultural resource studies conducted within the project area.
- There has been one cultural resource study conducted within a one-quarter mile radius, FR-00288.
- There are no recorded resources within the project area, and it is not known if any exist.
- There are two recorded cultural resources within the one-quarter mile radius, P-10-002864 and P-10-004423. These resources are an historic era trash scatter and an historic era park, respectively.
- There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks.

AB 52 Consultation pursuant to Public Resource Code Section 21080.3.1

- The City of Fowler has received a letter from the Santa Rosa Rancheria Tachi Yokut Tribe.
- A Tribal Consultation Notification Request Letter was sent out by the City of Fowler via certified mail dated June 8, 2021, which included a Project Description, map of the APE and a Topo map.
- No correspondence has been received by the City of Fowler pursuant to the Tribal Consultation Notification Request Letter.

## **CHRIS – Record Search Results**

<u>California</u>
<u>H</u>istorical
<u>R</u>esources
<u>I</u>nformation
<u>S</u>ystem



Fresno Kern Kings Madera Tulare Southern San Joaquin Valley Information Center

Record Search 21-254

California State University, Bakersfield

Mail Stop: 72 DOB 9001 Stockdale Highway Bakersfield, California 93311-1022 (661) 654-2289

E-mail: ssjvic@csub.edu Website: www.csub.edu/ssjvic

**To:** Jacqueline Lancaster

**Provost & Pritchard Consulting Group** 

130 N. Garden Street Visalia, CA 93291

**Date:** July 6, 2021

**Re:** City of Fowler, Tentative Subdivision Map 21-0015

**County:** Fresno

Map(s): Malaga 7.5'

#### **CULTURAL RESOURCES RECORDS SEARCH**

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

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

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

According to the information in our files, there have been no previous cultural resource studies conducted within the project area. There has been one study conducted within a one-half mile radius, FR-00288.

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

There are no recorded resources within the project area, and it is not known if any exist there. There are two recorded resources within the one-half mile radius, P-10-002864 and P-10-004423. These resources are an historic era trash scatter and an historic era park, respectively.

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

#### COMMENTS AND RECOMMENDATIONS

We understand this project consists of a subdivision of approximately 29 acres to allow for the creation of 103 single-family residential lots. Further, we understand two residences that currently exist in the project area, one of which was built in 1925, will be demolished as part of the project activities. Because no cultural resource studies have taken place on this project area, it is unknown if any cultural resources are present. Therefore, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. Further, according to our records, the existing structures have never been recorded or evaluated for historical significance. We recommend a qualified, professional consultant record and evaluated the structure prior to demolition. A list of qualified consultants can be found at www.chrisinfo.org.

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

By:

Celeste M. Thomson, Coordinator

**Date**: July 6, 2021

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

## **AB 52 Tribal Consultation**



June 18, 2021

Santa Rosa Indian Community of the Santa Rosa Rancheria Leo Sisco, Chairman C/O Cultural Department P.O. Box 8 Lemoore, CA 93245

Subject: Consultation pursuant to Assembly Bill 52 for Tentative Subdivision Map No.

21-0015, located on the east side of South Armstrong Avenue between East Hogan and East Adams Avenues in the City of Fowler, Fresno County, CA

#### Dear Chairman Sisco:

The City of Fowler is the Lead Agency for the project described above. The City is requesting your review to determine if formal consultation is appropriate pursuant to Public Resources Code Section 21080.3.1, *et seq.* (Assembly Bill 52). The project proposes the following activities at Fresno County Assessor's Parcel No. 340-130-14:

Subdivision of a 29.04-gross acre parcel for the purposes of creating a 103-lot single-family residential subdivision. An approximately 2.09-acre ponding basin and 1.54-acre park would be constructed within the subdivision.

We understand that pursuant to Public Resources Code Subdivision 21080.3.1(d) the Tribe has 30 days from receipt of this letter to request formal consultation. Please call Jarred Olsen at (559) 636-1166 Ext 535 or email at <a href="mailto:dmarple@ci.fowler.ca.us">dmarple@ci.fowler.ca.us</a> with any questions.

Respectfully,

Dawn Marple City Planner Marple

Enclosures: Quad Map

# Appendix D Soils Report

# Natural Resource Conservation Services - Custom Soil Resource Report

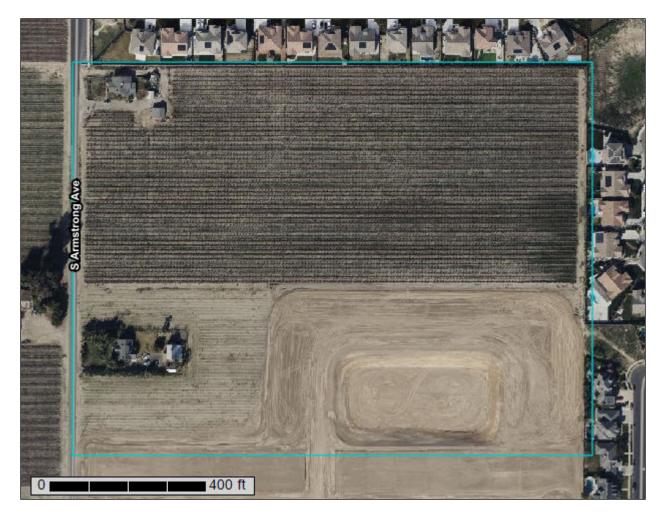


Natural

Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

## Custom Soil Resource Report for Eastern Fresno Area, California

**Marshall Estates II** 



## **Preface**

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2 053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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## **How Soil Surveys Are Made**

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

#### Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

## Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

## Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



#### MAP LEGEND

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons

-

Soil Map Unit Lines

Soil Map Unit Points

#### **Special Point Features**

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Blowout

 $\boxtimes$ 

Borrow Pit

Ж

Clay Spot

 $\Diamond$ 

**Closed Depression** 

v

Gravel Pit

...

**Gravelly Spot** 

0

Landfill Lava Flow

٨.

Marsh or swamp

2

Mine or Quarry

0

Miscellaneous Water
Perennial Water

0

Rock Outcrop

+

Saline Spot

. .

Sandy Spot

\_

Severely Eroded Spot

\_

Sinkhole

8

Slide or Slip

Ø

Sodic Spot

#### LGLIND



Spoil Area Stony Spot



Very Stony Spot



Wet Spot Other

Δ

Special Line Features

#### Water Features

\_

Streams and Canals

#### Transportation

ransp

Rails

~

Interstate Highways

US Routes

 $\sim$ 

Major Roads

~

Local Roads

#### Background

1

Aerial Photography

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24.000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eastern Fresno Area, California Survey Area Data: Version 13, May 29, 2020

Soil map units are labeled (as space allows) for map scales 1:50.000 or larger.

Date(s) aerial images were photographed: Jan 21, 2021—Feb 1, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ex	Exeter loam	2.3	7.6%
Нс	Hanford sandy loam	1.3	4.1%
Hst	Hesperia fine sandy loam, deep	27.2	88.3%
Totals for Area of Interest		30.8	100.0%

## **Map Unit Descriptions**

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

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onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Eastern Fresno Area, California

## Ex-Exeter loam

### **Map Unit Setting**

National map unit symbol: hl3w Elevation: 200 to 450 feet

Mean annual precipitation: 9 to 14 inches

Mean annual air temperature: 61 to 64 degrees F

Frost-free period: 225 to 275 days

Farmland classification: Farmland of statewide importance

### **Map Unit Composition**

Exeter and similar soils: 85 percent *Minor components*: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

## **Description of Exeter**

## Setting

Landform: Stream terraces

Landform position (two-dimensional): Footslope Landform position (three-dimensional): Side slope

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Alluvium derived from granite

### Typical profile

Ap - 0 to 15 inches: loam Bt - 15 to 30 inches: loam

Bqm - 30 to 40 inches: cemented

### Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: 20 to 40 inches to duripan

Drainage class: Well drained Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately

low (0.00 to 0.01 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.6 inches)

## Interpretive groups

Land capability classification (irrigated): 3s Land capability classification (nonirrigated): 4s

Hydrologic Soil Group: C Hydric soil rating: No

#### **Minor Components**

#### Unnamed

Percent of map unit: 14 percent Landform: Stream terraces Hydric soil rating: No

### Unnamed, ponded

Percent of map unit: 1 percent

Landform: Depressions on stream terraces

Hydric soil rating: Yes

## Hc—Hanford sandy loam

## **Map Unit Setting**

National map unit symbol: hl5f Elevation: 200 to 500 feet

Mean annual precipitation: 8 to 15 inches

Mean annual air temperature: 61 to 63 degrees F

Frost-free period: 250 to 275 days

Farmland classification: Prime farmland if irrigated

## **Map Unit Composition**

Hanford and similar soils: 85 percent Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

## **Description of Hanford**

### Setting

Landform: Alluvial fans, flood plains

Landform position (two-dimensional): Footslope, toeslope Landform position (three-dimensional): Base slope, rise

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Alluvium derived from granite

## Typical profile

Ap - 0 to 16 inches: sandy loam C - 16 to 72 inches: sandy loam

#### Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95

in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

#### Interpretive groups

Land capability classification (irrigated): 2s Land capability classification (nonirrigated): 4s

Hydrologic Soil Group: A

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Hydric soil rating: No

## **Minor Components**

#### Unnamed

Percent of map unit: 10 percent Landform: Alluvial fans, flood plains

Hydric soil rating: No

### Unnamed, channeled

Percent of map unit: 5 percent Landform: Channels on alluvial fans

Hydric soil rating: No

## Hst—Hesperia fine sandy loam, deep

## **Map Unit Setting**

National map unit symbol: 2yc9g

Elevation: 230 to 310 feet

Mean annual precipitation: 9 to 12 inches

Mean annual air temperature: 63 to 64 degrees F

Frost-free period: 314 to 327 days

Farmland classification: Prime farmland if irrigated

## **Map Unit Composition**

Hesperia, deep, and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

## **Description of Hesperia, Deep**

## Setting

Landform: Alluvial fans

Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Coarse-loamy alluvium derived from igneous and metamorphic

rock

## **Typical profile**

Ap1 - 0 to 5 inches: fine sandy loam
Ap2 - 5 to 11 inches: fine sandy loam
Bt - 11 to 32 inches: fine sandy loam
Btk - 32 to 43 inches: fine sandy loam
2Bdk - 43 to 63 inches: stratified silt loam
2Cd - 63 to 79 inches: stratified silt loam

## Properties and qualities

Slope: 0 percent

Depth to restrictive feature: 43 inches to densic material

Drainage class: Well drained

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Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to

0.14 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: Rare Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 2.0

Available water supply, 0 to 60 inches: Low (about 5.4 inches)

## Interpretive groups

Land capability classification (irrigated): 2s Land capability classification (nonirrigated): 4s

Hydrologic Soil Group: B Hydric soil rating: No

## **Minor Components**

## Unnamed, reclaimed

Percent of map unit: 10 percent

Landform: Fan skirts Hydric soil rating: No

## Unnamed, loam surface

Percent of map unit: 5 percent Landform: Alluvial fans Hydric soil rating: No

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