



CITY of CLOVIS

AGENDA • CITY COUNCIL MEETING

Council Chamber, 1033 Fifth Street, Clovis, CA 93612 (559) 324-2060
www.cityofclovis.com

In compliance with the Americans with Disabilities Act, if you need special assistance to access the City Council Chamber to participate at this meeting, please contact the City Clerk or General Services Director at (559) 324-2060 (TTY – 711). Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to the Council Chamber.

Any writings or documents provided to a majority of the City Council regarding any item on this 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.cityofclovis.com.

November 18, 2019

6:00 PM

Council Chamber

The City Council welcomes participation at Council Meetings. Members of the public may address the Council on any item of interest to the public that is scheduled on the Agenda. In order for everyone to be heard, please limit your comments to 5 minutes or less, or 10 minutes per topic.

CALL TO ORDER

FLAG SALUTE - Councilmember Mouanoutoua

ROLL CALL

Public Comments - This is an opportunity for the members of the public to address the City Council on any matter within the City Council's jurisdiction that is not listed on the Agenda. In order for everyone to be heard, please limit your comments to 5 minutes or less, or 10 minutes per topic. Anyone wishing to be placed on the Agenda for a specific topic should contact the City Manager's office and submit correspondence at least 10 days before the desired date of appearance.

ORDINANCES AND RESOLUTIONS - With respect to the approval of resolutions and ordinances, the reading of the title 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.

CONSENT CALENDAR - Items considered routine in nature are to be placed upon the Consent Calendar. They will all be considered and voted upon in one vote as one item unless a Councilmember requests individual consideration. A Councilmember's vote in favor of the Consent Calendar is considered and recorded as a separate affirmative vote in favor of each action listed. Motions in favor of adoption of the Consent Calendar are deemed to include a motion to waive the reading of any ordinance or resolution on the Consent Calendar. For adoption of ordinances, only those that have received a unanimous vote upon introduction are considered Consent items.

1. Administration - Approval - Minutes from the November 4, 2019 Council Meeting.
2. Administration - Adopt – **Ord. 19-13**, Amending various sections of Title 4, Chapter 4.4 Article 1 of the Clovis Municipal Code relating to adoption of the 2019 California Fire Code with local amendments, and making related findings. (Vote: 5-0)
3. Administration - Adopt – **Ord. 19-14**, an Ordinance of the City Council of the City of Clovis Amending Sections 8.1.02, 8.2.101, 8.5.101, 8.6.101, 8.15.101, 8.16.101, 8.17.101 of Title 8 of The Clovis Municipal Code Pertaining to Adoption of the 2019 California Building, Electrical, Mechanical, Plumbing, Residential, Energy, and Green Building Standards Codes. (Vote: 5-0)
4. Administration - Receive and File – Economic Development Corporation Serving Fresno County Quarterly Report, July – September 2019.
5. Planning and Development Services – Approval – Waive the City's usual purchasing procedures and authorize the City Manager to enter into a purchase agreement with Tesco Controls, Inc. to supply a motor control center for CIP 19-14, Well 21 Panel Upgrades, CIP 19-13 Well 17 Panel Upgrades and CIP 19-12 Well 4AA Panel Upgrades.

PUBLIC HEARINGS - A public hearing is an open consideration within a regular or special meeting of the City Council, for which special notice has been given and may be required. When a public hearing is continued, noticing of the adjourned item is required as per Government Code 54955.1.

6. Consider Introduction – Ord. 19-___, An Ordinance of the City Council of the City of Clovis amending Sections 3.1.216(n), 4.5.1011, and 10.3.02, and adding Chapter 5.33, of the Clovis Municipal Code relating to vending on public sidewalks, pedestrian paths, and parks.

Staff: John Holt, Assistant City Manager
Recommendation: Approve

7. Consider Introduction - Ord. 19- ____, An Ordinance of the City Council of the City Of Clovis adding Chapter 5.34, of Title 5, to the Clovis Municipal Code Relating To Food Trucks.

Staff: John Holt, Assistant City Manager
Recommendation: Approve

8. Consider Actions related to Annexation of Territory (Annexation #59 – T6200- North West Corner of Shepherd and Sunnyside) to the City of Clovis Community Facilities District No. 2004-1 (Police and Fire Services)

- a. Consider Approval - Res. 19-____, A Resolution annexing territory (Annexation #59) (T6200-North West Corner of Shepherd and Sunnyside) to the City of Clovis Community Facilities District No. 2004-1 (Police and Fire Services) and calling a special landowner election to annex territory (Annexation #59) to City of Clovis Community Facilities District No. 2004-1 (Police and Fire Services).
- b. Consider Approval - Res. 19-____, A Resolution of the City of Clovis declaring the results of a special landowner election and directing recording of the Notice of Special Tax Lien for City of Clovis Community Facilities District No. 2004-1 (Police and Fire Services).

Staff: Gina Daniels, Assistant Finance Director

Recommendation: Approve

9. Consider items associated with approximately 42.39 acres of property within area bounded by Teague Avenue to the south, Powers Avenue to the north, between Temperance and DeWolf Avenues. John & Patricia Baldwin, Robert & Deborah Bracich, Vincent & Diane Genco, Vong & Mindy Her, James & Leanore McKoane, Janet Nicholson, Edward & Roxanna Stevens, James White, Delores Whitford, Valley Coastal Development LLC., owners; Valley Coastal Development LLC. - Drew Phelps, applicant.

- a. Consider Approval - Res. 19-____, A request to adopt an environmental finding of a Mitigated Negative Declaration for General Plan Amendment GPA2019-004, Rezone R2019-005, Rezone R2019-006, Vesting Tentative Tract Map TM6264, and Vesting Tentative Tract Map TM6239.
- b. Consider Approval - Res. 19-____, GPA2019-004, A request to amend the General Plan and Herndon Shepherd Specific Plan to re-designate approximately 42.39 acres of property from Very Low Density Residential (0.6 to 2.0 DU/Ac) to Medium Density Residential (4.1 to 7.0 DU/Ac) classification.
- c. Consider Introduction - Ord. 19-____, R2019-005, A request to approve a rezone of approximately 5 acres of property from the R-1-AH (Single family Residential – 18,000 Sq. Ft.) to the R-1-PRD (Single Family Planned Residential Development) Zone District.
- d. Consider Introduction - Ord. 19-____, R2019-006, A request to approve a rezone of approximately 37.39 acres of property from the R-1-AH (Single family Residential – 18,000 Sq. Ft.) to the R-1-PRD (Single Family Planned Residential Development) Zone District.
- e. Consider Approval - Res. 19-____, TM6264, An appeal by Valley Coastal Development of the Planning Commission’s denial of a vesting tentative tract map for a 36-lot single family planned residential development on approximately 5 acres of property.

- f. Consider Approval - Res. 19-____, TM6239, A request to approve a vesting tentative tract map for a 169-lot single family planned residential development on approximately 37.39 acres of property.

Staff: Lily Cha, Assistant Planner

Recommendation: Approve

CITY MANAGER COMMENTS

COUNCIL COMMENTS

ADJOURNMENT

MEETINGS AND KEY ISSUES

Regular City Council Meetings are held at 6:00 P.M. in the Council Chamber. The following are future meeting dates:

Dec. 2, 2019 (Mon.)
Dec. 9, 2019 (Mon.)
Dec. 16, 2019 (Mon.)
Jan. 6, 2020 (Mon.)
Jan. 13, 2020 (Mon.)
Jan. 21, 2020 (Tue.)

CLOVIS CITY COUNCIL MEETING

November 4, 2019

6:00 P.M.

Council Chamber

Meeting called to order by Mayor Bessinger
Flag Salute led by Councilmember Flores

Roll Call: Present: Councilmembers Ashbeck, Flores, Mouanoutoua, Whalen
Mayor Bessinger
Absent: None

PRESENTATION

1. 6:03 P.M. - PRESENTATION - RECOGNIZING MEMBERS OF THE OCTOBER 2019 CLOVIS CITIZENS ACADEMY

Councilmember Ashbeck recognized members of the October 2019 Clovis Citizens Academy.

2. 6:09 - PRESENTATION – UPDATE ON THE CITY OF CLOVIS GEOGRAPHIC INFORMATION SYSTEMS (GIS) DAY TO BE HELD ON NOVEMBER 13TH, 2019

Planning and Development Services Assistant Director Renee Mathis provided Council an update on the City of Clovis Geographic Information System (GIS) Day to be held on November 13th, 2019.

3. 6:17 - PRESENTATION OF PROCLAMATION RECOGNIZING NOVEMBER 2019, AS NATIONAL RUNAWAY PREVENTION MONTH.

Councilmember Mouanoutoua presented a proclamation to Fresno Economic Opportunities Commission Sanctuary and Support Services recognizing November 2019, as National Runaway Prevention Month.

PUBLIC COMMENTS – 6:24

NONE

CONSENT CALENDAR 6:25

Motion by Councilmember Ashbeck, seconded by Councilmember Flores, that the items on the Consent Calendar be approved, including the waiver of the reading of the ordinance. Motion carried by unanimous vote.

4. Administration - Approved - Minutes from the October 21, 2019 Council Meeting.
5. Administration - Adopted - **Ord. 19-12**, R2019-002, a request to approve a prezone from the County AE-20 and AE-40 Zone Districts to the Clovis P-F (Public Facilities) Zone District, approximately 117 acres of land located on the north side of the Clovis Landfill at 15679 Auberry Road. (Vote 5-0)

PRELIMINARY - SUBJECT TO APPROVAL

AGENDA ITEM NO. 1.

6. Finance – Received and Filed – Treasurer’s Report for the Month of July 2019.
7. Finance – Received and Filed – Investment Report for the Month of July 2019.
8. General Services – Approved – **Res. 19-137**, authorizing the City Manager to execute agreements with the California Department of Transportation and CALSTART associated with the FY2020-21 Sustainable Transportation Planning Grant application for the City of Clovis Transit Fleet Electrification Study.
9. General Services - Approved – **Res. 19-138**, amending the City’s FY 19-20 Position Allocation Plan by deleting one (1) Administrative Assistant Position and adding one (1) Management Analyst Position within the Fire Department.
10. Police - Approved - **Res. 19-139**, authorizing the Police Department to submit an application for the San Joaquin Valley Air Pollution Control District Public Benefits Grant Program New Alternative Vehicle Purchase and authorize the Chief of Police to implement this program.
11. Police - Approved – **Res. 19-140**, amending the Police Department’s Budget for FY 2019-2020 to reflect the award from the Office of Traffic Safety Selective Enforcement Traffic Program Grant in the amount of \$70,000.00.
12. Police – Approved – **Res. 19-141**, amending the FY 2019-2020 Police Department Budget to reflect the award of the Edward Byrne Memorial Justice Assistance Grants (JAG) Program in the amount of \$17,263.00.
13. Planning and Development Services - Approved - **Res. 19-142**, Supporting and Implementing the "Timely Use of Funding" as required by AB1012 for Candidate 2019-20 Federal Transportation Act, FAST Act Projects.
14. Planning and Development Services - Approved – Bid Award for CIP 19-09, Recreation Center Athletic Court Resurfacing, and Authorize City Manager to Execute the Contract on Behalf of the City.
15. Planning and Development Services – Approved – **Res. 19-143**, Final Map Tract 6228, located at the northwest area of Gettysburg Avenue and Leonard Avenue. (Wilson Premier Homes, Inc.).
16. Planning and Development Services – Approved – **Res. 19-144**, Annexation of Proposed Tract 6228, located at the northwest area of Gettysburg Avenue and Leonard Avenue to the Landscape Maintenance District No. 1 of the City of Clovis. (Wilson Premier Homes, Inc.).
17. Planning and Development Services – Approved – Final Acceptance Tract 5546, located at the southeast corner of Sunnyside and Nees Avenue. (Gary McDonald Homes).

PUBLIC HEARINGS

18. 6:26 - APPROVED - **RES. 19-145**, ADOPTION OF THE CITY OF CLOVIS ANALYSIS OF IMPEDIMENTS TO FAIR HOUSING CHOICE

Housing Program Coordinator Heidi Crabtree presented a report on the adoption of the City of Clovis Analysis of Impediments to Fair Housing Choice. As a recipient of funds from HUD, the City of Clovis is required to conduct an Analysis of Impediments to Fair Housing Choice, and to review the analysis and update as necessary on a periodic basis. This document includes analysis of local factors that may impact Fair Housing Choice, the identification of specific impediments to Fair Housing Choice, and action steps to address the identified impediments. The review identified six (6) impediments to Fair Housing Choice that Heidi Crabtree covered as well as recommended actions to reduce or eliminate

the impediments. Kean Unruh, resident, commented on the item regarding outreach and Council response to recent articles in the paper. Joseph Flores, thanked Council for removing what he termed “the race card”. Discussion by Council.

Motion by Councilmember Ashbeck, seconded by Councilmember Whalen, for the Council to adopt the City of Clovis Analysis of Impediments to Fair Housing Choice. Motion carried by unanimous vote.

- 19. 7:07 - APPROVED – DEVELOPMENT IMPACT FEE CREDIT PROGRAM FOR DEED RESTRICTED AFFORDABLE HOUSING PROJECTS, AND APPROVED - **RES. 19-146**, AMENDING THE FY 2019-20 HOUSING SUCCESSOR AGENCY BUDGET TO INCREASE THE FUNDS AVAILABLE BY \$330,000.

Housing and Community Economic Development Director Andy Haussler presented a report on the Development Impact Fee Credit Program for Deed Restricted Affordable Housing Projects, and amending the FY 2019-20 Housing Successor Agency Budget to Increase the Funds Available by \$330,000. In 2012, the Clovis Community Development Agency was dissolved by state law. The law provided direction on the handling of Agency assets. One of the Agency assets was the Housing Fund. The law provided that the City was to manage the fund and any future deposits for the benefit of affordable housing projects. Until recently there was not a significant amount of funding available but due to a large loan pay-off, the fund has \$1,000,000 in cash available to expend. This amount was included in the 2019-20 budget for use on an affordable housing project. While this is a sizeable amount, it is not enough for the City to take on an active role in the development of a major project as it has in the past. Staff is recommending utilizing the funding to reduce development impact fees for affordable housing projects that provide deed-restricted units to households that make 80% or less of median household income. There being no public comment, Mayor Bessinger closed the public portion. Discussion by Council.

Motion by Councilmember Whalen, seconded by Councilmember Flores, for the Council to approve the Development Impact Fee Credit Program for Deed Restricted Affordable Housing Projects, and approve a resolution amending the FY 2019-20 Housing Successor Agency Budget to Increase the Funds Available by \$330,000. Motion carried by unanimous vote.

- 20. 7:16 - APPROVED INTRODUCTION – **ORD. 19-13**, AMENDING VARIOUS SECTIONS OF TITLE 4, CHAPTER 4.4 ARTICLE 1 OF THE CLOVIS MUNICIPAL CODE RELATING TO ADOPTION OF THE 2019 CALIFORNIA FIRE CODE WITH LOCAL AMENDMENTS, AND MAKING RELATED FINDINGS.

Life Safety Enforcement Manager Chad Fitzgerald presented a report on a request to amend various sections of Title 4, Chapter 4.4 Article 1 of the Clovis Municipal Code relating to adoption of the 2019 California Fire Code with local amendments, and making related findings. Every three years, the California Fire Code is reviewed and modified where applicable and adopted by the California Building Standards Commission. The California State Fire Marshal’s Office has adopted the 2019 California Fire Code. The Clovis Municipal Code §§ 4.4.101 and 4.4.102 contain these standards which are adopted or modified as necessary to ensure the safety of the community. Staff is introducing the

ordinance to be considered for a second reading and adoption on November 18, 2019. There being no public comment, Mayor Bessinger closed the public portion. Discussion by Council.

Motion by Councilmember Ashbeck, seconded by Councilmember Flores, for the Council to approve an ordinance amending various sections of Title 4, Chapter 4.4 Article 1 of the Clovis Municipal Code relating to adoption of the 2019 California Fire Code with local amendments, and making related findings. Motion carried by unanimous vote.

21. 7:25 - APPROVED INTRODUCTION – **ORD. 19-14**, AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CLOVIS AMENDING SECTIONS 8.1.02, 8.2.101, 8.5.101, 8.6.101, 8.15.101, 8.16.101, 8.17.101 OF TITLE 8 OF THE CLOVIS MUNICIPAL CODE PERTAINING TO ADOPTION OF THE 2019 CALIFORNIA BUILDING, ELECTRICAL, MECHANICAL, PLUMBING, RESIDENTIAL, ENERGY, AND GREEN BUILDING STANDARDS CODES.

City Building Official Doug Stawarski presented a report on a request to approve the introduction of Ordinance 19-14, Amending Sections 8.1.02, 8.2.101, 8.5.101, 8.6.101, 8.15.101, 8.16.101, 8.17.101 of Title 8 of The Clovis Municipal Code Pertaining to Adoption of the 2019 California Building, Electrical, Mechanical, Plumbing, Residential, Energy, and Green Building Standards Codes. There being no public comment, Mayor Bessinger closed the public portion. Discussion by Council.

Motion by Councilmember Ashbeck, seconded by Councilmember Flores, for the Council to approve the introduction of Ordinance 19-14, Amending Sections 8.1.02, 8.2.101, 8.5.101, 8.6.101, 8.15.101, 8.16.101, 8.17.101 of Title 8 of The Clovis Municipal Code Pertaining to Adoption of the 2019 California Building, Electrical, Mechanical, Plumbing, Residential, Energy, and Green Building Standards Codes. Motion carried by unanimous vote.

ADMINISTRATIVE ITEMS

22. 7:31 - APPROVED - OPTIONS REGARDING THE ROLL OUT OF SHARED MOBILITY DEVICES IN THE CITY OF FRESNO AND HOW THE CITY OF CLOVIS MAY BE IMPACTED.

Assistant City Manager John Holt presented a report regarding options regarding the roll out of Shared Mobility Devices in the City of Fresno and how the City of Clovis may be impacted. On October 10, 2019, the Fresno City Council approved a six month trial program in the City of Fresno to allow 500 Shared Mobility Devices (SMD's) with a sole franchise with Lime Scooters. The tentative roll out date is mid November 2019. Staff reached out to Lime Scooters and spoke with their Communications and Government Relations person on October 22, 2019. According to the Lime representative, Lime has the sole franchise for a six month trial period, after which an additional six month period may be implemented depending on the results of the first six months. At the end of one year, the franchise could be opened up to other SMD operators. In the summer of 2018, the City of Clovis was impacted when Bird Scooters rolled out SMD's in both Fresno and Clovis unannounced. A few months later the City of Fresno issued a cease and desist order to

Bird. The Lime Scooter representative indicated that Fresno State University has requested their campus to be geo-fenced to not allow their use on campus. This will lessen the impact on Shaw Avenue that was experienced in 2018 with Bird Scooters. It is likely that the roll out of Lime Scooters in Fresno will have an impact on the City of Clovis. Staff is recommending that Lime Scooters use technology referred to as geo-fencing in the Clovis city limits during the initial six month trial period in the City of Fresno. Geo-fencing is a feature in a software program that uses the global positioning system (GPS) or radio frequency identification (RFID) to define geographical boundaries. The Scooters can travel up to 15 mph, but with geo-fencing they would slow down to 3 mph when they approached Clovis city limits. The rider would also be notified that Lime Scooters are not currently licensed and allowed in the City of Clovis. The six month geo-fencing trial period would allow staff time to evaluate Lime's performance in the City of Fresno, and develop policies to regulate. It would also allow staff additional time to evaluate the regulations approved by the City of Fresno to determine if they are adequate and will suffice in the City of Clovis. As the two cities are contiguous in their borders, it would make sense to have similar if not identical regulations.

Kean Unruh, resident, commented on scooters and impound companies, and similar issues in bigger cities that Clovis would experience. Joseph Flores, resident, commented on allowing the pick-up and drop off locations at specified locations could make the use of scooters work. Discussion by Council.

Motion by Councilmember Ashbeck, seconded by Councilmember Flores, for the Council to work with Shared Mobility Devices to geo-fence the City of Clovis during the six to twelve month trial period while staff evaluates City of Fresno regulations and measures Lime's performance and return with a recommendation. Motion carried by unanimous vote.

CITY MANAGER COMMENTS

COUNCIL ITEMS

- 23. 7:54 - APPROVED – CHANGE OF COUNCIL MEETING SCHEDULE COUNCIL COMMENTS.

City Manager Luke Serpa presented a report on a recommendation to cancel the City Council meeting of November 12, 2019. Staff is able to consolidate the agenda items to the first and third meetings in November 2019. Staff is recommending that City Council consider canceling the meeting of November 12, 2019. Given adequate notice, staff will be able to amend the timing of actions coming forward so that operations will not be affected by the cancellation. There being no public comment, Mayor Bessinger closed the public portion. Discussion by the Council. Motion by Councilmember Ashbeck, seconded by Councilmember Flores, for the Council to approve the cancellation of the City Council meeting of November 12, 2019. Motion carried by unanimous vote.

COUNCIL COMMENTS 7:55

Councilmember Whalen showed a picture of him running in the Tale of Two Cities race on Sunday and thanked event organizers.

Councilmember Ashbeck reported out on a recent Fresno County Transportation Committee meeting. She also commented on a recent Fresno Pacific University event.

Councilmember Mouanoutoua commented on the involvement of the members of the audience from the Citizens Academy as well as Boy Scouts in the audience.

Mayor Bessinger reported out on a Fresno County Council of Governments meeting attended last week.

CLOSED SESSION 8:00

- 24. Government Code Section 54956.9
CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION
Initiation of Litigation Pursuant to Paragraph (4) of subdivision (d) of Section 54956.9
(Deciding Whether to Initiate Litigation)
One Potential Case

- 25. Government Code Section 54956.9(d)(1)
CONFERENCE WITH LEGAL COUNSEL - EXISTING LITIGATION
Desiree Martinez v. City of Clovis, et al.

- 26. Government Code Section 54956.8
CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Properties: Portion of 1665 Tollhouse Rd. (APN 491-080-59S), and Portion of 1748 Tollhouse Rd. (APN 491-080-08)
Agency Negotiators: L. Serpa, S. Redelfs, A. Haussler
Negotiating Parties: Anlin Industries
Under Negotiation: Price & Terms

- 27. Government Code Section 54956.9(d)(1)
CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
Case Name: City of Clovis v. Xavier Flores, as Trustee of the Flores Revocable Living Trust

Mayor Bessinger adjourned the meeting of the Council to November 18, 2019

Meeting adjourned: 9:10 p.m.

Mayor

City Clerk



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Administration

DATE: November 18, 2019

SUBJECT: Administration - Adopt – **Ord. 19-13**, Amending various sections of Title 4, Chapter 4.4 Article 1 of the Clovis Municipal Code relating to adoption of the 2019 California Fire Code with local amendments, and making related findings. (Vote: 5-0)

This item was approved for introduction on November 4, 2019 with a unanimous vote.

Please direct questions to the City Manager's office at 559-324-2060.



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Administration

DATE: November 18, 2019

SUBJECT: Administration - Adopt – Ord. 19-14, an Ordinance of the City Council of the City of Clovis Amending Sections 8.1.02, 8.2.101, 8.5.101, 8.6.101, 8.15.101, 8.16.101, 8.17.101 of Title 8 of The Clovis Municipal Code Pertaining to Adoption of the 2019 California Building, Electrical, Mechanical, Plumbing, Residential, Energy, and Green Building Standards Codes. (Vote: 5-0)

This item was approved for introduction on November 4, 2019 with a unanimous vote.

Please direct questions to the City Manager's office at 559-324-2060.



CITY of CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Community and Economic Development

DATE: November 18, 2019

SUBJECT: Administration - Receive and File – Economic Development Corporation Serving Fresno County Quarterly Report, July – September 2019.

ATTACHMENTS: 1. EDC First Quarter Report, July – September 2019

CONFLICT OF INTEREST

None

RECOMMENDATION

That the City of Clovis receive and file the First Quarterly Report July – September 2019 (First Quarter of 2019-20 contract), from the Economic Development Corporation Serving Fresno County.

EXECUTIVE SUMMARY

The Economic Development Corporation serving Fresno County (EDC) has submitted their First Quarter Report of activities for the City Council to receive and file, as required per the 2019 - 20 Agreement with the City.

BACKGROUND

In the summer of 2019, the City of Clovis and the EDC entered into a contract for the 2019-20 fiscal year to provide regional marketing and businesses services to Clovis businesses. The contract provides for \$40,000 in baseline funding and provides \$10,000 for a medical attraction study to be completed. This allows Clovis to be part of a regional effort in attracting commercial and industrial businesses to Clovis. Attached is a report detailing the progress of their activities to provide information to industrial/commercial representatives not currently located in Clovis for recruiting purposes, and continue to assist existing Clovis businesses with informational and/or technical assistance to access statewide business support programs.

Highlights of the EDC quarterly report include:

- Two qualified business attraction leads were achieved during the quarter.
- The EDC assisted in getting 1 site tour.
- The EDC attended 1 trade show.
- Significant progress was made in the medical industry attraction study.
- Summary of 2019-20 results are below:

Type	Goal	Q1	FY19-20	Completion
New Business Leads*	40	2	2	
Site Tours	4	1	1	
Trade Shows	5	1	1	
Broker Events	2	-	-	

FISCAL IMPACT

The City will forward the First Quarter installment payment to EDC. The funds were budgeted in the 2019-20 fiscal year budget.

REASON FOR RECOMMENDATION

The attached report meets the requirements established in the 2019-20 Agreement between the EDC and the City of Clovis.

ACTIONS FOLLOWING APPROVAL

Staff will file the report.

Prepared by: Andy Haussler, Community and Economic Development Director

Reviewed by: City Manager LS



Growing the California Dream

City of Clovis Quarterly Activity Report

Quarter 1

Fiscal Year ~~2019-2020~~

July 1, 2019 – September 30, 2019

Lee Ann Eager	President/CEO
Sherry Neil	Chief Operating Officer
Paul Thorn	Controllor
Andrea Reyes	VP of Business Development
Will Oliver	Director of Business Services
Jenna Lukens	Contracts Manager
Amanda Bosland	Client Services Manager
Tracy Tosta	Economic Development Coordinator
Mandip Johal	Business Expansion Retention Coordinator
Courtney Ramirez	Business Attraction Specialist
Lavell Tyler	Economic Development Specialist
Curtis Williamson	Economic Development Specialist
Robin Montgomery	Economic Development Specialist
Daisy Ramirez	Retention Specialist
Chris Palacios	Retention Specialist
Nicholas Vincent	Research Analyst
Shyamala Rye	Research Intern

City of Clovis Quarterly Activity Report

This report summarizes the agreement requirements between the City of Clovis and the Fresno County Economic Development Corporation (EDC).

Division Mission

To market Fresno County as the premier location for business prosperity.

Fresno County EDC Services

The Economic Development Corporation serving Fresno County is a nonprofit organization established to market Fresno County as the premier location for business prosperity. We facilitate site selection for new businesses within Fresno County, and assist in the retention and expansion of businesses through our alliance with collaborative partners and resources.

The EDC agrees to the following services:

1. Provide information to the industrial and office representatives not located in the City of Clovis for recruiting new businesses and industries;
2. Assist in the development of marketing materials to attract new investments, commercial and industrial brokers, developers, and site selectors. Assist in utilizing online marketing to advance economic and community development efforts;
3. Assist existing businesses and industries that contact the EDC with information and technical assistance through the BEAR Action Network;
4. Work to foster a closer working relationship with local business associations to enhance the EDC services provided to Clovis area employers;
5. Continue acting in a leadership role in promotion of high-speed rail and promote the Clovis area for related development;
6. Inform Clovis of legislation important to the economic and community development of the region and act on their behalf;
7. Assist in identifying economic development projects on the City's behalf for the inclusion in the County of Fresno's Comprehensive Economic Development Strategy (CEDS) for possible grant funding; and
8. Provide administrative staffing at all Executive Committee, Board, and related events.

Q1 Snapshot

The EDC team conducts outreach marketing business expansion and retention services by:

- Providing an operational analysis to evaluate the health of the business. This tool offers us a thorough understanding of the appropriate referrals or resources needed for business growth or retention;
- Connecting businesses to labor subsidy programs;
- Promoting Fresno Energy Watch services;
- Providing education on federal/state/local tax Incentives; and
- Providing referrals and information on financing assistance.

Stemming from direct outreach, workshops, one-on-one meetings, and marketing efforts, the areas of interest and number of referrals generated are reflected below:

	Q1 2019-2020			
Businesses Contacted	21			
Business Referrals	60			
Type	Goal	Q1	FY19-20	Completion
New Business Leads*	40	2	2	
Site Tours	4	1	1	
Trade Shows	5	1	1	
Broker Events	2	-	-	

Clients and Businesses Contacted

- | | | |
|---|---|---|
| A Mind Above
Accounting America
Ambitious Concepts
CALBEC Group
Central Valley Energy Solutions
Clovis Country Junction

Deli Delicious - Clovis & Herndon | Genesis Master of Events
Gilbert K. Moran, M.D. F.A.C.O.G. INC.
Hemb Law Group
Herzog Brothers Electric Inc.
Integrity Building dba GJ Gardner
Island Tile

Mi-Rancho Tortilla | MRM Family Counseling Services Inc.
Sequoia Companion Care
Sequoia Home Health
Startup- Cat Cafe
The Medicine Shoppe - Clovis
Valley Community Small Business
Development Center (SBDC)
Wardrobe For Women |
|---|---|---|

Quarter 1, FY 19-20
Industrial, Office, and Retail Vacancy

This quarter in the City of Clovis, the industrial vacancy rate increased from 0.0% to 0.8%, the office vacancy rate decreased to 3.5%, and the retail vacancy rate decreased from 6.8 to 3.8%.

Q1 FY19-20	Industrial	Office	Retail
Fresno County	3.8%	6.7%	5.8%
City of Clovis	0.8%	4.6%	6.1%

Source: CoStar.com

September Unemployment Rates

The unemployment rate in Fresno County was 6.6 percent in September 2019, down from a revised 7.2 percent in July 2019, and below the year-ago estimate of 6.7 percent. This compares with an unadjusted unemployment rate of 4.2 percent for California and 3.8 percent for the nation during the same period.

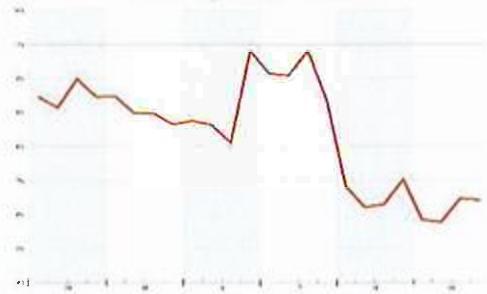
Area	Labor Force	Unemployment Rate
Fresno County	454,800	6.6%
City of Clovis	55,200	4.6%

Source: State of California Employment Development Department

Vacancy Rate – Industrial



Vacancy Rate – Office



Vacancy Rate – Retail



Business Expansion and Attraction Leads

AGENDA ITEM NO. 4.

The EDC generated two new business attraction and expansion leads in the first quarter. EDC staff also remains involved with additional prospective leads that may match Clovis' land and building inventory. See information below:

Client Number	Source	Industry	Site Requirement	Jobs	Cities/Regions Participated
190813A1	Direct	Multifamily Investor	25-50 Units	TBD	Metro- Fresno; Clovis
190905A1	Direct	Manufacturing Rubber Products	TBD	TBD	Metro-Clovis

Direct	Client Contacted EDC Directly
GO-Biz	Governor's Office of Business and Economic Development

Q4 Site Visit Activity

Date	Client Number	Industry	Sites or Area
8/20/2019	190207A1	Bioenergy	Fresno; Clovis

Marketing

The EDC continues to participate in trade shows/missions in partnership with the California Central Valley Economic Development Corporation (CCVEDC) and Team California to promote Fresno County and its 15 cities.

TRADE SHOWS, BROKER EVENTS, AND MISSIONS

ICSC Western Conference & Deal Making

September 16-18, 2019

Los Angeles Convention Center, Los Angeles, CA

The International Council of Shopping Center's Western Conference & Deal Making was held at the Los Angeles Convention Center from September 16-18, 2019. The event drew over 3,200 advanced registrations and 274 exhibitors. Professionals from all aspects of the retail industry gathered to network, make deals and learn from accomplished experts and thought leaders. The cities of Firebaugh and Sanger participated in this event.

The EDC began preparation in August 2019 by notifying all Cities of the EDC's participation in the event and securing exhibiting space at ICSC's Deal Making. The EDC emailed **78** retailers to identify those interested in expanding/opening in Fresno County and coordinated meetings between attending cities and retailers/brokers.

The EDC booth attracted over **100** unique visitors with **45** of those leaving their business card as part of the wine giveaway. The EDC had **6** pre-booked meetings and received **23** contacts during the deal-making portion of the event.

Despite this year's lower attendee numbers (as compared to last year), the EDC met its event participation objectives. Additionally, the EDC's investment in marketing material and exhibiting at the event was well received by the participating Cities and retail stakeholders.

Partnership with Department of Social Services

The EDC has been contracted to assist the Fresno County Department of Social Services in marketing the New Employment Opportunities (NEO) program, and Ready2Hire, and identify prospective employers to hire from the pool of eligible NEO job seekers.

New Employment Opportunities (NEO) 2018-2019*	Actual	Contract Goal
Participating Businesses	192	150
Job Placements	358	200
Job Postings	674	500
Job Fairs	12	4
Employer Training	8	4

*Contract Dates: October 1, 2018 – September 30, 2019

Customized Workforce Trainings

Realizing the current labor demands among our local businesses, the EDC, Department of Social Services and educational partners have worked with industry stakeholders to develop customized trainings to fulfill today's workforce needs. Utilizing input from various industry practitioners, each training curriculum is developed to create career pathways to meet tomorrow's industry needs, help businesses grow, and put individuals back to work. Below is a list of customized training programs underway:

Valley Apprenticeship Connections

Pre-Apprenticeship Program. The partnership between Fresno County EDC, the Department of Social Services, and Fresno EOC is continuing to provide a 12-week program comprised of classroom and construction-based training.

Aug 2016 – Current Cohorts 1– 11 Status	
Completed	106
Retained Employment	85
Retention Rate	80%

Cohort #11 8/12 –11/1

Truck Driving

Class A Truck Driving Class. The 10-week training is a partnership between Fresno County EDC, the Department of Social Services, Fresno City College, and Lawson Rock and Oil.

Feb 2015 – Current Cohort 1– 33 Status	
Obtained CDL	222
CDL – Left County	-16
Entered employment	176
Placement Rate	85%

Cohort 33 7/22-9/23

High-Speed Rail

Since the program inception in 2013, the EDC has assisted 330 property owners throughout the City and County of Fresno. During this quarter our Business Support Specialists assisted 8 businesses and property owners, making contact 18 times.

Client Status

Closed	34
Active/Existing	94
Pending Relocation	8
Reconfiguring	40
Relocated	154
Total	330

Open Requests for Property

Client#	Industry	Space Needed	Ownership	Preferred Relocation
351	Logistics	3,000 - 5,000 sf	Lease	South Fresno Ind. Mrkt.

Economic Development Administration Coordination Meeting

EDC staff coordinated meetings between Wil Marshall of the U.S. Economic Development Administration (EDA), Supervisor Nathan Magsig and representatives of Fresno County cities, including Andy Hausler with the City of Clovis. The purpose of the meeting was to apprise Mr. Marshall of potential projects and city needs that could become good candidates for future EDA funding. The feedback gathered at this meeting will help staff prepare an update to the Comprehensive Economic Development Strategy, which serves as a planning document and precursor to EDA funding opportunities.

China Trade & Investment Network

EDC staff has begun interacting with the China Trade Investment Network (CTIN) as reinstated by Bud Colligan, the Senior Advisor for International Trade and Investment, with the California's Office of Business and Economic Development (Go-Biz). This partnership of agencies across the state aims to support businesses looking to locate in California from China and also support exporting activity to China. Currently, the EDC has three Chinese businesses receiving support in their potential expansion into Fresno County. The EDC is planning a trip to China to develop the network partnership and provide local information to interested parties.

American Farm Rubber

This Chinese based company was connected to the EDC through a local consultant requesting meetings for the business with local governments. The EDC arranged meetings with Fresno FTZ, the City of Clovis, and the City of Fresno. In addition to providing general incentive information the business was pleased to learn about the services of our foreign trade zone operator in more detail. Several paths for cost savings were noted and the company will be signing an office lease for their initial investment into the Central Valley. Future phased expansions include two manufacturing sites with a potential total of 150 new jobs between Fresno and Clovis. A long time Tulare World Ag Expo exhibitor, American Farm Rubber will be supported at the World Ag Expo by EDC staff in 2020.

Cen Cal DEC and World Ag Expo Collaboration

EDC staff has been meeting with the Central California District Export Council and the International Agri-Center event staff to support international programming. Under the umbrella of the Global Cities Initiative strategies and in conjunction with the Export Council, assistance will be provided in the months leading up to the World Ag Expo, such as providing coordination for the international business matchmaking session to be held on the first day of the Tulare World Ag Expo. The EDC is going to promote the event through direct business outreach and partner support. This will allow the organization to track international business leads from the event and have additional impact on increasing Exports for the Central Valley and Fresno County. Two international client businesses will be attending as exhibitors. One of those, Manda Fermentation, learned about the event and secured their exhibit space based on the information provided by EDC staff.

Manda Fermentation in Sacramento

Staff coordinated and attended a meeting between Manda Fermentation and the Governor's Office of Business and Economic Development (GoBiz). The purpose was to introduce Manda to the Governor's international business team and receive technical assistance in registering its agriculture product in California. GoBiz will continue to provide support with regulatory matters along with importing and investment in California.

Gazarian Bus Tour

EDC staff attended and presented at the Tri-City Real Estate Tour of Clovis, Fresno, and Madera hosted by Fresno State's Gazarian Real Estate Center. The guided tour took real estate brokers and industry

stakeholders involved in the industry on a chartered bus to Ulta Beauty's newly-built dist in Fresno, the Tesoro Viejo and Riverstone housing and business developments in Madera County, along with a look at the major expansion underway at Clovis Community Medical Center and two multi-use projects in the city. A reception at the Fresno State Winery followed the tour, where participants had the opportunity to network after learning more about the area.

Select USA Follow Up and Targeted Outreach

EDC staff conducted research and obtained contact information on 100+ leads from the Select USA Summit. Staff created a lead 'heat map' to help determine which leads are most likely to be a good fit for the area. The EDC attractions team will use this information to conduct targeted outreach and follow ups.

ATTACHMENT 1

FY 19-20 Overview of Work Product	Deliverables	FY 2019 – 2020 Target Outcomes	
<p>Economic Development Corporation Serving Fresno County</p> <p>Contract: \$40,000</p> <p>Comparative Healthcare Analysis: \$10,000</p> <p>Staff: President & CEO Lee Ann Eager</p> <p>Sherry Neil Chief Operating Officer</p> <p>Director of Business Services Will Oliver</p> <p>Economic Development Coordinator Tracy Tosta</p>	<p>Retention: Targeted businesses will be contacted by a variety of methods to educate Clovis businesses on local, regional and statewide incentive programs</p> <ul style="list-style-type: none"> Conduct Analysis to determine top 50 companies in Clovis that should be focused on for retention and expansion <p>New Business Recruitment: Provide information and tours to industrial and commercial representatives not currently located in Clovis for the purpose of recruiting new businesses and industries to the City of Clovis. Assist the City of Clovis in marketing identified industrial parks or industrial areas to new clients.</p> <ul style="list-style-type: none"> Coordinate site tours for the purpose of business attraction and expansion. Create and update marketing materials. Coordinate commercial and industrial broker events for the City of Clovis. Conduct analysis to determine expansion industries and companies to target for expansion. At end trade shows/missions and market Clovis. 	<p>Top 50 targeted business analysis for expansion/retention</p> <p>Respond to all City of Clovis business inquires and connect them to appropriate resources</p> <p>Complete Comparative Healthcare Analysis</p> <p>2 Broker Events</p> <p>40 new business leads</p> <p>5 Trade shows/missions attended</p> <p>Incentive brochure created and distributed to targeted Clovis businesses in cooperation with City staff</p> <p>Economic Profile including updated demographic Information</p> <p>Business Park Brochures</p> <p>Incentive Brochure</p>	<p>Top 50 Analysis to be updated in Q2 with updates and adjustments ongoing through FY19-20.</p> <p>21 clients and businesses contacted and 60 referrals made during Q1.</p> <p>Healthcare Comparative Analysis in progress.</p> <p>Planning discussions to continue in Q2.</p> <p>2 new business leads and 1 site tour generated in Q1</p> <p>1/5 trade shows/missions attended in Q1.</p> <ul style="list-style-type: none"> Economic profile updated and hosted on our website. Business park brochures to be updated in Q2. Incentive brochure to be updated or modified in Q2 in cooperation with city staff.

AGENDA ITEM NO. 4.



CITY of CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Planning and Development Services Department

DATE: November 18, 2019

SUBJECT: Planning and Development Services – Approval – Waive the City’s usual purchasing procedures and authorize the City Manager to enter into a purchase agreement with Tesco Controls, Inc. to supply a motor control center for CIP 19-14, Well 21 Panel Upgrades, CIP 19-13 Well 17 Panel Upgrades and CIP 19-12 Well 4AA Panel Upgrades.

ATTACHMENTS: 1. Vicinity Map

CONFLICT OF INTEREST
None

RECOMMENDATION
For the City Council to waive the City’s usual purchasing procedures and authorize the City Manager to sign a purchase agreement in an amount estimated at \$442,170.00 for material and services to be provided by with Tesco Controls, Inc. for three (3) well sites.

EXECUTIVE SUMMARY
Tesco Controls, Inc. will be providing the motor control center that will be installed at Well Sites 21, 17, and 4AA located at 640 W. Alluvial Avenue, 1680 Willow Avenue, and 3300 Lind Avenue, respectively. The City will be using a competitively bid General Services Administration (GSA) contract, which was awarded to Tesco Controls, Inc. The 2019-2020 Water Enterprise budget has sufficient funding for the purchase of the Motor Control Centers at said three sites.

BACKGROUND
Because of propriety software by Tesco Controls, Inc. used by the City of Clovis to control the automation of its well sites, City staff would like to contract directly with Tesco Controls, Inc. under their GSA contract. The City’s purchasing policies and procedures allow services to be exempt from the bidding process when the City is participating in an established governmental cooperative purchasing agreement. Tesco Controls, Inc. has secured GSA

contract # GS-07F-0513X, with a contract period from June 1, 2016, through May 31, 2021. The program has been price analyzed and competitively bid for government agencies. The bidding process has been completed so that each individual government entity does not need to repeat the process for the same products and services.

Council authorization will allow the City of Clovis to utilize the GSA contract GS-07F-0513X to purchase and deliver a Motor Control Center to Well 21, 17, and 4AA through Tesco Controls, Inc. The Motor Control Center will contain all components necessary for Public Utilities Department to control well pump operations by automation with their existing computer system or manually on site.

FISCAL IMPACT

This project is budgeted in the Community Investment Program budget.

REASON FOR RECOMMENDATION

Tesco Controls, Inc. has met the necessary requirements for obtaining a GSA contract, which complies with the public bidding requirements of the Public Contract Code, as well as complying with the latest building and safety codes.

ACTIONS FOLLOWING APPROVAL

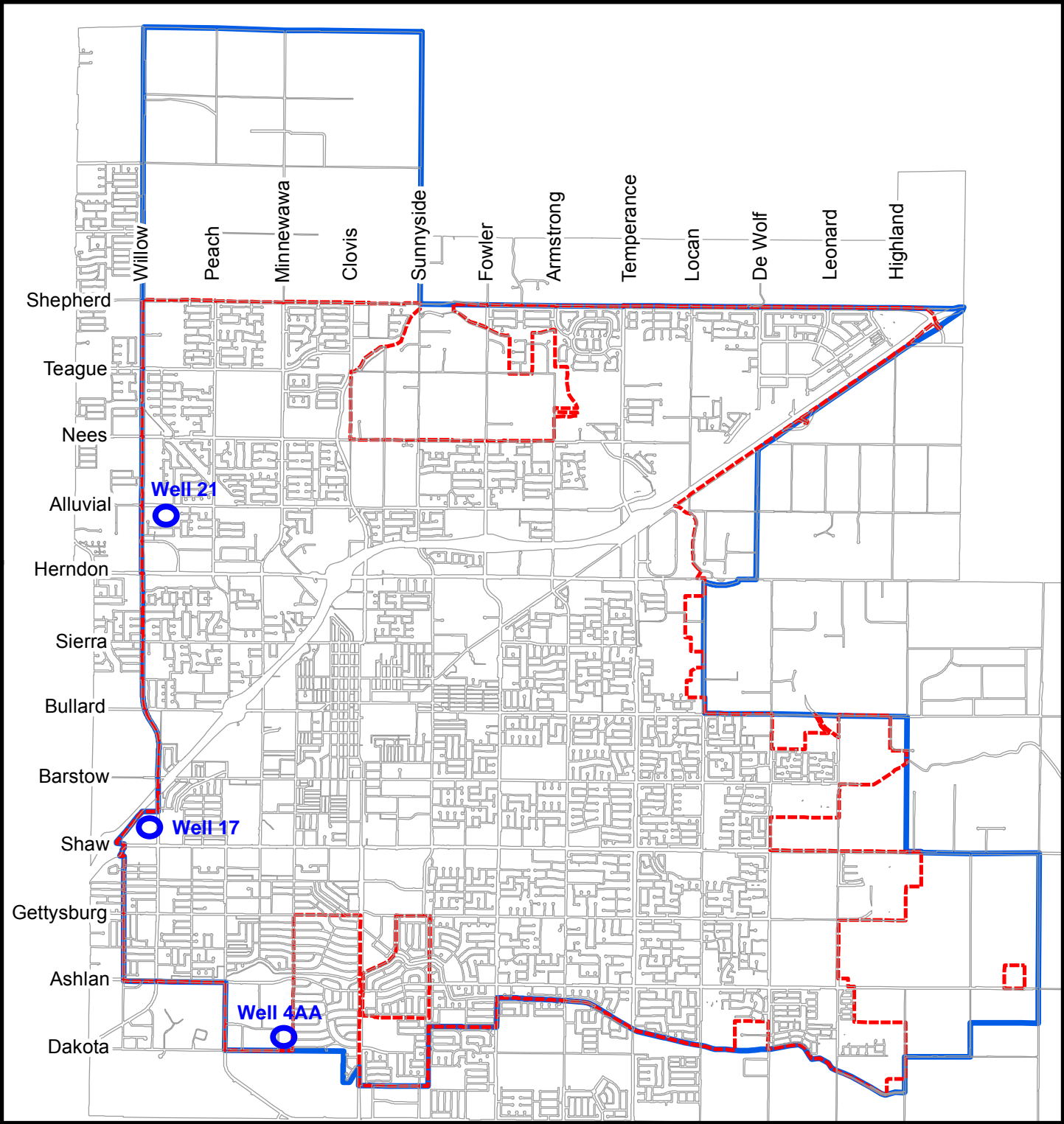
1. The City Manager will enter into a Purchase Agreement with Tesco Controls, Inc.
2. The City Manager will authorize a purchase order in an amount estimated at \$177,145.00 to Tesco Controls, Inc. for the purchase and delivery of Well 21's Motor Control Center.
3. The City Manager will authorize a purchase order in an amount estimated at \$130,050.00 to Tesco Controls, Inc. for the purchase and delivery of Well 17's Motor Control Center.
4. The City Manager will authorize a purchase order in an amount estimated at \$134,975.00 to Tesco Controls, Inc. for the purchase and delivery of Well 4AA's Motor Control Center.

Prepared by: Ian King, Engineer II

Reviewed by: City Manager *JH*

VICINITY MAP

AGENDA ITEM NO. 5.



ATTACHMENT 1



 CITY LIMITS  SPHERE OF INFLUENCE

Prepared By:



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council
FROM: Administration
DATE: November 18, 2019
SUBJECT: Consider Introduction – Ord. 19-___, An Ordinance of the City Council of the City of Clovis amending Sections 3.1.216(n), 4.5.1011, and 10.3.02, and adding Chapter 5.33, of the Clovis Municipal Code relating to vending on public sidewalks, pedestrian paths, and parks

Staff: John Holt, Assistant City Manager
Recommendation: Approve

ATTACHMENTS: 1. Draft Ordinance
2. December 17, 2018 Staff Report

CONFLICT OF INTEREST

None

RECOMMENDATION

For the City Council to approve the introduction of an Ordinance amending Sections 3.1.216(n), 4.5.1011, and 10.3.02, and adding Chapter 5.33, of the Clovis Municipal Code relating to vending on public sidewalks, pedestrian paths, and parks.

EXECUTIVE SUMMARY

In December 2018, the Council approved by Resolution 18-173, interim regulations, to comply with the new state law mandating that the City allow sidewalk vending. The resolution was meant to keep the City in compliance while staff had the opportunity to draft a permanent ordinance given the short time between the passage of SB 946 and its implementation. Staff returns now with the permanent ordinance, which is substantively similar to the interim regulations.

BACKGROUND

California State Senate Bill SB 946 became law on January 1, 2019. The legislation was designed to limit local jurisdictions' abilities to regulate vending on streets, sidewalks and parks ("Vending"), barring certain exceptions to protect public health, safety, and welfare. Vending is defined in the law as the sale of food or merchandise from the person or a non-motorized conveyance in the public right-of-way. SB 946 allows municipalities to establish permit programs for vendors with specific allowances and limitations.

The City has existing rules for "peddlers" as defined in Section 3.1.216(n), that are inconsistent with SB 946. The Code currently punishes "peddlers" criminally for violations, excludes selling locations available under SB 946, and requires permission from non-government entities to Vend in certain locations, all inconsistent with the new law. The interim regulations corrected these deficiencies. The Proposed Ordinance makes these corrections permanent.

Besides a change limiting vendors to parks greater than one acre, the interim regulations largely remain the same. To summarize:

- Vendors will be required to obtain a Vending permit, business tax certificate, and any other permits necessary for the operation of their business.
- Vending hours are 7 a.m. to 10 p.m. unless in a residentially zoned district which prohibits vending from 6 p.m. to 8 a.m.
- Vendors will be allowed to vend in City parks over one acre in size and must maintain an adequate distance from any special event that occurs in the park.
- All vendors will be required to provide trash receptacles for customers and are responsible for leaving their Vending areas clean.
- Food vendors are required to operate within 200 feet of a toilet and handwashing facilities, if operating for more than one hour.
- Vendors must leave adequate space for pedestrians to use the sidewalks and cannot block driveways, curbs, or any area that would impede traffic.
- Vendors are prohibited from Vending near schools during the school day and cannot vend in front of businesses that possess sidewalk permits.
- Violations: fines are included in the Ordinance to the fullest extent allowable under SB946. For excessive violations, suspension of permit, revocation of permit, and/or confiscation of Vending items can be implemented.

FISCAL IMPACT

The fiscal impact of the adoption of permanent rules for Vending on public streets, sidewalks, and parks is not significant. The State of California believes that SB 946 will increase the tax base in local municipalities.

REASON FOR RECOMMENDATION

It is necessary to adopt the Ordinance so the City can properly meet the requirements of SB 946.

ACTIONS FOLLOWING APPROVAL

The Ordinance will return for a second reading and adoption at the next regular council meeting.

Prepared by: Jessica Mejorado, Deputy City Attorney

Reviewed by: City Manager LS

ORDINANCE 19-__

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CLOVIS AMENDING SECTIONS 3.1.216(n), 4.5.1011, AND 10.3.02, AND ADDING CHAPTER 5.33, OF THE CLOVIS MUNICIPAL CODE RELATING TO VENDING ON PUBLIC SIDEWALKS, PEDESTRIAN PATHS, AND PARKS

WHEREAS, with the adoption of SB 946 in 2018, the California Legislature expressed an interest in providing more opportunities for individuals to sell food and merchandise from their person and conveyances in outdoor public places, commonly referred to as Street Vending, Sidewalk Vending, or Vending; and

WHEREAS, it is in the City’s interest to allow Vending consistent with SB 946, while protecting the public health, safety, and welfare of the businesses, residents, and visitors in Clovis; and

WHEREAS, the following are some of the public health, safety, and welfare concerns:

- Safe Paths of Travel. Narrow sidewalk width and existing obstructions in the sidewalk can limit accommodations for the disabled and other pedestrians to follow a safe path of travel, which are further limited with the presence of Vendors and their conveyances.
- Conflicts. Location restrictions and buffer distances are necessary to minimize conflict between pedestrians, bicyclists, customers of Vendors, automobile drivers on City streets, and Vendors; to avoid double-parking and vehicular congestion which may occur when limited on-street parking is occupied by Vendors; to cause fewer motorist distractions and resulting accidents; to avoid causing pedestrians to be pushed into busy streets; and to prevent injuries.
- Preservation of Recreation. It is necessary for the City to ensure the public’s use and enjoyment of natural resources and recreational opportunities on City parks, trails, and open spaces are not impeded.
- Protection of Neighborhoods. It is necessary to protect the residential character of residential neighborhoods and the safety of the community in all zone districts.
- Safe Business Practices. It is necessary to protect Clovis businesses, residents and visitors from unscrupulous Vendors and ensure that Vendors follow the same safe practices required of other businesses, including complying with all applicable public health, safety, and welfare provisions of the Clovis Municipal Code.

ATTACHMENT 1

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF CLOVIS DOES ORDAIN AS FOLLOWS:

SECTION 1. AMENDMENT TO SECTION 3.1.216(n).

Section 3.1.216, subsection (n), Chapter 3.1, of Title 3 of the Clovis Municipal Code is hereby amended to read as follows:

3.1.216 Catchall.

(n) Peddling: General.

(1) Peddler defined. For the purposes of this chapter, “peddler” shall mean and include every person not having a regularly established place of business in the City who travels from place to place or has a stand upon any public street, alley, or other place, doorway of any room or building, unenclosed or vacant lot, or parcel of land and who sells or offers for sale any foodstuffs, goods, wares, merchandise, or articles of personal property in his possession.

(2) Peddlers shall be subject to provisions of Chapter 5.33 or Chapter 5.34 as applicable.

(3) Fees. The registration fee for any person conducting, carrying on, or managing the business of peddling foodstuffs, goods, wares, merchandise, or other articles not otherwise provided for in this chapter shall be as specified in Section 3.1.201.

SECTION 2. AMENDMENT TO SECTION 4.5.1011.

Section 4.5.1011, Article 10, Chapter 4.5, of Title 4 of the Clovis Municipal Code is hereby amended to read as follows:

4.5.1011 Unlawful Parking: Peddlers, Vendors, and Food Trucks.

(a) No person shall stand or park any vehicle, wagon, bicycle, or pushcart from which goods, wares, merchandise, fruits, vegetables, or foodstuffs are sold, displayed, solicited, or offered for sale or bartered or exchanged, or any lunch wagon or eating car or vehicle, on any portion of any street within the City except as provided in Chapter 5.33 or Chapter 5.34 as applicable. The provisions of this subsection shall not apply to persons delivering such articles upon order of, or by agreement with, a customer from a store or other fixed place of business or distribution.

(b) No person shall park or stand any vehicle or wagon used or intended to be used in the transportation of people or property for hire on any street while awaiting patronage for such vehicle or wagon without first obtaining a written permit to do so from the Planning and Development Services Department, which permit shall designate the specific location where such vehicle may stand.

SECTION 3. AMENDMENT TO SECTION 10.3.02.

Section 10.3.02, Chapter 10.3, of Title 10 of the Clovis Municipal Code is hereby amended to read as follows:

10.3.02 Prohibited acts without prior written permission.

No person shall do any of the following acts within the limits of any City park without the prior written permission of the Facilities Manager:

1. Lead, ride, drive, or let loose any cattle, horse, mule, goat, sheep, swine, dog, or fowl of any kind; provided, however, the provisions of this subsection shall not apply to dogs when led by a cord or chain not more than six feet (6') long;
2. Sell any tickets for a performance or activity or seek contributions for a performance or activity, whether conducted in the park or elsewhere;
3. Distribute any handbills or circulars or post, place, or erect any bills, notices, papers, or advertising devices or matter of any kind;
4. Make or kindle a fire for any purpose, except the use of barbecue briquettes for the purpose of cooking in cooking apparatuses installed in the park by the City;
5. Camp or lodge therein at any place not set apart for that purpose;
6. Practice, carry on, conduct, or solicit for any trade, occupation, business, or profession, except as provided in Chapter 5.33;
7. Row or sail on any pond, lake, or waters in any boat or raft, except a lake or pond provided for that purpose by the City;
8. Drive any traffic vehicle carrying goods, merchandise, lumber, oil, dirt, manure, sand, or soil, or any article of trade or commerce, or any offensive article or material whatsoever, upon any road or drive except when the same is being done for the improvement of the park and at the direction of the Facilities Manager;
9. Remain, stay, or loiter in any public park between the hours of 10:00 p.m. and 7:00 a.m. of the following day; provided, however, the provisions of this subsection shall not prevent persons from camping overnight in any portion of any park set aside for that purpose;
10. Use amplified sound devices inside the park, including the parking lot area, that are audible more than fifty feet (50') from the source;
11. Drive or ride any vehicle powered by an internal combustion engine, except for licensed and registered vehicles in designated parking areas and roadways; or

12. Drive or ride any vehicle of any type in excess of fifteen (15) miles per hour.

SECTION 5. ADDITION OF CHAPTER 5.33.

Chapter 5.33, of Title 5 of the Clovis Municipal Code is hereby added to read as follows:

Chapter 5.33

VENDING ON PUBLIC PROPERTY

5.33.01 Definitions.

For purposes of this Chapter, the following definitions apply:

“Annual Permit” means a permit to Vend lasting one calendar year unless otherwise provided by this Chapter.

“City” means the City of Clovis.

“Code” means Clovis Municipal Code and all codes incorporated therein by reference.

“Food” shall be as defined in Health and Safety Code Section 113781 or any successor provision.

“Food Facility” shall be as defined in Health and Safety Code Section 113789 or any successor provision.

“Food Truck Vendor” means a Vendor selling, offering for sale, or distributing Food from a Vehicle.

“Handwashing Facility” means a facility providing either a basin, container, or outlet with an adequate supply of potable water, soap, and single-use towels, as further defined in Health and Safety Code Section 114359.

“Health Officer” shall be as defined in Health and Safety Code Section 111015.

“Location” means the area within a one hundred (100) foot radius of the Vendor’s position.

“Merchandise” means commodities or goods that are bought and sold.

“Mobile Food Facility” shall be as defined in Health and Safety Code Section 113831 or any successor provision.

“Old Town Special Event” shall be as defined in the Section 5.20.03 of this Code.

“Peddler” shall be as defined in Section 3.1.216(n) of the Code. The provisions of that Section shall be supplemented by this Chapter.

“Police Chief” means the Police Chief for the City of Clovis or his/her designee.

“Roaming Sidewalk Vendor” means a Sidewalk Vendor selling, offering for sale, or distributing Food or Merchandise on a public sidewalk continuously moving except when making a sale.

“Sidewalk Vendor” means a person who sells Food or Merchandise from a pushcart, stand, display, pedal-driven cart, wagon, showcase, rack, bicycle or other nonmotorized conveyance, or from one’s person, upon a public sidewalk or other pedestrian path.

“Single Event Permit” means a Vending Permit valid for a specific amount of time not to exceed thirty (30) continuous days.

“Special Event” means any outdoor event designated for the exclusive use of the event organizer utilizing public areas, including streets and parking lots temporarily closed by the City Council or Clovis Police Department, and including those events approved pursuant to Section 10.2.04 of the Code.

“Stationary Sidewalk Vendor” means a Sidewalk Vendor selling, offering for sale, or distributing Food or Merchandise on a public sidewalk in one Location as provided by permit.

“Toilet Facility” means a fixture maintained with a toilet room for the purpose of defecation or urination or both, as further defined in Health and Safety Code Section 114359.

“Vehicle” means a Mobile Food Facility, catering truck, or other motorized conveyance upon which Food or Merchandise is sold, offered for sale or distributed.

“Vend” or “Vending” means to offer for sale or distribution.

“Vendor” shall include Peddler, Roaming Sidewalk Vendor, Sidewalk Vendor, Stationary Sidewalk Vendor.

“Vendor Permit” or “Vending Permit” or “Permit” means the permit issued to Vendors pursuant to this Chapter.

5.33.02 Business Tax Certificate.

It shall be unlawful to sell, offer for sale, or distribute any Food or Merchandise on any public sidewalks, pedestrian paths, or parks within the City without first obtaining a business tax certificate and paying the applicable business registration fee for each Vendor, pursuant to Article 1 of Title 3 of the Code. Vendors are subject to the same rules and penalties found in Article 1 of Title 3 of the Code.

Notwithstanding those provisions, no business tax certificate shall be issued without evidence that the Vendor has obtained all permits required by this Chapter. The original of the City business tax certificate, Vendor Permit, and health permit, as applicable, shall be displayed conspicuously at all times on the Vendor's Vehicle, person, or site.

5.33.03 Health and Sanitation Requirements.

Vendors selling or offering Food shall obtain a health permit from the Fresno County Health Officer, as applicable. The health permit shall be displayed conspicuously at all times on the Vendor's Vehicle, person, or site. Evidence of a health permit shall be made available to the Finance Department as part of the business tax certificate application or renewal.

5.33.04 Vendor Permit to Operate.

- (a) Permit required. It shall be unlawful to sell, offer for sale, or distribute any Food or Merchandise on any public sidewalk, pedestrian path, or park within the City without first obtaining a Vendor Permit from the Police Department pursuant to the provisions of this Chapter. The Vendor's Permit shall be displayed conspicuously at all times on the Vendor's Vehicle, person, or site. Evidence of such permit shall accompany the business tax certificate application or renewal application to the Finance Department.
- (b) Person and Location specific. Vendor Permits shall be specific to a person and Location.
- (c) Non-transferable; no vested right. Vendor Permits shall be nontransferable. No Vendor shall acquire a vested right or property interest from the issuance of a permit, and permits shall at all times be subject to the provisions of this Chapter.
- (d) Application and fees. Written application for a Vendor Permit shall be filed with the Police Chief and shall be accompanied by a fee as approved by the City Council. Applicants are strongly encouraged to apply for permits more than forty-five (45) days before the permit is needed in order to ensure timely processing of the application.

The Vendor applicant shall provide the following information on a form approved by the Police Chief along with any required documentation:

- (1) Names, addresses, email addresses, and telephone numbers of the Vendor applicant and of all persons financially interested in the business;
- (2) A statement of the type of Food or Merchandise to be sold;
- (3) The Location(s) at which the applicant intends to operate;
- (4) Number of Vehicles the Vendor applicant intends to operate, along with a copy of the current registration of each Vehicle;
- (5) Intended day(s) and hours of operation at such Location(s);

- (6) The site of the toilet and handwashing facility required by Health and Safety Code Section 114359;
 - (7) If the toilet and handwashing facility required by the Health and Safety Code is on private property, a copy of an enforceable contract between the private property owner and the Vendor applicant allowing vendor to utilize such facilities on the day(s) and hours of operation;
 - (8) A copy of the health permit required by this Chapter;
 - (9) Agreement by the applicant to indemnify and hold harmless the City, its officers, officials, volunteers, and employees from any and all damages or injury to persons or property proximately caused by the act or neglect of the applicant or by hazardous or negligent conditions maintained at the applicant's Vending Location;
 - (10) Evidence of general liability insurance, as applicable, in a form and at levels of coverage acceptable to the City;
 - (11) Previous vending permits issued to the applicant in other cities and the status of those permits;
 - (12) Authority for the Police Chief to conduct the background check necessary for the investigation required by this Chapter;
 - (13) Certification that to his or her knowledge and belief, the information provided is true and correct.
 - (14) Such further information as the Clovis Police Department may require.
- (e) Investigation. The Police Chief shall conduct an investigation of the application and shall issue a Vendor Permit within forty-five (45) days of receipt of a complete application, upon finding all of the following:
- (1) An accurate application has been filed;
 - (2) The required application fee has been paid;
 - (3) All applicable provisions of this Chapter have been or will be met;
 - (4) The Vending will not cause excessive traffic congestion, impede pedestrian or bicycle movement, or violate any applicable Federal or State accessibility laws;
 - (5) The Vending will not impede recreational opportunities on City parks, trails, and open spaces;

- (6) The Vending will not change the residential character of residential neighborhoods or have an adverse effect on the safety of the community in any zone district;
 - (7) The applicant and all the persons listed on the application have: (a) no previous convictions of felonies; (b) no crimes involving theft or fraud within the preceding ten (10) years.
- (f) Conditions of approval. The Police Chief may impose conditions of approval on the Vendor Permit necessary to make the findings for approval. The Police Chief shall document the need for the conditions.
- (g) Permit term and renewal. Except where a Vendor Permit is issued for a shorter duration, as set forth in subsection (h), Permits shall be issued on a calendar year basis as follows:
- (1) Initial permits. First-year Permits issued after October 1st shall be valid until December 31st of the succeeding year and automatically expire at that time unless sooner suspended or revoked. First-year Permits issued prior to October 1st shall be valid until December 31st of that year and automatically expire at that time unless sooner suspended or revoked.
 - (2) Annual renewal. Any Vendor Permit pursuant to this Chapter shall automatically expire, terminate, and be of no further force and effect at 5:00 p.m. on December 31 of each year if not renewed. Permits may be renewed prior to expiration by submitting an application for renewal to the Chief of Police prior to November 1st, accompanied by a renewal fee as approved by the City Council. Applicants for renewal of a first-year Permit issued for a period of less than twelve (12) months shall receive pro rata credit towards the renewal fee. The application for renewal shall contain the same information required by subsection (d) of this section, updated to reflect changes in the preceding year.
- (h) Single event permits. Single Event Permits shall be for no longer than thirty (30) consecutive days in duration and shall name the exact dates of validity on the Permit. No more than one Single Event Permit shall be issued to a Vendor in a calendar year.
- (i) Priority of applications. Vendor applications will be processed in the order of receipt of a complete application, as determined by the Police Chief, accompanied by payment of the required application fee. Specific Vending Locations requested by more than one Vendor will be allocated based upon this order. A list of applicants shall be maintained and at the time of renewal, the next Vendor on the list will have priority. For high demand areas, the Police Chief may limit the duration of Permits to less than one (1) year.

5.33.05 Operational Requirements.

All Vendors are subject to the conditions set forth below:

- (a) No Vendor shall locate within three hundred (300) feet of the grounds of any elementary or secondary school on any school day while school is in session;
- (b) No Vendor shall locate within five hundred (500) feet of a freeway entrance or exit;
- (c) No Vendor shall locate within fifty (50) feet of any street or roadway intersection, crosswalk, fire hydrant, signal crossing, or bus stop;
- (d) No Vendor shall locate their operation in such a way that would restrict the ingress to or egress from the adjoining property;
- (e) No Vendor shall locate on any public sidewalk or within any public street adjacent to a curb which has been duly designated by the City as a white, yellow, blue or red zone;
- (f) No Vendor shall locate within two hundred (200) feet of any other Vendor operating during the applicable Vending hours specified in this Chapter;
- (g) No Vendor may obstruct the flow of pedestrian traffic by reducing the clear space to less than sixty (60) inches of usable sidewalk pursuant to California Building Code Section 1133B.7.1;
- (h) No Vendor shall locate their operation in such a way that would restrict accessibility routes and curb cuts;
- (i) No Vehicle shall roll up onto the sidewalk or cause traffic to block and be delayed;
- (j) No driveways, parking lots, or private property can be occupied by a Vendor without written permission;
- (k) No Vendor shall locate their operation in such a way that would restrict trash enclosures;
- (l) No Vendor shall locate their operation in such a way that would restrict required off street parking and parking meters;
- (m) No Sidewalk Vendor is permitted in residential areas except for Roaming Sidewalk Vendors pursuant to Section 5.33.06;
- (n) No Vendor shall conduct business with customers in moving cars;
- (o) Vendors must provide a visible trash receptacle for use by bona fide purchasers;
- (p) The Vendor shall not leave any Location without first picking up, removing and disposing of all trash or refuse from their operation that remains within one hundred (100) feet of the Vendor's position;

- (q) No Vending shall occur between the hours of 10:00 p.m. and 7:00 a.m. Specific types of Vending may have shorter permitted hours.
- (r) No Vendor handling Food shall operate more than two hundred (200) feet travel distance of an approved and readily available toilet and handwashing facility to ensure that restroom facilities are available to the Vendor permit holder and any of its employees whenever operating for more than a one (1) hour period.
- (s) No Vendor shall Vend within one hundred (100) feet of a Special Event for one (1) hour before or after the reserved event time.
- (t) No Vending in Centennial Park.
- (u) No Sidewalk Vendor shall Vend in the street.
- (v) Vendors shall not use City utility connections, including electricity and water, without prior written approval.
- (w) Vendors shall not leave items unattended or store on public property.

5.33.06 Additional Rules for Sidewalk Vendors.

- (a) Roaming Sidewalk Vendors shall not stop more than ten (10) minutes to Vend in one Location.
- (b) Vendors are prohibited in all exclusively residential zone districts in the City except for Roaming Sidewalk Vendors and Special Event Vendors.
- (c) Roaming Sidewalk Vendors are prohibited from Vending in all exclusively residential zone districts between the hours of 6:00 p.m. and 8:00 a.m.
- (d) Sidewalk Vending is prohibited along the frontage of any business that has a sidewalk permit from the City to sell Food or Merchandise on the sidewalk in front of the business.

5.33.07 Food Truck Vendors.

Food Truck Vendors are regulated by Chapter 5.34 of the Clovis Municipal Code.

5.33.08 Additional Rules for Vending in Parks.

- (a) Vendors shall not vend in parks less than one acre in size to preserve the use and enjoyment of smaller residential and pocket parks.
- (b) Vendors shall be subject to the City’s park rules and regulations.

- (c) Stationary Sidewalk Vending is not allowed at parks that have exclusive vending contracts.
- (d) Vendors shall at all times adhere to the Special Event restrictions.
- (e) Vendors shall at all times meet the two hundred (200) foot separation requirement from other Vendors, unless otherwise authorized by the Parks Manager pursuant to Section 10.3.02 of the Code.

5.33.09 Supplemental Regulations.

The City Manager and Police Chief, and their designees, are hereby authorized to adopt supplemental rules and regulations, and to develop all related forms and/or other materials, reasonably necessary to implement this Chapter, and to make such interpretations of this Chapter as they may consider necessary to achieve the purposes of this Chapter. Violations of supplemental rules and regulations shall be considered violations of this Chapter.

5.33.10 Violations.

- (a) Fines and penalties.

Violations of this Chapter or the conditions in a Vendor Permit shall be subject to the following fines:

- (1) Vendor without a valid Permit:
 - (i) An administrative fine of \$250 for a first violation;
 - (ii) An administrative fine of \$500 for a second violation within one year of the first violation;
 - (iii) An administrative fine of \$1,000 for a third violation within one year of the first violation;
 - (iv) An administrative fine of \$1,000 for a fourth and each subsequent violation within one year of the first violation and confiscation of the Vehicle, Food and Merchandise as provided for in subdivisions (b) & (c);
 - (v) The administrative fines listed in this paragraph may be reduced from \$250 to \$100, \$500 to \$200 and \$1000 to \$500 upon submission of proof of a Permit to the City Manager’s office.
- (2) Vendor with a valid Permit:
 - (i) An administrative fine of \$100 for a first violation;

- (ii) An administrative fine of \$200 for a second violation within one year of the first violation;
- (iii) An administrative fine of \$500 for a third violation within one year of the first violation; and
- (iv) An administration fine of \$500 for a fourth and each subsequent violation within one year for the first violation and revocation or suspension of Permit and/or confiscation of Vehicle, Food and Merchandise, as provided for in subdivisions (b) & (c).

(3) Penalties for failing to have a Business Tax Certificate are subject to the penalty provision of Chapter 1.2 of this Code.

(4) Fines may be issued on a form approved by the City Manager, and shall include an appeal process as provided for in Title 5, Chapter 28 of the Code.

(b) Revocation and suspension.

The Police Chief may suspend for up to thirty (30) days or revoke any Permit issued under this Chapter when any one or more of the following grounds are found to exist:

- (1) Violation of this Chapter or provisions of a Vendor Permit. The Police Chief shall not revoke a Permit for violations of this Chapter or the Vendor Permit that relate solely to the act of Vending until the fourth (4th) violation in any three hundred sixty five (365) day period.
- (2) Violation of local, State, or Federal law in connection with Vendor Activity.
- (3) When a Vendor's permit was issued under fraudulent circumstances or mistake.
- (4) When necessary to protect the public health, safety, or welfare.

(c) Confiscation. In connection with suspension or revocation of a Vendor Permit, the City may confiscate property used in connection with Vending upon a determination that confiscation of the property is necessary to protect the public health, safety, or welfare.

(d) Procedures. The following procedures shall apply for suspensions, revocation, and confiscation:

- (1) Prior to revocation or suspension of a Permit and/or confiscation of property, the Police Chief shall provide written notice to the Vendor stating the reasons for the action by personal notice or certified mail.
- (2) The notice shall provide information on the appeal process and explain that a suspension may lead to a permanent revocation of the Permit.

- (3) Unless immediate suspension is necessary to protect the public health, safety, and welfare, prior to taking final action the Police Chief shall afford the Vendor, and Vehicle owner when applicable, an opportunity for an appeal hearing pursuant to the procedures set forth in Article 2 of Chapter 5.28 of the Code. For immediate suspensions, the appeal hearing, if requested, shall be held within ten (10) business days after the filing of the appeal.
- (4) If an appeal is filed, the hearing officer may permanently revoke the Permit, reinstate the Permit, conditionally reinstate the Permit, or modify the suspension, based upon findings related to circumstances described in this Section. The hearing officer shall also make appropriate findings regarding any confiscation.

SECTION 6. EFFECTIVE DATE.

This Ordinance shall go into effect and be in full force from and after thirty (30) days after its final passage and adoption.

APPROVED: _____, 2019

Mayor	City Clerk
* * * * * * *	* * *

The foregoing Ordinance was introduced and read at a regular meeting of the City Council held on _____, 2019, and was adopted at a regular meeting of said Council held on _____, 2019, by the following vote, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

DATED: _____, 2019

City Clerk



CITY of CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Community and Economic Development

DATE: December 17, 2018

SUBJECT: Consider Approval –Res. 18-____, a Resolution of the City Council of the City of Clovis Adopting Interim Rules for Vending on Public Streets, Sidewalks, and Parks

ATTACHMENTS: Attachment A: Senate Bill 946 Bill Text
Attachment B: Res. 18-____ Draft Resolution

CONFLICT OF INTEREST

None

RECOMMENDATION

For the City Council to approve a resolution adopting interim rules for vending on public streets, sidewalks, and parks.

EXECUTIVE SUMMARY

California State Senate Bill SB 946 will become law on January 1, 2019. The legislation was designed to limit local jurisdictions' abilities to regulate vending on streets, sidewalks and parks ("Vending"), unless the regulation is connected to public health, safety, and welfare. Vending is defined in the law as the sale of food or merchandise from the person or a non-motorized conveyance. (Attachment A.)

SB 946 allows municipalities to establish permit programs for vendors, and they may require sidewalk vendors to obtain a business license and abide by state tax laws, just like other businesses.

ATTACHMENT 2

Staff has been working on an Ordinance (attached as Exhibit A to the Attachment B Resolution) to implement reasonable regulations to address the public health, safety, and welfare concerns that might arise from Vending. Due to the short time since passage of the Legislation, staff is unable to process the Ordinance so that it becomes effective before January 1, 2019. Therefore, staff is proposing that the Council adopt the primary regulations from the draft Ordinance (proposed new Chapter 5.33) by Resolution as interim rules for Vending. Following Council input on the interim rules, staff will make any needed adjustments, do additional community outreach, and bring back the permanent Ordinance early next year.

BACKGROUND

The Clovis Municipal Code has existing rules for "peddlers" as defined in Section 3.1.216(n), that are inconsistent with SB 946. The Code currently punishes "peddlers" criminally for violations, excludes selling locations available under SB 946, and requires permission from non-government entities to Vend in certain locations, all inconsistent with the new law.

The new regulations will address the deficiencies in our Code so that the City is compliant with SB 946. Vendors, incorporating the existing definition of "peddler," will be required to obtain a Vending permit, business tax certificate, and any other permits necessary for the operation of their business. Vending hours will be limited throughout the City and reduced hours will apply for residential areas. Vendors will be allowed to Vend in City parks, a departure from the current Code, but must maintain an adequate distance from any special event that occurs in the park. All Vendors will be required to provide trash receptacles for customers and are responsible for leaving their Vending areas clean. They must leave adequate space for pedestrians to use the sidewalks and cannot block driveways, curbs, or any area that would impede traffic. Vendors are also prohibited from Vending near schools during the school day and cannot Vend in front of businesses with sidewalk permits.

A significant change, and a departure from the long standing norm, is that violations of the Vendor rules cannot be prosecuted as criminal violations of the Municipal Code, but instead must be enforced administratively. Fines are allowed, but there are significant restrictions on those amounts. Further, upon a showing of inability to pay the fine, the City must reduce the fine.

For excessive violations of proposed Chapter 5.33, suspension of permit, revocation of permit, and/or confiscation of Vending items can be implemented.

The regulations will also apply to "Street Vendors" which the City defines as Vendors who use motorized conveyances to Vend on public property; primarily food trucks. The same general rules for Vending on parks and sidewalks will apply to food trucks.

FISCAL IMPACT

The fiscal impact of the adoption of interim rules for Vending on public streets, sidewalks, and parks is not significant. The State of California believes that SB 946 will increase the tax base in local municipalities.

REASON FOR RECOMMENDATION

It is necessary to adopt interim regulations governing Vending pending adoption of a permanent ordinance to meet the needs of SB 946.

ACTIONS FOLLOWING APPROVAL

The interim rules will become effective immediately and remain in effect until the permanent Vending Ordinance can be approved.

Prepared by: Shawn Miller, Business Development Manager

Submitted by: Andrew Haussler, Community & Economic Development Director 

Senate Bill No. 946

CHAPTER 459

An act to add Chapter 6.2 (commencing with Section 51036) to Part 1 of Division 1 of Title 5 of the Government Code, relating to sidewalk vendors.

[Approved by Governor September 17, 2018. Filed with Secretary of State September 17, 2018.]

LEGISLATIVE COUNSEL'S DIGEST

SB 946, Lara. Sidewalk vendors.

Existing law authorizes a local authority, by ordinance or resolution, to adopt requirements for the public safety regulating any type of vending and the time, place, and manner of vending from a vehicle upon a street.

This bill would prohibit a local authority, as defined, from regulating sidewalk vendors, except in accordance with the provisions of the bill. The bill would provide that a local authority is not required to adopt a new program to regulate sidewalk vendors if the local authority has established an existing program that substantially complies with the provisions of the bill. The bill would apply these provisions to a chartered or general law city, county, or city and county.

The bill would require a local authority that elects to adopt a sidewalk vending program to, among other things, not require a sidewalk vendor to operate within specific parts of the public right-of-way, except when that restriction is directly related to objective health, safety, or welfare concerns, and not restrict sidewalk vendors to operate only in a designated neighborhood or area, except as specified. The bill would authorize a local authority to, by ordinance or resolution, adopt additional requirements regulating the time, place, and manner of sidewalk vending, as specified, if the requirements are directly related to objective health, safety, or welfare concerns. The bill would also authorize a local authority to prohibit sidewalk vendors in areas located within the immediate vicinity of a permitted certified farmers' market and a permitted swap meet, as specified, and to restrict or prohibit sidewalk vendors within the immediate vicinity of an area designated for a temporary special permit issued by the local authority, as specified. A violation would be punishable only by an administrative fine, as specified, pursuant to an ability-to-pay determination, and proceeds would be deposited in the treasury of the local authority.

The bill would require the dismissal of any criminal prosecutions under any local ordinance or resolution regulating or prohibiting sidewalk vendors that have not reached final judgment. The bill would also authorize a person who is currently serving, or who completed, a sentence, or who is subject to a fine, for a conviction of a misdemeanor or infraction for sidewalk vending, as specified, to petition for dismissal of the sentence, fine, or conviction.

Existing constitutional provisions require that a statute that limits the right of access to the meetings of public bodies or the writings of public officials and agencies be adopted with findings demonstrating the interest protected by the limitation and the need for protecting that interest.

This bill would make legislative findings to that effect.

BILL TEXT

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1.

(a) The Legislature finds and declares all of the following:

(1) Sidewalk vending provides important entrepreneurship and economic development opportunities to low-income and immigrant communities.

(2) Sidewalk vending increases access to desired goods, such as culturally significant food and merchandise.

(3) Sidewalk vending contributes to a safe and dynamic public space.

(4) The safety and welfare of the general public is promoted by encouraging local authorities to support and properly regulate sidewalk vending.

(5) The safety and welfare of the general public is promoted by prohibiting criminal penalties for violations of sidewalk vending ordinances and regulations.

(6) This act applies to any city, county, or city and county, including a charter city. The criminalization of small business entrepreneurs, and the challenges that those entrepreneurs face as a result of a criminal record, are matters of statewide concern. Further, unnecessary barriers have been erected blocking aspiring entrepreneurs from accessing the formal economy, harming California’s economy in the process, and disrupting the regulation of business, which is a matter of statewide concern. Moreover, California has an interest in the regulation of traffic, a matter of statewide concern, whether in ensuring the appropriate flow of traffic or in ensuring the safety of pedestrians on the road or the sidewalk.

(b) It is the intent of the Legislature to promote entrepreneurship and support immigrant and low-income communities.

SEC. 2.

Chapter 6.2 (commencing with Section 51036) is added to Part 1 of Division 1 of Title 5 of the Government Code, to read:

CHAPTER 6.2. Sidewalk Vendors

51036.

For purposes of this chapter, the following definitions apply:

(a) “Sidewalk vendor” means a person who sells food or merchandise from a pushcart, stand, display, pedal-driven cart, wagon, showcase, rack, or other nonmotorized conveyance, or from one’s person, upon a public sidewalk or other pedestrian path.

(b) “Roaming sidewalk vendor” means a sidewalk vendor who moves from place to place and stops only to complete a transaction.

(c) “Stationary sidewalk vendor” means a sidewalk vendor who vends from a fixed location.

(d) “Local authority” means a chartered or general law city, county, or city and county.

51037.

(a) A local authority shall not regulate sidewalk vendors except in accordance with Sections 51038 and 51039.

AGENDA ITEM NO. 6.

(b) Nothing in this chapter shall be construed to affect the applicability of Part 7 (commencing with Section 113700) of Division 104 of the Health and Safety Code to a sidewalk vendor who sells food.

(c) Nothing in this chapter shall be construed to require a local authority to adopt a new program to regulate sidewalk vendors if the local authority has established an existing program that substantially complies with the requirements in this chapter.

51038.

(a) A local authority may adopt a program to regulate sidewalk vendors in compliance with this section.

(b) A local authority's sidewalk vending program shall comply with all of the following standards:

(1) A local authority shall not require a sidewalk vendor to operate within specific parts of the public right-of-way, except when that restriction is directly related to objective health, safety, or welfare concerns.

(2) (A) A local authority shall not prohibit a sidewalk vendor from selling food or merchandise in a park owned or operated by the local authority, except the local authority may prohibit stationary sidewalk vendors from vending in the park only if the operator of the park has signed an agreement for concessions that exclusively permits the sale of food or merchandise by the concessionaire.

(B) Notwithstanding subparagraph (A), a local authority may adopt additional requirements regulating the time, place, and manner of sidewalk vending in a park owned or operated by the local authority if the requirements are any of the following:

(i) Directly related to objective health, safety, or welfare concerns.

(ii) Necessary to ensure the public's use and enjoyment of natural resources and recreational opportunities.

(iii) Necessary to prevent an undue concentration of commercial activity that unreasonably interferes with the scenic and natural character of the park.

(3) A local authority shall not require a sidewalk vendor to first obtain the consent or approval of any nongovernmental entity or individual before he or she can sell food or merchandise.

(4) (A) A local authority shall not restrict sidewalk vendors to operate only in a designated neighborhood or area, except when that restriction is directly related to objective health, safety, or welfare concerns.

(B) Notwithstanding subparagraph (A), a local authority may prohibit stationary sidewalk vendors in areas that are zoned exclusively residential, but shall not prohibit roaming sidewalk vendors.

(5) A local authority shall not restrict the overall number of sidewalk vendors permitted to operate within the jurisdiction of the local authority, unless the restriction is directly related to objective health, safety, or welfare concerns.

(c) A local authority may, by ordinance or resolution, adopt additional requirements regulating the time, place, and manner of sidewalk vending if the requirements are directly related to objective health, safety, or welfare concerns, including, but not limited to, any of the following:

(1) Limitations on hours of operation that are not unduly restrictive. In nonresidential areas, any limitations on the hours of operation for sidewalk vending shall not be more restrictive than any limitations on hours of operation imposed on other businesses or uses on the same street.

(2) Requirements to maintain sanitary conditions.

(3) Requirements necessary to ensure compliance with the federal Americans with Disabilities Act of 1990 (Public Law 101-336) and other disability access standards.

(4) Requiring the sidewalk vendor to obtain from the local authority a permit for sidewalk vending or a valid business license, provided that the local authority issuing the permit or business license accepts a California driver's license or identification number, an individual taxpayer identification number, or a

municipal identification number in lieu of a social security number if the local authority does not have a social security number for the issuance of a permit or business license, and that the number shall not be available to the public for inspection, is confidential, and shall not be disclosed except as required to administer the permit or licensure program or comply with a state law or state or federal court order.

(5) Requiring the sidewalk vendor to possess a valid California Department of Tax and Fee Administration seller's permit.

(6) Requiring additional licenses from other state or local agencies to the extent required by law.

(7) Requiring compliance with other generally applicable laws.

(8) Requiring a sidewalk vendor to submit information on his or her operations, including, but not limited to, any of the following:

(A) The name and current mailing address of the sidewalk vendor.

(B) A description of the merchandise offered for sale or exchange.

(C) A certification by the vendor that to his or her knowledge and belief, the information contained on the form is true.

(D) The California seller's permit number (California Department of Tax and Fee Administration sales tax number), if any, of the sidewalk vendor.

(E) If the sidewalk vendor is an agent of an individual, company, partnership, or corporation, the name and business address of the principal.

(d) Notwithstanding subdivision (b), a local authority may do both of the following:

(1) Prohibit sidewalk vendors in areas located within the immediate vicinity of a permitted certified farmers' market or a permitted swap meet during the limited operating hours of that certified farmers' market or swap meet. A "certified farmers' market" means a location operated in accordance with Chapter 10.5 (commencing with Section 47000) of Division 17 of the Food and Agricultural Code and any regulations adopted pursuant to that chapter. A "swap meet" means a location operated in accordance with Article 6 (commencing with Section 21660) of Chapter 9 of Division 8 of the Business and Professions Code, and any regulations adopted pursuant to that article.

(2) Restrict or prohibit sidewalk vendors within the immediate vicinity of an area designated for a temporary special permit issued by the local authority, provided that any notice, business interruption mitigation, or other rights provided to affected businesses or property owners under the local authority's temporary special permit are also provided to any sidewalk vendors specifically permitted to operate in the area, if applicable. For purposes of this paragraph, a temporary special permit is a permit issued by the local authority for the temporary use of, or encroachment on, the sidewalk or other public area, including, but not limited to, an encroachment permit, special event permit, or temporary event permit, for purposes including, but not limited to, filming, parades, or outdoor concerts. A prohibition of sidewalk vendors pursuant to this paragraph shall only be effective for the limited duration of the temporary special permit.

(e) For purposes of this section, perceived community animus or economic competition does not constitute an objective health, safety, or welfare concern.

51039.

(a) (1) A violation of a local authority's sidewalk vending program that complies with Section 51038 is punishable only by the following:

(A) An administrative fine not exceeding one hundred dollars (\$100) for a first violation.

(B) An administrative fine not exceeding two hundred dollars (\$200) for a second violation within one year of the first violation.

(C) An administrative fine not exceeding five hundred dollars (\$500) for each additional violation within one year of the first violation.

(2) A local authority may rescind a permit issued to a sidewalk vendor for the term of the fourth violation or subsequent violations.

(3) (A) If a local authority requires a sidewalk vendor to obtain a sidewalk vending permit from the local authority, vending without a sidewalk vending permit may be punishable by the following in lieu of the administrative fines set forth in paragraph (1):

(i) An administrative fine not exceeding two hundred fifty dollars (\$250) for a first violation.

(ii) An administrative fine not exceeding five hundred dollars (\$500) for a second violation within one year of the first violation.

(iii) An administrative fine not exceeding one thousand dollars (\$1,000) for each additional violation within one year of the first violation.

(B) Upon proof of a valid permit issued by the local authority, the administrative fines set forth in this paragraph shall be reduced to the administrative fines set forth in paragraph (1), respectively.

(b) The proceeds of an administrative fine assessed pursuant to subdivision (a) shall be deposited in the treasury of the local authority.

(c) Failure to pay an administrative fine pursuant to subdivision (a) shall not be punishable as an infraction or misdemeanor. Additional fines, fees, assessments, or any other financial conditions beyond those authorized in subdivision (a) shall not be assessed.

(d) (1) A violation of a local authority's sidewalk vending program that complies with Section 51038, or a violation of any rules or regulations adopted prior to January 1, 2019, that regulate or prohibit sidewalk vendors in the jurisdiction of a local authority, shall not be punishable as an infraction or misdemeanor, and the person alleged to have violated any of those provisions shall not be subject to arrest except when permitted under law.

(2) Notwithstanding any other law, paragraph (1) shall apply to all pending criminal prosecutions under any local ordinance or resolution regulating or prohibiting sidewalk vendors. Any of those criminal prosecutions that have not reached final judgment shall be dismissed.

(e) A local authority that has not adopted rules or regulations by ordinance or resolution that comply with Section 51037 shall not cite, fine, or prosecute a sidewalk vendor for a violation of any rule or regulation that is inconsistent with the standards described in subdivision (b) Section 51038.

(f) (1) When assessing an administrative fine pursuant to subdivision (a), the adjudicator shall take into consideration the person's ability to pay the fine. The local authority shall provide the person with notice of his or her right to request an ability-to-pay determination and shall make available instructions or other materials for requesting an ability-to-pay determination. The person may request an ability-to-pay determination at adjudication or while the judgment remains unpaid, including when a case is delinquent or has been referred to a comprehensive collection program.

(2) If the person meets the criteria described in subdivision (a) or (b) of Section 68632, the local authority shall accept, in full satisfaction, 20 percent of the administrative fine imposed pursuant to subdivision (a).

(3) The local authority may allow the person to complete community service in lieu of paying the total administrative fine, may waive the administrative fine, or may offer an alternative disposition.

(g) (1) A person who is currently serving, or who completed, a sentence, or who is subject to a fine, for a conviction of a misdemeanor or infraction for sidewalk vending, whether by trial or by open or negotiated plea, who would not have been guilty of that offense under the act that added this section had that act been in effect at the time of the offense, may petition for dismissal of the sentence, fine, or conviction before the trial court that entered the judgment of conviction in his or her case.

(2) Upon receiving a petition under paragraph (1), the court shall presume the petitioner satisfies the criteria in paragraph (1) unless the party opposing the petition proves by clear and convincing evidence that the petitioner does not satisfy the criteria. If the petitioner satisfies the criteria in paragraph (1), the court shall

grant the petition to dismiss the sentence or fine, if applicable, and dismiss and seal the sentence, fine, and conviction are legally invalid.

AGENDA ITEM NO. 6.

(3) Unless requested by the petitioner, no hearing is necessary to grant or deny a petition filed under paragraph (1).

(4) If the court that originally sentenced or imposed a fine on the petitioner is not available, the presiding judge shall designate another judge to rule on the petition.

(5) Nothing in this subdivision is intended to diminish or abrogate any rights or remedies otherwise available to the petitioner.

(6) Nothing in this subdivision or related provisions is intended to diminish or abrogate the finality of judgments in any case not falling within the purview of this chapter.

SEC. 3.

The Legislature finds and declares that Section 2 of this act, which adds Section 51038 to the Government Code, imposes a limitation on the public's right of access to the meetings of public bodies or the writings of public officials and agencies within the meaning of Section 3 of Article I of the California Constitution. Pursuant to that constitutional provision, the Legislature makes the following findings to demonstrate the interest protected by this limitation and the need for protecting that interest:

The Legislature finds and declares that in order to protect the privacy of a sidewalk vendor with regard to his or her California driver's license or identification number, individual taxpayer identification number, or municipal identification number, when that number is collected in lieu of a social security number for purposes of the issuance of a permit or business license, it is necessary that the sidewalk vendor's number be confidential, except as provided in this act.

RESOLUTION NO. 18 - _____

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CLOVIS
ADOPTING INTERIM RULES FOR VENDING ON PUBLIC STREETS,
SIDEWALKS, AND PARKS.**

WHEREAS, with the adoption of SB 946 on September 17, 2018, the California Legislature expressed an interest in providing more opportunities for individuals to sell food and merchandise from their person and conveyances in outdoor public places, commonly referred to as Street Vending, Sidewalk Vending, or Vending; and

WHEREAS, existing Clovis Municipal Code’s provisions that regulate Vendors, as applicable to SB 946, will not adequately protect public health, safety, and welfare after January 1, 2019 when SB 946 becomes law; and

WHEREAS, it is in the City’s interest to allow vending consistent with SB 946 while also protecting public health, safety, and welfare; and

WHEREAS, a new ordinance addressing these issues is in development with a draft proposed ordinance (“Vending Ordinance”) prepared, but there is insufficient time to approve and have the ordinance become effective before January 1, 2019; and

WHEREAS, the City of Clovis needs to have in place interim rules effective January 1, 2019 until the Vending Ordinance can be approved; and

WHEREAS, the most effective way to address these issues is to adopt the proposed Vending Ordinance as interim rules; and

WHEREAS, this process also allows time to fine tune the draft Vending Ordinance and solicit additional input from interested persons and businesses, as necessary.

NOW, THEREFORE, THE CITY COUNCIL RESOLVES AS FOLLOWS:

1. The City adopts the provisions set forth in proposed Chapter 5.33 of Exhibit A as interim rules effective January 1, 2019 for the regulation of vending on public streets, sidewalks, and parks pending the adoption of a permanent ordinance.

2. The provisions of Chapter 5.33, as approved by this Resolution, shall be enforceable in the same manner as violations of City ordinances.

The foregoing resolution was introduced and adopted at a regular meeting of the City Council of the City of Clovis held on the 17th day of December, 2018, by the following vote, to wit:

AYES:
NOES:
ABSENT:
ABSTAIN:

DATED: _____

Mayor

City Clerk

EXHIBIT A
PROPOSED CHAPTER 5.33

Chapter 5.33

VENDING ON PUBLIC PROPERTY

5.33.01 Definitions.

For purposes of this Chapter, the following definitions apply:

“Annual Permit” means a permit to Vend lasting one calendar year unless otherwise provided by this Chapter.

“City” means the City of Clovis.

“Code” means Clovis Municipal Code and all codes incorporated therein by reference.

“Food” shall be as defined in Health and Safety Code Section 113781 or any successor provision.

“Food Facility” shall be as defined in Health and Safety Code Section 113789 or any successor provision.

“Handwashing Facility” means a facility providing either a basin, container, or outlet with an adequate supply of potable water, soap, and single-use towels, as further defined in Health and Safety Code Section 114359.

“Health Officer” shall be as defined in Health and Safety Code Section 111015.

“Location” means the area within a one hundred (100) foot radius of the Vendor’s position.

“Merchandise” means commodities or goods that are bought and sold.

“Mobile Food Facility” shall be as defined in Health and Safety Code Section 113831 or any successor provision.

“Old Town Special Event” shall be as defined in the Section 5.20.03 of this Code.

“Peddler” shall be as defined in Section 3.1.216(n) of the Code. The provisions of that Section shall be supplemented by this Chapter.

“Police Chief” means the Police Chief for the City of Clovis or his/her designee.

“Roaming Sidewalk Vendor” means a Sidewalk Vendor selling, offering for sale, or distributing Food or Merchandise on a public sidewalk continuously moving except when making a sale.

“Sidewalk Vendor” means a person who sells Food or Merchandise from a pushcart, stand, display, pedal-driven cart, wagon, showcase, rack, bicycle or other nonmotorized conveyance, or from one’s person, upon a public sidewalk or other pedestrian path.

“Single Event Permit” means a Vending Permit valid for a specific amount of time not to exceed thirty (30) continuous days.

“Special Event” means any outdoor event designated for the exclusive use of the event organizer utilizing public areas, including streets and parking lots temporarily closed by the City Council or Clovis Police Department, and including those events approved pursuant to Section 10.2.04 of the Code.

“Stationary Sidewalk Vendor” means a Sidewalk Vendor selling, offering for sale, or distributing Food or Merchandise on a public sidewalk in one Location as provided by permit.

“Street Vendor” means a Vendor selling, offering for sale, or distributing Food or Merchandise from a Vehicle located within a public street.

“Toilet Facility” means a fixture maintained with a toilet room for the purpose of defecation or urination or both, as further defined in Health and Safety Code Section 114359.

“Vehicle” means a Mobile Food Facility, catering truck, or other motorized conveyance upon which Food or Merchandise is sold, offered for sale or distributed.

“Vend” or “Vending” means to offer for sale or distribution.

“Vendor” shall include Peddler, Roaming Sidewalk Vendor, Sidewalk Vendor, Stationary Sidewalk Vendor, and Street Vendor.

“Vendor Permit” or “Vending Permit” or “Permit” means the permit issued to Vendors pursuant to this Chapter.

5.33.02 Business Tax Certificate.

It shall be unlawful to sell, offer for sale, or distribute any Food or Merchandise on any public streets, sidewalks, or parks within the City without first obtaining a business tax certificate and paying the applicable business registration fee for each Vendor, pursuant to Article 1 of Title 3 of the Code. Vendors are subject to the same rules and penalties found in Article 1 of Title 3 of the Code.

Notwithstanding those provisions, no business tax certificate shall be issued without evidence that the Vendor has obtained all permits required by this Chapter. The original of the City business tax certificate, Vendor Permit, and health permit, as applicable, shall be displayed conspicuously at all times on the Vendor’s Vehicle, person, or site.

5.33.03 Health and Sanitation Requirements.

Vendors selling or offering Food shall obtain a health permit from the Fresno County Health Officer, as applicable. The health permit shall be displayed conspicuously at all times on the Vendor's Vehicle, person, or site. Evidence of a health permit shall be made available to the Finance Department as part of the business tax certificate application or renewal.

5.33.04 Vendor Permit to Operate.

- (a) Permit required. It shall be unlawful to sell, offer for sale, or distribute any Food or Merchandise on any public street, sidewalk, or park within the City without first obtaining a Vendor Permit from the Police Department pursuant to the provisions of this Chapter. The Vendor's Permit shall be displayed conspicuously at all times on the Vendor's Vehicle, person, or site. Evidence of such permit shall accompany the business tax certificate application or renewal application to the Finance Department.
- (b) Person and Location specific. Vendor Permits shall be specific to a person and Location.
- (c) Non-transferable; no vested right. Vendor Permits shall be nontransferable. No Vendor shall acquire a vested right or property interest from the issuance of a permit, and permits shall at all times be subject to the provisions of this Chapter.
- (d) Application and fees. Written application for a Vendor Permit shall be filed with the Police Chief and shall be accompanied by a fee as approved by the City Council. Applicants are strongly encouraged to apply for permits more than forty-five (45) days before the permit is needed in order to ensure timely processing of the application.

The Vendor applicant shall provide the following information on a form approved by the Police Chief along with any required documentation:

- (1) Names, addresses, email addresses, and telephone numbers of the Vendor applicant and of all persons financially interested in the business;
- (2) A statement of the type of Food or Merchandise to be sold;
- (3) The Location(s) at which the applicant intends to operate;
- (4) Number of Vehicles the Vendor applicant intends to operate, along with a copy of the current registration of each Vehicle;
- (5) For Vendors, the desired street Location(s) of the Vehicle(s), if applicable;
- (6) Intended day(s) and hours of operation at such Location(s);
- (7) The site of the toilet and handwashing facility required by Health and Safety Code Section 114359;

- (8) If the toilet and handwashing facility required by the Health and Safety Code is on private property, a copy of an enforceable contract between the private property owner and the Vendor applicant allowing vendor to utilize such facilities on the day(s) and hours of operation;
 - (9) A copy of the health permit required by this Chapter;
 - (10) Agreement by the applicant to indemnify and hold harmless the City, its officers, officials, volunteers, and employees from any and all damages or injury to persons or property proximately caused by the act or neglect of the applicant or by hazardous or negligent conditions maintained at the applicant's Vending Location;
 - (11) Evidence of general liability and automobile liability insurance, as applicable, in a form and at levels of coverage acceptable to the City;
 - (12) Previous vending permits issued to the applicant in other cities and the status of those permits;
 - (13) Authority for the Police Chief to conduct the background check necessary for the investigation required by this Chapter;
 - (14) Certification that to his or her knowledge and belief, the information provided is true and correct.
 - (15) Such further information as the Clovis Police Department may require.
- (e) Investigation. The Police Chief shall conduct an investigation of the application and shall issue a Vendor Permit within forty-five (45) days of receipt of a complete application, upon finding all of the following:
- (1) An accurate application has been filed;
 - (2) The required application fee has been paid;
 - (3) All applicable provisions of this Chapter have been or will be met;
 - (4) The Vending will not cause excessive traffic congestion, impede pedestrian or bicycle movement, or violate any applicable Federal or State accessibility laws;
 - (5) The Vending will not impede recreational opportunities on City parks, trails, and open spaces;
 - (6) The Vending will not change the residential character of residential neighborhoods or have an adverse effect on the safety of the community in any zone district;

- (7) The applicant and all the persons listed on the application have: (a) no previous convictions of felonies; (b) no crimes involving theft or fraud within the preceding ten (10) years.

- (f) Conditions of approval. The Police Chief may impose conditions of approval on the Vendor Permit necessary to make the findings for approval. The Police Chief shall document the need for the conditions.

- (g) Permit term and renewal. Except where a Vendor Permit is issued for a shorter duration, as set forth in subsection (h), Permits shall be issued on a calendar year basis as follows:
 - (1) Initial permits. First-year Permits issued after October 1st shall be valid until December 31st of the succeeding year and automatically expire at that time unless sooner suspended or revoked. First-year Permits issued prior to October 1st shall be valid until December 31st of that year and automatically expire at that time unless sooner suspended or revoked.

 - (2) Annual renewal. Any Vendor Permit pursuant to this Chapter shall automatically expire, terminate, and be of no further force and effect at 5:00 p.m. on December 31 of each year if not renewed. Permits may be renewed prior to expiration by submitting an application for renewal to the Chief of Police prior to November 1st, accompanied by a renewal fee as approved by the City Council. Applicants for renewal of a first-year Permit issued for a period of less than twelve (12) months shall receive pro rata credit towards the renewal fee. The application for renewal shall contain the same information required by subsection (d) of this section, updated to reflect changes in the preceding year.

- (h) Single event permits. Single Event Permits shall be for no longer than thirty (30) consecutive days in duration and shall name the exact dates of validity on the Permit. No more than one Single Event Permit shall be issued to a Vendor in a calendar year.

- (i) Priority of applications. Vendor applications will be processed in the order of receipt of a complete application, as determined by the Police Chief, accompanied by payment of the required application fee. Specific Vending Locations requested by more than one Vendor will be allocated based upon this order. A list of applicants shall be maintained and at the time of renewal, the next Vendor on the list will have priority. For high demand areas, the Police Chief may limit the duration of Permits to less than one (1) year.

5.33.05 Operational Requirements.

All Vendors are subject to the conditions set forth below:

- (a) No Vendor shall locate within three hundred (300) feet of the grounds of any elementary or secondary school on any school day while school is in session;

- (b) No Vendor shall locate within five hundred (500) feet of a freeway entrance or exit;
- (c) No Vendor shall locate within fifty (50) feet of any street or roadway intersection, crosswalk, fire hydrant, signal crossing, or bus stop;
- (d) No Vendor shall locate their operation in such a way that would restrict the ingress to or egress from the adjoining property;
- (e) No Vendor shall locate on any public sidewalk or within any public street adjacent to a curb which has been duly designated by the City as a white, yellow, blue or red zone;
- (f) No Vendor shall locate within two hundred (200) feet of any other Vendor operating during the applicable Vending hours specified in this Chapter;
- (g) No Vendor may obstruct the flow of pedestrian traffic by reducing the clear space to less than sixty (60) inches of usable sidewalk pursuant to California Building Code Section 1133B.7.1;
- (h) No Vendor shall locate their operation in such a way that would restrict accessibility routes and curb cuts;
- (i) No Vehicle shall roll up onto the sidewalk or cause traffic to block and be delayed;
- (j) No driveways, parking lots, or private property can be occupied by a Vendor without written permission;
- (k) No Vendor shall locate their operation in such a way that would restrict trash enclosures;
- (l) No Vendor shall locate their operation in such a way that would restrict required off street parking and parking meters;
- (m) No Sidewalk or Street Vendor are permitted in residential areas except for Roaming Sidewalk Vendors pursuant to Section 5.33.06;
- (n) No Vendor shall conduct business with customers in moving cars;
- (o) Vendors must provide a visible trash receptacle for use by bona fide purchasers;
- (p) The Vendor shall not leave any Location without first picking up, removing and disposing of all trash or refuse from their operation that remains within one hundred (100) feet of the Vendor's position;
- (q) No Vending shall occur between the hours of 10:00 p.m. and 7:00 a.m. Specific types of Vending may have shorter permitted hours.

(r) No Vendor handling Food shall operate more than two hundred (200) feet travel distance of an approved and readily available toilet and handwashing facility to ensure that restroom facilities are available to the Vendor permit holder and any of its employees whenever operating for more than a one (1) hour period.

(s) No Vendor shall Vend within one hundred (100) feet of a Special Event for one (1) hour before or after the reserved event time.

5.33.06 Additional Rules for Sidewalk Vendors.

(a) Roaming Sidewalk Vendors shall not stop more than ten (10) minutes to Vend in one Location.

(b) No Sidewalk Vendor shall Vend in the street.

(c) Vendors are prohibited in all exclusively residential zone districts in the City except for Roaming Sidewalk Vendors and Special Event Vendors.

(d) Roaming Sidewalk Vendors are prohibited from Vending in all exclusively residential zone districts between the hours of 6:00 p.m. and 8:00 a.m.

(e) Sidewalk Vending is prohibited along the frontage of any business that has a sidewalk permit from the City to sell Food or Merchandise on the sidewalk in front of the business.

5.33.07 Additional Rules for Street Vendors.

(a) Street Vending Vehicles are required to have the sale window on the sidewalk side of the Vehicle at all times.

(b) Street Vendors are prohibited in all exclusively residential zone districts in the City except for Vendors participating in Special Events.

5.33.08 Additional Rules for Vending in Parks.

(a) Vendors shall be subject to the City's park rules and regulations.

(b) Stationary Sidewalk Vending is not allowed at parks that have exclusive vending contracts.

(c) Vendors shall at all times adhere to the Special Event restrictions.

(d) Vendors shall at all times meet the two hundred (200) foot separation requirement from other Vendors, unless otherwise authorized by the Parks Manager pursuant to Section 10.3.02 of the Code.

5.33.09 Supplemental Regulations.

The City Manager and Police Chief, and their designees, are hereby authorized to adopt supplemental rules and regulations, and to develop all related forms and/or other materials, reasonably necessary to implement this Chapter, and to make such interpretations of this Chapter as they may consider necessary to achieve the purposes of this Chapter. Violations of supplemental rules and regulations shall be considered violations of this Chapter.

5.33.10 Violations.

(a) Fines and penalties.

Violations of this Chapter or the conditions in a Vendor Permit shall be subject to the following fines:

- (1) Vendor without a valid Permit:
 - (i) An administrative fine of \$250 for a first violation;
 - (ii) An administrative fine of \$500 for a second violation within one year of the first violation;
 - (iii) An administrative fine of \$1,000 for a third violation within one year of the first violation;
 - (iv) An administrative fine of \$1,000 for a fourth and each subsequent violation within one year of the first violation and confiscation of the Vehicle, Food and Merchandise as provided for in subdivisions (b) & (c);
 - (v) The administrative fines listed in this paragraph may be reduced from \$250 to \$100, \$500 to \$150 and \$1000 to \$200 upon submission of proof of a Permit to the City Manager's office.

- (2) Vendor with a valid Permit:
 - (i) An administrative fine of \$100 for a first violation;
 - (ii) An administrative fine of \$150 for a second violation within one year of the first violation;
 - (iii) An administrative fine of \$200 for a third violation within one year of the first violation; and
 - (iv) An administration fine of \$200 for a fourth and each subsequent violation within one year for the first violation and revocation or suspension of Permit

and/or confiscation of Vehicle, Food and Merchandise, as provided for in subdivisions (b) & (c).

(3) Penalties for failing to have a Business Tax Certificate are subject to the penalty provision of Chapter 1.2 of this Code.

(4) Fines may be issued on a form approved by the City Manager, and shall include an appeal process as provided for in Title 5, Chapter 28 of the Code.

(b) Revocation and suspension.

The Police Chief may suspend for up to thirty (30) days or revoke any Permit issued under this Chapter when any one or more of the following grounds are found to exist:

- (1) Violation of this Chapter or provisions of a Vendor Permit. The Police Chief shall not revoke a Permit for violations of this Chapter or the Vendor Permit that relate solely to the act of Vending until the fourth (4th) violation in any three hundred sixty five (365) day period.
- (2) Violation of local, State, or Federal law in connection with Vendor Activity.
- (3) When a Vendor's permit was issued under fraudulent circumstances or mistake.
- (4) When necessary to protect the public health, safety, or welfare.

(c) Confiscation. In connection with suspension or revocation of a Vendor Permit, the City may confiscate property used in connection with Vending upon a determination that confiscation of the property is necessary to protect the public health, safety, or welfare.

(d) Procedures. The following procedures shall apply for suspensions, revocation, and confiscation:

- (1) Prior to revocation or suspension of a Permit and/or confiscation of property, the Police Chief shall provide written notice to the Vendor stating the reasons for the action by personal notice or certified mail.
- (2) The notice shall provide information on the appeal process and explain that a suspension may lead to a permanent revocation of the Permit.
- (3) Unless immediate suspension is necessary to protect the public health, safety, and welfare, prior to taking final action the Police Chief shall afford the Vendor, and Vehicle owner when applicable, an opportunity for an appeal hearing pursuant to the procedures set forth in Article 2 of Chapter 5.28 of the Code. For immediate suspensions, the appeal hearing, if requested, shall be held within ten (10) business days after the filing of the appeal.
- (4) If an appeal is filed, the hearing officer may permanently revoke the Permit, reinstate the Permit, conditionally reinstate the Permit, or modify the suspension,

based upon findings related to circumstances described in this Section. The hearing officer shall also make appropriate findings regarding any confiscation.

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CITY of CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Administration

DATE: November 18, 2019

SUBJECT: Consider Introduction - Ord. 19- ____, An Ordinance of the City Council of the City Of Clovis adding Chapter 5.34, of Title 5, to the Clovis Municipal Code Relating To Food Trucks.

Staff: John Holt, Assistant City Manager
Recommendation: Approve

ATTACHMENTS: 1. Draft Ordinance

CONFLICT OF INTEREST

None

RECOMMENDATION

For the City Council to approve the introduction of an ordinance adding Chapter 5.34, Of Title 5, to the Clovis Municipal Code relating to Food Trucks.

EXECUTIVE SUMMARY

This Ordinance addresses the growing presence of Food Trucks in the City by creating new regulations for Food Trucks city wide and requiring land owners to obtain Administrative Use Permits if they intend to allow the operation of Food Trucks on their property on a regular basis. Concerns have been raised about the hours of operation, parking, traffic, and other health and safety issues.

BACKGROUND

Currently, the City does not have specific provisions for Food Trucks outside of the existing rules for "peddlers" as defined in CMC Section 3.1.216(n). Currently, Food Trucks must obtain a tax certificate, health permits, and are allowed to operate for no more than 10 minutes while parked on a City street. There are no specific provisions for Food Truck operations on private property.

Under the proposed ordinance, Food Trucks operating on public property will still be prohibited from remaining in one location on a public street for more than 10 minutes at a time, and must obtain proper permitting and licensing, but will now additionally be restricted to operating between the hours of 7 a.m. and 10 p.m.

Food Trucks operating on private property must adhere to the same rules as those operating on public property, without the 10 minute restriction, and may operate only on private property with the permission of the property owner. The owner must have an Administrative Use Permit which allows for staff to address site specific issues. Additionally, Food Trucks may not adversely affect required off-street parking and are required to obtain the consent of any restaurants located on the same parcel before they can operate.

Food Trucks are not permitted in residential areas except for private events that do not sell to the general public unless they have been issued a Temporary Use Permit for events less than thirty (30) continuous days, for a single event. All Food Trucks will be required to provide trash receptacles for customers and are responsible for leaving their Vending areas clean. Food Trucks are not allowed to operate near schools unless as part of a school event.

FISCAL IMPACT

Adopting this Ordinance may result in additional enforcement costs that will be covered with current staffing levels.

REASON FOR RECOMMENDATION

It is necessary to adopt the Ordinance governing Food Trucks so the City can properly manage and regulate Food Trucks.

ACTIONS FOLLOWING APPROVAL

The Ordinance will return for a second reading and adoption at the next regular Council meeting.

Prepared by: Jessica Mejorado, Deputy City Attorney

Reviewed by: City Manager LS

ORDINANCE 19-__

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CLOVIS
ADDING CHAPTER 5.34, OF TITLE 5, TO THE CLOVIS MUNICIPAL CODE
RELATING TO FOOD TRUCKS**

WHEREAS, there has been an increase in popularity in Food Trucks in California which create conflicts among Food Trucks and City restaurants; and

WHEREAS, it is in the City’s interest to allow Food Truck businesses consistent with public desire to utilize Food Trucks, while protecting the public health, safety, and welfare of Clovis businesses, residents, and visitors.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF CLOVIS DOES ORDAIN AS FOLLOWS:

SECTION 1. ADDITION TO THE MUNICIPAL CODE.

Chapter 5.34 is hereby added to Title 5, of the Clovis Municipal Code, to read as follows:

**Chapter 5.34
FOOD TRUCK VENDING**

5.34.01 Definitions.

For purposes of this Chapter, the following definitions apply:

“Administrative Use Permit” shall reference permits issued by the City of Clovis as outlined in Chapter 9.62.

“City” means the City of Clovis.

“Code” means the Clovis Municipal Code and all codes incorporated therein by reference.

“Food” shall be as defined in Health and Safety Code Section 113781 or any successor provision.

“Food Facility” shall be as defined in Health and Safety Code Section 113789 or any successor provision.

“Food Truck” means a mobile food facility as defined in Health and Safety Code Section 113831 or any successor provision and any vehicle as defined in Section 670 of the California Vehicle Code, which is equipped and used for retail sales of prepared, prepackaged, or unprepared food or foodstuffs of any kind that parks at one (1) or more locations within the City. A Food Truck shall also include any trailer or wagon equipped and used as described in this definition and pulled by a vehicle.

“Food Truck Permit” or “Permit” means the Administrative Use Permit or Temporary Use Permit issued to a property owner or lessee with authority allowing Food Trucks to operate on private property pursuant to this Chapter.

“Food Truck Vendor” or “Vendor” means an individual or business responsible for or utilizing a Food Truck to sell, offer for sale, or distribute Food.

“Hand washing Facility” means a facility providing either a basin, container, or outlet with an adequate supply of potable water, soap, and single-use towels, as further defined in Health and Safety Code Section 114359.

“Health Officer” shall be as defined in Health and Safety Code Section 111015.

“Old Town Special Event” shall be as defined in the Section 5.20.03 of the Municipal Code.

“Special Event” means any outdoor event designated for the exclusive use of the event organizer utilizing public areas, including streets and parking lots temporarily closed by the City Council or Clovis Police Department, and including those events approved pursuant to Section 10.2.04 of the Municipal Code.

“Temporary Use Permit” shall reference permits issued by the City of Clovis as outlined in Chapter 9.60.

“Toilet Facility” means a fixture maintained with a toilet room for the purpose of defecation or urination or both, as further defined in Health and Safety Code Section 114359.

“Vend” or “Vending” means to offer for sale or distribution.

5.34.02 Taxes.

(a) Business Tax Certificate. All Food Trucks operating in the City shall obtain a business tax certificate pursuant to Chapter 3.1 of the Municipal Code. No business tax certificate shall be issued without evidence that the Vendor has obtained all permits required by this Chapter. The original of the City business tax certificate, health permit, and any permit required by this Chapter, shall be displayed conspicuously at all times on the Food Truck.

(b) Old Town Clovis Taxes and Assessments. Food Trucks operating in Old Town Clovis shall be subject to the same taxes and assessments as permanent businesses located in Old Town Clovis. The boundaries of Old Town Clovis shall be considered the outside maximum boundaries set forth in Section 5.20.03(a) of the Municipal Code.

5.34.03 Health and Sanitation Requirements.

Vendors shall obtain a health permit from the Fresno County Health Officer. The health permit shall be displayed conspicuously at all times on the Vendor’s Vehicle. Evidence of a health

permit shall be made available to the Finance Department as part of the business tax certificate application or renewal.

5.34.04 Permit to Operate on Private Property.

(a) Permit required. No Food Truck shall operate on private property without a Food Truck Permit issued to the property owner or a lessee. A Food Truck Permit shall be either a Temporary Use Permit for events less than thirty (30) continuous days or an Administrative Use Permit for events thirty (30) days or more.

(b) Single event permits. The City may issue a Temporary Use Permit for events less than thirty (30) continuous days, for a single event. A single event permit may only be issued for exclusively residentially zoned districts once per year. Other zoned areas may have a maximum of four (4) single event permits issued per year.

(c) Private Events. Food Truck Permits are not required for Food Trucks operating for a one-day private event or party located either on the site of the event or in the public right-of-way with no retail sale to the general public and no admission charge to the event.

5.34.05 Operational Requirements.

All Food Truck Vendors are subject to the following conditions:

(a) No Food Truck shall locate within fifty (50) feet of any street or roadway intersection, crosswalk, fire hydrant, signal crossing, or bus stop.

(b) No Food Truck shall locate their operation in such a way that would restrict the ingress to or egress from the adjoining property.

(c) No Vendor shall sell food and beverage items not regulated under the California Retail Food Code (California Health and Safety Code Division 104, Part 7, Section 113700 et. seq., as it currently exists or may be amended).

(d) No Vendor shall locate their operation in such a way that would restrict accessibility routes and curb cuts.

(e) No Vehicle shall roll up onto the sidewalk or cause traffic to block and be delayed.

(f) No driveways, parking lots, or private property can be occupied by a Vendor without written permission from the property owner or lessee.

(g) No Vendor shall locate their operation in such a way that would restrict trash enclosures.

(h) No Vendor shall locate their operation in such a way that would restrict required off street parking and parking meters.

- (i) No Vendor shall conduct business with customers in moving cars.
- (j) Vendors must provide a visible trash receptacle for use by customers.
- (k) The Vendor shall regularly pick up, remove and dispose of all trash or refuse from their operation that remains within two hundred (200) feet of the Vendor's position. Regularly means not less than every one (1) hour. For Vendors that operate less than one hour at a location, the Vendor shall pick up, remove and dispose of all trash or refuse prior to leaving the location.
- (l) No Vending shall occur between the hours of 10:00 p.m. and 7:00 a.m. Specific types of Vending may have shorter permitted hours and no overnight parking shall be permitted.
- (m) No Vendor shall operate more than two hundred (200) feet travel distance of an approved and readily available toilet and hand washing facility to ensure that restroom facilities are available to the Food Truck Permit holder and any of its employees whenever operating for more than a one (1) hour period.
- (n) No Vendor shall Vend within three hundred (300) feet of an Old Town Special Event or other designated special event for one (1) hour before or after the reserved event time, unless the Vendor is approved by the event's sponsor to participate in the event.
- (o) Vendors shall not Vend at Centennial Plaza.
- (p) Vendors shall not use City utility connections, including water and electric, without prior written approval from the City.
- (q) Vendors shall not leave items unattended or stored on public property.
- (r) All Vendors shall comply with the California Vehicle Code and California Health and Safety Code.
- (s) Food Trucks may not operate in an exclusively residentially zoned district in the City, except for private events as provided for in Section 5.34.04(c) or as exempt under 5.34.04(b).
- (t) Vendors shall not operate in an unsafe manner, including but not limited to, impeding on- or off-site vehicle circulation and obstructing the view of pedestrians by motorists.
- (u) Vendors may not sell non-food accessory retail items that exceed ten percent (10%) of the average annual gross receipts of sales from the Food Truck. Non-food accessory retail items may not occupy more than ten percent (10%) of the Food Truck space devoted to preparation and sales. If the business is a new business, the gross receipts shall be calculated by considering the Vendor's estimated annual gross receipts for the first year of operation. "Gross receipts" shall mean the total amount of revenue derived from activities conducted on or within the Food Truck.

(v) No Vendor shall locate within three hundred (300) feet of any other Vendor operating during the applicable Vending hours specified in this Chapter, except that the Food Truck Permit may allow for smaller groupings of Food Trucks on a single parcel of property.

5.34.06 Additional Rules for Food Truck Vendors on Public Rights-of-Way.

(a) No Food Truck shall Vend in any one Location on a public street for more than ten (10) minutes in any two (2) hour period. "Location" for purposes of this section shall mean a radius of five hundred (500) feet from the original position of the Food Truck.

(b) No Food Truck shall locate within five hundred (500) feet of a freeway entrance or exit.

(c) No Food Truck shall locate within any public street adjacent to a curb which has been duly designated by the City as a white, yellow, blue or red zone.

(d) The Vehicle shall be legally parked and shall not stop, stand, or park in any clear vision triangle or no parking zone.

(e) Vehicles shall not occupy more than two on-street parking spaces in the public right-of-way in commercial zones.

(f) Vendors shall limit food and beverage service to that side of the Food Truck facing away from the street.

(g) No Vendor shall locate within three hundred (300) feet of the grounds of any elementary or secondary school on any school day while school is in session; this restriction does not apply to an event at a school facility if the Vendor is in partnership with the organization conducting the event and is located on the site of the event.

(h) Vendors shall indemnify, defend and hold the City, its officials, officers, employees, agents, and volunteers harmless from and against all claims, demands, causes of action, actions, damages, losses, expenses, and other liabilities, (including without limitation reasonable attorney fees and costs of litigation) of every nature arising out of or in connection with operation of the Food Truck on City right-of-way, regardless of fault, unless the injuries or damages are the result of City's sole negligence or willful misconduct.

(i) Vendors shall maintain, at their sole cost and expense, liability insurance in the amount of not less than \$2,000,000 per occurrence, \$4,000,000 aggregate, covering liability associated with operation of the Food Truck. Vendors shall also maintain, at their sole cost and expense, automobile insurance in the amount of not less than \$1,000,000 commercial auto liability coverage. The insurance shall be in full force and effect at any time the vendor is operating in the City. Prior to operations, the Vendor shall deliver or have on file with the City a Certificate of Insurance which includes all required coverages, endorsements, and names the City of Clovis as additionally insured and as the certificate holder. The City's Risk Manager shall verify coverages.

5.34.07 Additional Rules for Food Truck Vendors on Private Property.

- (a) Vendors shall obtain written authorization to operate the Food Truck from the property owner, or a lessee with authority.

- (b) Vendors shall obtain the consent of any restaurants operating on the same parcel of property.

- (c) Food Trucks shall operate as follows:
 - (1) Within a paved, level parking area, where it can be demonstrated that any off-street parking spaces located in that area are not otherwise reserved, encumbered, or designated to satisfy the off-street parking requirement of a business or activity that is operating at the same time as the Food Truck.

 - (2) Operations shall not impede pedestrian or vehicular ingress or egress through the remainder of the parking area or adjacent public right-of-way.

 - (3) Vendors shall not use or permit use of parking spaces on the site (e.g., customer queuing, tables, chairs, portable restrooms, signs, and any other ancillary equipment) if doing so will adversely affect the required off-street parking available for the primary use(s) of the site during peak periods as determined by the Director of Planning and Development Services.

 - (4) Vendors shall have adequate lighting to ensure customer safety either on the vehicle or at the location of the vehicle during business hours.

5.34.08 Supplemental Regulations.

The City Manager and approved designees, are hereby authorized to adopt supplemental rules and regulations, and to develop all related forms and/or other materials, reasonably necessary to implement this Chapter, and to make such interpretations of this Chapter as they may consider necessary to achieve the purposes of this Chapter. Violations of supplemental rules and regulations shall be considered violations of this Chapter.

5.34.09 Violations.

- (a) Fines and penalties.

Violations of this Chapter or the conditions in a Food Truck Permit shall be subject to the penalty and enforcement provisions of the Municipal Code, including, but not limited to Chapters 1.2, 1.7, 5.27, 5.28, and 5.29.

- (b) Revocation and suspension.

In addition to the grounds for suspending or revoking a Food Truck Permit, the City may suspend for up to thirty (30) days or revoke any Food Truck Permit issued under this Chapter when any one or more of the following grounds are found to exist:

- (1) Violation of this Chapter or provisions of a Food Truck Permit.
- (2) Violation of local, State, or Federal law in connection with Vendor Activity.
- (3) When a Vendor's permit was issued under fraudulent circumstances or mistake.
- (4) When necessary to protect the public health, safety, or welfare.

(c) Confiscation. In connection with suspension or revocation of a Food Truck Permit or violations of this Chapter, the City may confiscate property used in connection with Vending upon a determination that confiscation of the property is necessary to protect the public health, safety, or welfare.

(d) Procedures. The following procedures shall apply for suspensions, revocation, and confiscation:

- (1) Prior to revocation or suspension of a Permit and/or confiscation of property, the City shall provide written notice to the Vendor stating the reasons for the action by personal notice or certified mail.
- (2) The notice shall provide information on the appeal process and explain that a suspension may lead to a permanent revocation of the Permit.
- (3) Unless immediate suspension and/or confiscation is necessary to protect the public health, safety, and welfare, prior to taking final action the City shall afford the Vendor, and Vehicle owner when applicable, an opportunity for an appeal hearing pursuant to the procedures set forth in Article 2 of Chapter 5.28 of the Code. For immediate suspensions and/or confiscations, the appeal hearing, if requested, shall be held within ten (10) business days after the filing of the appeal.
- (4) If an appeal is filed, the hearing officer may permanently revoke the Permit, reinstate the Permit, conditionally reinstate the Permit, or modify the suspension, based upon findings related to circumstances described in this Section. The hearing officer shall also make appropriate findings regarding any confiscation.

5.34.10 Severability.

If any article, section, sentence, clause or phrase of this Chapter is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portion of this Chapter. The Council hereby declares that it would have adopted this Chapter and adopted each article, section, sentence, clause or

phrase thereof, irrespective of the fact that any one or more articles, sections, subsections, sentences, clauses or phrases be declared invalid or unconstitutional.

SECTION 2: EFFECTIVE DATE.

This Ordinance shall go into effect and be in full force and operation from and after thirty (30) days after its final passage and adoption.

APPROVED:

Drew Bessinger, Mayor	John Holt, City Clerk
* *	* *

The Foregoing Ordinance was introduced at a regular meeting of the City Council held on _____, 2019, and was adopted at a regular meeting of said Council held on _____, 2019 by the following vote, to wit:

- AYES:
- NOES:
- ABSENT:
- ABSTAIN:

DATED: 2019

CITY CLERK



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Finance Department

DATE: November 18, 2019

SUBJECT: Consider Actions related to Annexation of Territory (Annexation #59 – T6200- North West Corner of Shepherd and Sunnyside) to the City of Clovis Community Facilities District No. 2004-1 (Police and Fire Services)

- a. Consider Approval - Res. 19-____, A Resolution annexing territory (Annexation #59) (T6200-North West Corner of Shepherd and Sunnyside) to the City of Clovis Community Facilities District No. 2004-1 (Police and Fire Services) and calling a special landowner election to annex territory (Annexation #59) to City of Clovis Community Facilities District No. 2004-1 (Police and Fire Services)
- b. Consider Approval - Res. 19-____, A Resolution of the City of Clovis declaring the results of a special landowner election and directing recording of the Notice of Special Tax Lien for City of Clovis Community Facilities District No. 2004-1 (Police and Fire Services).

Staff: Gina Daniels, Assistant Finance Director

Recommendation: Approve

ATTACHMENTS:

1. Resolution of Annexation
2. Resolution Declaring Results
3. Map

CONFLICT OF INTEREST

None.

RECOMMENDATION

- That the Council hold a public hearing and approve actions related to the Annexation of Territory (Annexation #59) to Community Facilities District No. 2004-1.
- Consider Approval – Res. 19-____, A Resolution of annexation of territory (Annexation #59) to the Community Facilities District (City of Clovis Community Facilities District No. 2004-1) and to authorize the levy of Special Taxes therein and submitting Levy of Special Taxes to Qualified Electors.
- Call for Special Election and have Clerk announce the vote.
- Consider Approval – Res. 19-____, A Resolution of the City Council of the City of Clovis Declaring the Results of the Special Annexation Election; Determining Validity of Prior Proceedings and Directing Recording of the Notice of Special Tax Lien (City of Clovis Community Facilities District No. 2004-1) (Police and Fire Services).

EXECUTIVE SUMMARY

Since the condition to establish a CFD was imposed on the developments being processed by the City, developments proceeding after March 8, 2004, must petition to be annexed to the existing CFD. Several property owners have submitted petitions to annex territory to the Community Facilities District 2004-1 and to include their property within the District as provided by the conditions of approval of the development entitlements.

To initiate the process for annexation of territory to a CFD, the Council approved a Resolution of Intention-Annexation #59 (ROI) to annex territory to the CFD on October 7, 2019. The ROI set a public hearing for November 18, 2019. The action today finalizes the annexation to the CFD.

BACKGROUND

Since the condition to establish a CFD was imposed on the developments being processed by the City, developments proceeding after March 8, 2004 must petition to be annexed to the existing CFD. Several property owners have submitted petitions to annex territory to the Community Facilities District 2004-1 and to include their property within the District as provided by the conditions of approval of the development entitlements.

To initiate the process for annexation of territory to a CFD, the Council approved a Resolution of Intention-Annexation #59 (ROI) to annex territory to the CFD. The ROI set a public hearing for November 18, 2019. The Rate and Method of Apportionment (RMA) referred to in the ROI is the same as adopted by the Council with the Resolution of Formation adopted March 8, 2004. RMA provides, among other things, definitions, identifies what properties will be taxed, and the maximum special tax.

The conditions as provided in the Rate and Method of Apportionment will apply to territory annexed to the Community Facilities Districts to provide funding for public safety operations in new growth areas. The major conditions include:

1. The maximum annual tax will be \$255.33 for single family residential and \$220.46 for multi-family residential.
2. The maximum tax will be increased by the Escalator Factor, which is the greater of the change in CPI or percentage change in population.
3. There will be a review not later than five years of inception of the CFD.
4. The annual tax will not apply to commercially zoned property.
5. The tax will apply only to that property for which a building permit is issued after January 1, 2004.
6. The costs of salary and benefit increases funded by the CFD will be limited to the Escalator Factor.

The purpose of the hearing is to take public comment on the annexation of territory to the CFD and to accept protests from any interested person within the proposed boundaries. If no property owner protests are received, the Council may take the initial actions to annex the territory to the CFD by approving a resolution on the annexation to the CFD and calling a special property owner election. Once the election is called, the City Clerk tabulates the ballots. If the property owners of two-thirds (2/3) of the property within the proposed boundaries vote in favor of the CFD, then the Council can take action to direct the recording of Notice of Special Tax Lien. A unanimous vote is required to have the election the same night as approval of the resolution of annexation. The recording of the Tax Lien is contingent upon the property being annexed to the City. The property included within the CFD is being processed for annexation to the City and the Local Agency Formation Commission has approved the annexations.

After the annexation is complete and the Notice of Tax Lien has been recorded, any final maps within the CFD may be recorded and construction permits for homes can be issued. One of the conditions of the CFD is that the tax will only be collected on those properties where a building permit for a residence has been issued.

FISCAL IMPACT

If approved, residential units built within the boundaries of the CFD will be assessed annually according to the conditions of the CFD formation and those assessments will be utilized to fund police and fire services.

REASON FOR RECOMMENDATION

All requirements for the annexation of territory to the CFD have been completed and the Council may take action to annex territory to the CFD.

ACTIONS FOLLOWING APPROVAL

After approval of the resolution directing the recordation of the Notice of Tax Lien, the lien will be recorded.

Prepared by: Steve Nourian, Senior Accounting Systems Technician

Reviewed by: City Manager LS

RESOLUTION NO. 19-

A RESOLUTION OF ANNEXATION OF TERRITORY TO COMMUNITY FACILITIES DISTRICT AND TO AUTHORIZE THE LEVY OF SPECIAL TAXES THEREIN AND SUBMITTING LEVY OF SPECIAL TAXES TO QUALIFIED ELECTORS

**CITY OF CLOVIS
Community Services District No. 2004-1
(Police and Fire Services)
Annexation No. 59**

RESOLVED by the City Council (the "Council") of the City of Clovis (the "City"), County of Fresno, State of California, that:

WHEREAS, this Council, on October 7, 2019, adopted A Resolution of Intention to Annex Territory to the Community Services District and to Authorize the Levy of Special Taxes Therein (the "Resolution of Intention") stating its intention to annex the territory to the City's Community Services District 2004-1 (the "District"), pursuant to Mello Roos Community Facilities Act of 1982, Sections 53311 and following of the California Government Code (the "Act"); and

WHEREAS, a copy of the Resolution of Intention, incorporating a description and map of the proposed boundaries of the territory to be annexed to the District and stating the services to be provided and the rate and method of apportionment of the special tax to be levied within the District to pay for the services for the District, is on file with the Clerk of the Council and the provisions thereof are fully incorporated herein by this reference as if fully set forth herein; and

WHEREAS, on the date hereof, this Council held a noticed public hearing as required by the Act and the Resolution of Intention relative to the proposed annexation of territory to the District; and

WHEREAS, at such hearing all interested persons desiring to be heard on all matters pertaining to the annexation of territory to the District and the levy of said special taxes within the area proposed to be annexed were heard and a full and fair hearing was held; and

WHEREAS, prior to the time fixed for said hearing, written protests had not been filed against the proposed annexation of territory to the District by (i) 50% or more of the registered voters, or six registered voters, whichever is more, residing in the existing District, or (ii) 50% or more of the registered voters, or six registered voters, whichever is more, residing in the territory proposed to be annexed to the District, or (iii) owners of one-half or more of the area of land in the territory proposed to be annexed to the District; and

WHEREAS, Annexation Map No. 59 to the District, has been filed with the City Clerk, which map shows the territory to be annexed in these proceedings, and a copy thereof is on file with the City Clerk.

ATTACHMENT 1

NOW, THEREFORE, IT IS HEREBY ORDERED,

1. All prior proceedings taken by this Council with respect to the District and the proposed annexation of territory thereto have been duly considered and are hereby determined to be valid and in conformity with the Act, and the District has been validly established pursuant to the Act.
2. The description and map of the boundaries of the territory to be annexed to District, as described in said Annexation Map No. 59 to the District on file with the Clerk are hereby finally approved, are incorporated herein by reference, and shall be included within the boundaries of the District, and said territory is hereby ordered annexed to the District, subject to voter approval of the levy of the special taxes therein as hereinafter provided.
3. The provisions of the Resolution of Intention and Resolution No. 19-36 adopted by this Council for the District on October 7, 2019 each as heretofore adopted by this Council are by this reference incorporated herein, as if fully set forth herein.
4. Pursuant to the provisions of the Act, the proposition of the levy of the special tax within the territory to be annexed to the District shall be submitted to the voters of the area to be annexed to the District at an election called therefore as hereinafter provided.
5. This Council hereby finds that fewer than 12 persons have been registered to vote within the territory proposed to be annexed to the District for each of the 90 days preceding the close of the hearing heretofore conducted and concluded by this Council for the purposes of these annexation proceedings. Accordingly, and pursuant to the Act, this Council finds that for purposes of these proceedings the qualified electors are the landowners within the territory proposed to be annexed to the District and that the vote shall be by said landowners, each having one vote for each acre or portion thereof such landowner owns in the territory proposed to be annexed to the District.
6. Pursuant the Act, the election shall be conducted by mail ballot under Section 4000 of the California Elections Code. This Council hereby determines that paragraphs (a), (b), (c)(1), and (c)(3) of said Section 4000 are applicable to this election.
7. The Council hereby calls a special election to consider the measure described in the ballot referred to below, which election shall be held on November 18, 2019, in the regular meeting place of this Council, City Council Chambers, City Hall, 1033 5th Street, Clovis, California. This Council hereby further finds that the provision of the Act requiring a minimum of 90 days to elapse before said election is for the protection of voters and that the voters have waived such requirement and the date for the election herein specified is established accordingly.
8. The City Clerk is hereby appointed as the election official to conduct the election and shall cause to be provided to each landowner in the territory to be annexed to the District. The City Clerk shall accept the ballots of the qualified electors received prior to 5:00 o'clock p.m. on November 18, 2019, whether received by mail or by personal delivery.

* * * * *

The foregoing resolution was introduced and adopted at a regular meeting of the City Council of the City of Clovis held on November 18, 2019 by the following vote, to wit.

AYES:

NOES:

ABSENT:

ABSTAIN:

DATED: November 18, 2019

Mayor

City Clerk

RESOLUTION NO. 19-___

**A RESOLUTION DECLARING RESULTS OF SPECIAL ANNEXATION ELECTION,
DETERMINING VALIDITY OF PRIOR PROCEEDINGS, AND DIRECTING
RECORDING OF AMENDED NOTICE OF SPECIAL TAX LIEN**

**CITY OF CLOVIS
Community Facilities District No. 2004-1
(Police and Fire Services)
Annexation No. 59**

RESOLVED by the City Council (the "Council") of the City of Clovis (the "City"), County of Fresno, State of California, that:

WHEREAS, in proceedings heretofore conducted by the Council pursuant to the Mello-Roos Community Facilities Act of 1982, as amended (the "Act"), this Council has heretofore adopted a resolution calling a special election of the qualified landowner electors in the territory of land proposed to be annexed to Community Facilities District No. 2004-1 (Police and Fire Services) (the "CFD"); and

WHEREAS, pursuant to the terms of the resolution which is hereby incorporated herein by this reference, the special election has been held and the City Clerk has filed a Canvass of Votes Cast in Special Election, a copy of which is attached hereto as Attachment A of Attachment 2; and

WHEREAS, this Council has reviewed the Canvass and hereby approves it.

NOW, THEREFORE, IT IS HEREBY ORDERED as follows:

1. The issue presented at the special election was the levy of a special tax within the territory annexed to the CFD, to be levied in accordance with the formula heretofore approved by this Council as described in Resolution No. 19-___, a Resolution of Annexation of Territory to Community Facilities District, authorizing the Levy of a Special Tax and Submitting Levy of Tax to Qualified Electors, adopted November 18, 2019.
2. Pursuant to the Canvass on file with the City Clerk, the issue presented at the special election was approved by the landowners of the territory annexed to the CFD by more than two-thirds (2/3) of the landowners voting at the special election.
3. Pursuant to the voter approval, said annexed territory to the CFD is hereby declared to be fully annexed to and part of the CFD and this Council may levy special taxes therein as heretofore provided in these proceedings.

ATTACHMENT 2

4. It is hereby found that all prior proceedings and actions taken by this Council pursuant to the CFD and the territory annexed thereto were valid and in conformity with the Act.

Within 15 days of the date hereof, the City Clerk shall execute and cause to be recorded in the office of the County Recorder of the County of Fresno, an amendment to the Notice of Special Tax Lien as required by Section 3117.5 of the California Streets and Highways Code.

* * * * *

The foregoing resolution was introduced and adopted at a regular meeting of the City Council of the City of Clovis held on November 18, 2019 by the following vote, to wit.

AYES:

NOES:

ABSENT:

ABSTAIN:

DATED: November 18, 2019

Mayor

City Clerk

CITY OF CLOVIS
Community Facilities District No. 2004-1
(Police and Fire Services)
Annexation No. 59

CANVASS AND STATEMENT OF RESULT OF ELECTION

I hereby certify that on this date, I canvassed the returns of the election held on this date, in the territory annexed to Community Facilities District No. 2004-1 (Police and Fire Services) of the City of Clovis which election is designated as the Special Tax Annexation Election, and the total number of ballots cast in the territory to be annexed and the total number of votes cast for and against the measure are as follows and the totals as shown for and against the measure are full, true and correct:

	Qualified Landowner Votes	Votes Cast	YES	NO
City of Clovis Community Facilities District No. 2004-1 (Police and Fire Services), Annexation No. 59 Special Tax Annexation Election, November 18, 2019.				

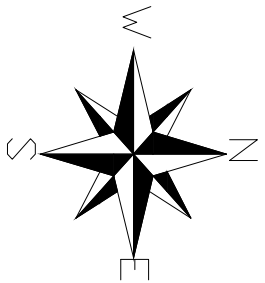
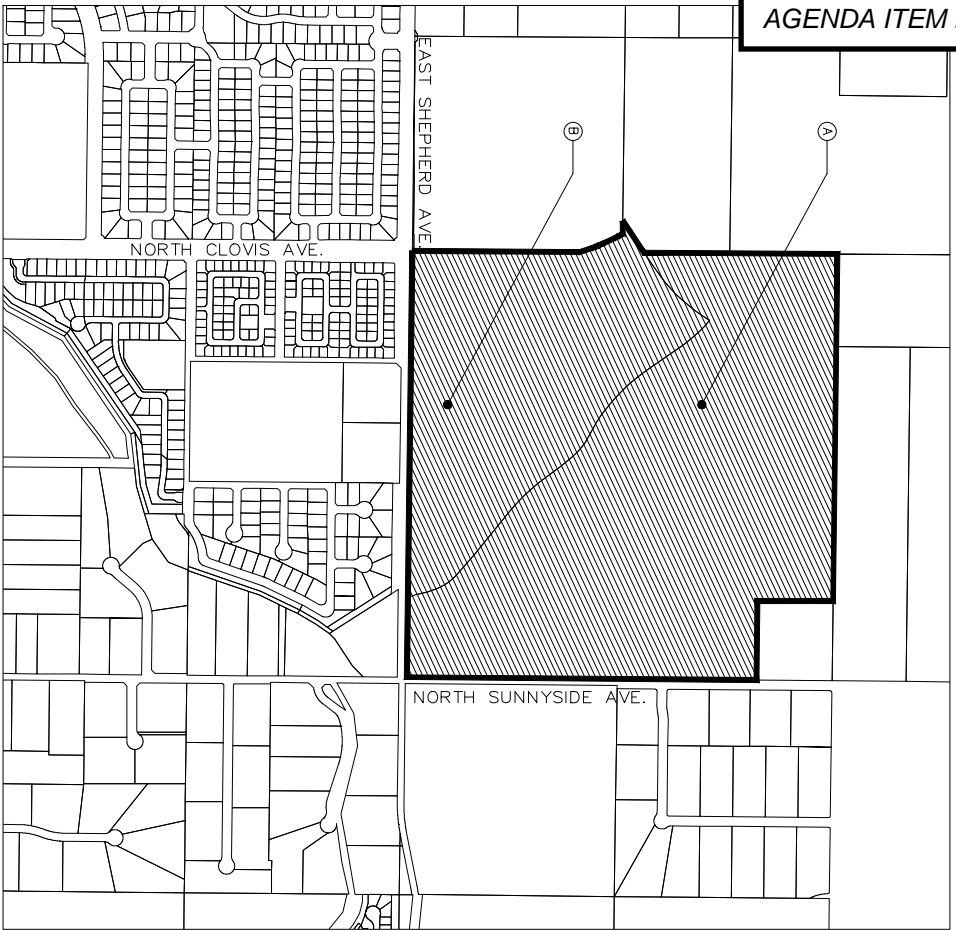
BALLOT MEASURE: Shall the City of Clovis, by and for its Community Facilities District No. 2004-1 (Police and Fire Services) (the "CFD"), be authorized to levy special taxes within the territory annexed to the CFD pursuant to and as described in Resolution No. 19-___ of the City of Clovis, adopted by its Council on November 18, 2019?

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND this ____ day of _____ 2019.

CITY OF CLOVIS

By: _____
City Clerk

ATTACHMENT A OF ATTACHMENT 2



LEGEND

PARCEL

ANNEXATION BOUNDARY

(A) APN 556-05-285

(B) APN 556-05-275

FILED IN THE OFFICE OF THE CITY CLERK THIS _____ DAY OF _____ 2019, I HEREBY CERTIFY THAT THE WITHIN MAP SHOWING PROPOSED BOUNDARIES OF ANNEXATION NO. 59 TO COMMUNITY FACILITIES DISTRICT NO. 2004-1 (POLICE AND FIRE SERVICES), CITY OF CLOVIS, COUNTY OF FRESNO, STATE OF CALIFORNIA, WAS APPROVED BY THE CITY COUNCIL OF THE CITY OF CLOVIS AT A REGULAR MEETING THEREOF, HELD ON THE 18TH DAY OF _____ NOVEMBER, 2019, BY ITS RESOLUTION NO. 19-_____.

JOHN HOLT
CITY CLERK
CITY OF CLOVIS

FILED THIS _____ DAY OF _____, 2019, AT THE HOUR OF _____ O'CLOCK _____ M. IN THE BOOK _____ PAGE _____ OF MAPS OF ASSESSMENT AND COMMUNITY FACILITIES DISTRICTS AND AS INSTRUMENT NO. _____ IN THE OFFICE OF THE COUNTY RECORDER IN THE COUNTY OF FRESNO, STATE OF CALIFORNIA.

PAUL A. DICTOS, C.P.A. BY: DEPUTY COUNTY RECORDER
COUNTY ASSESSOR-RECORDER
COUNTY OF FRESNO
STATE OF CALIFORNIA

REFERENCE IS MADE TO THAT BOUNDARY MAP OF COMMUNITY FACILITIES DISTRICT NO. 2004-1 (POLICE AND FIRE SERVICES) OF THE CITY OF CLOVIS RECORDED WITH THE FRESNO COUNTY RECORDER'S OFFICE ON FEBRUARY 19, 2004, IN BOOK 40 OF MAPS OF ASSESSMENT AND COMMUNITY FACILITIES DISTRICTS, PAGE 57.

THE LINES AND DIMENSIONS OF EACH LOT OR PARCEL SHOWN ON THIS DIAGRAM SHALL BE THOSE LINES AND DIMENSIONS AS SHOWN ON THE FRESNO COUNTY ASSESSORS MAPS FOR THOSE PARCELS LISTED.

THE FRESNO COUNTY ASSESSORS MAPS SHALL GOVERN FOR ALL DETAILS CONCERNING THE LINES AND DIMENSIONS OF SUCH LOTS OF PARCELS.

ANNEXATION MAP NO. 59

COMMUNITY FACILITIES DISTRICT NO. 2004-1
(POLICE AND FIRE SERVICES)

0 250' 500'
SCALE : 1" = 500'

CITY OF CLOVIS
COUNTY OF FRESNO
STATE OF CALIFORNIA



CITY of CLOVIS

REPORT TO THE CITY COUNCIL

- TO: Mayor and City Council
- FROM: Planning and Development Services
- DATE: November 18, 2019
- SUBJECT: Consider items associated with approximately 42.39 acres of property within area bounded by Teague Avenue to the south, Powers Avenue to the north, between Temperance and DeWolf Avenues. John & Patricia Baldwin, Robert & Deborah Bracich, Vincent & Diane Genco, Vong & Mindy Her, James & Leane McKeane, Janet Nicholson, Edward & Roxanna Stevens, James White, Delores Whitford, Valley Coastal Development LLC., owners; Valley Coastal Development LLC. - Drew Phelps, applicant.
- a. **Consider Approval - Res. 19-____**, A request to adopt an environmental finding of a Mitigated Negative Declaration for General Plan Amendment GPA2019-004, Rezone R2019-005, Rezone R2019-006, Vesting Tentative Tract Map TM6264, and Vesting Tentative Tract Map TM6239.
 - b. **Consider Approval - Res. 19-____, GPA2019-004**, A request to amend the General Plan and Herndon Shepherd Specific Plan to re-designate approximately 42.39 acres of property from Very Low Density Residential (0.6 to 2.0 DU/Ac) to Medium Density Residential (4.1 to 7.0 DU/Ac) classification.
 - c. **Consider Introduction - Ord. 19-____, R2019-005**, A request to approve a rezone of approximately 5 acres of property from the R-1-AH (Single family Residential – 18,000 Sq. Ft.) to the R-1-PRD (Single Family Planned Residential Development) Zone District.
 - d. **Consider Introduction - Ord. 19-____, R2019-006**, A request to approve a rezone of approximately 37.39 acres of property from the R-1-AH (Single family Residential – 18,000 Sq. Ft.) to the R-1-PRD (Single Family Planned Residential Development) Zone District.
 - e. **Consider Approval - Res. 19-____, TM6264**, An appeal by Valley Coastal Development of the Planning Commission's denial of a vesting tentative tract map for a 36-lot single family planned residential development on approximately 5 acres of property.

- f. **Consider Approval - Res. 19-____, TM6239**, A request to approve a vesting tentative tract map for a 169-lot single family planned residential development on approximately 37.39 acres of property.

Staff: Lily Cha, Assistant Planner

Recommendation: Approve

ATTACHMENTS:

1. Conditions of Approval
2. Draft Resolution, Initial Study Mitigated Negative Declaration
3. Draft Resolution, GPA2019-004
4. Draft Ordinance, R2019-005
5. Draft Ordinance, R2019-006
6. Draft Resolution, TM6264
7. Draft Resolution, TM6239
8. Vesting Tentative Tract Map, TM6264
9. Vesting Tentative Tract Map, TM6239
10. Letter of Justification
11. Correspondence from Commenting Agencies
12. Correspondence from Public
13. Initial Study Mitigated Negative Declaration (IS/MND)
14. Planning Commission Minutes

CONFLICT OF INTEREST

None

RECOMMENDATION

Planning Commission and staff recommend that the City Council:

- Approve an environmental finding of a Mitigated Negative Declaration for General Plan Amendment GPA2019-004, Rezone 2019-005, Rezone 2019-006, Vesting Tentative Tract Map TM6264, Vesting Tentative Tract Map TM6239; and
- Approve GPA2019-004, subject to the conditions of approval listed as Attachment “1;” and
- Approve Rezone R2019-005, subject to the conditions of approval listed as Attachment “1-A;” and
- Approve Rezone R2019-006, subject to the conditions of approval listed as Attachment “1-B;” and
- Approve Vesting Tentative Tract Map TM6239, subject to the conditions of approval listed as Attachment “1-D.”

Staff recommend that the City Council:

- Approve an appeal by Valley Coastal Development of the Planning Commission’s denial of Vesting Tentative Tract Map TM6264, and approve the Map subject to the conditions of approval listed as Attachment “1-C;”

EXECUTIVE SUMMARY

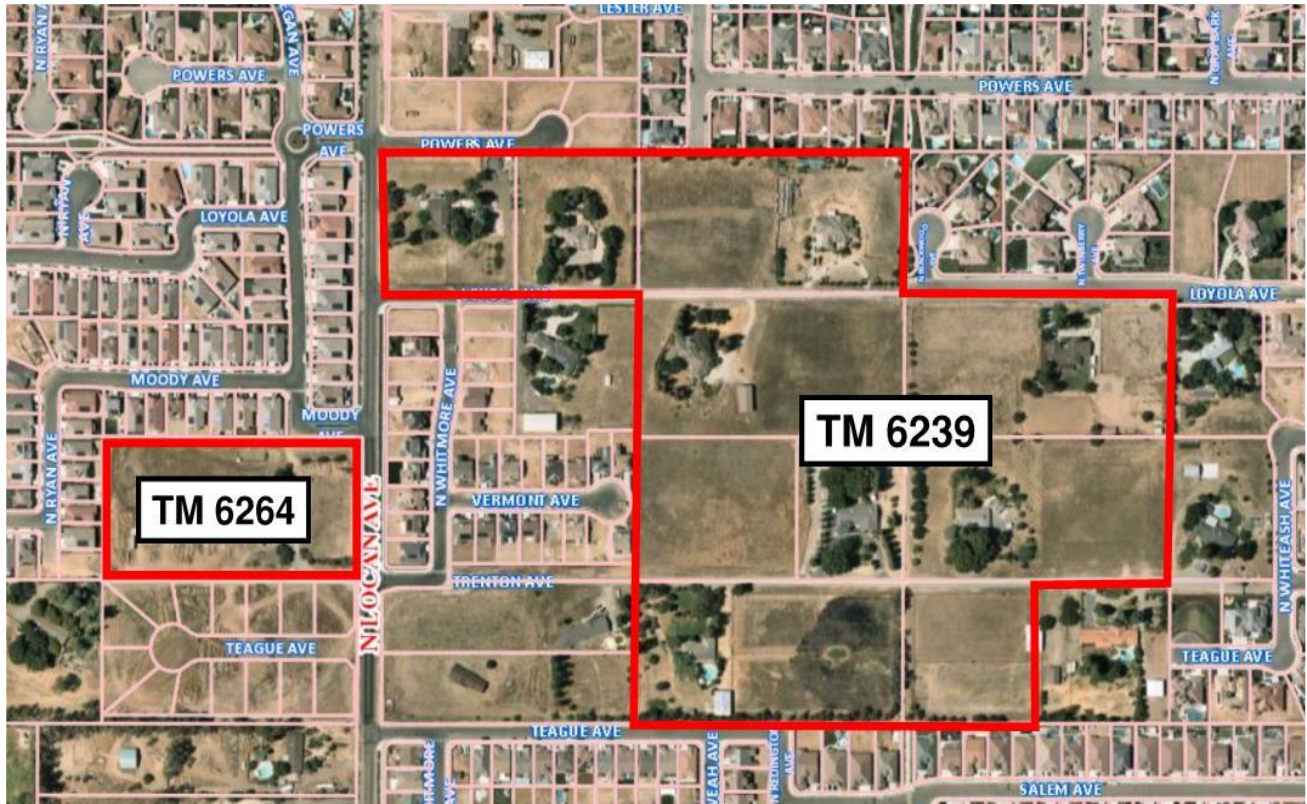
The applicant is proposing two single-family planned residential developments on approximately 42.39 acres of property as shown in Figure 1. A 169-lot development (Vesting Tentative Tract Map TM6239) is proposed on approximately 37.39 acres of property located east of Locan Avenue between Powers and Teague Avenues, and a gated 36-lot development (Vesting Tentative Tract Map TM6264) is proposed on approximately 5 acres of property located west of Locan Avenue between Moody and Teague Avenues.

The Project involves a general plan amendment request to re-designate the subject sites from the Very Low Density Residential (0.6 to 2.0 DU/Ac), to the Medium Density Residential (4.1 to 7.0 DU/Ac) designation, a rezone on each of the project sites from the R-1-AH (Single-Family Residential 18,000 sq. ft.) Zone District to the R-1-PRD (Single-Family Planned Residential Development) Zone District, and approval of vesting tentative tract maps for a 169-lot single-family planned development and a 36-lot gated, single-family planned development.

BACKGROUND

- General Plan Designation: Very Low Density Residential
- Specific Plan Designation: Herndon-Shepherd Specific Plan
- Existing Zoning: R-1-AH
- Lot Size: 42.39 acres
- Current Land Use: Rural Residential
- Adjacent Land Uses:
 - North: Low Density Residential single-family subdivision
 - South: Low Density Residential single-family subdivision
Medium Density Residential single-family subdivision
 - East: Low Density Residential single-family subdivision
 - West: Very Low Density Residential single-family subdivision
- Previous Entitlements: GPA2007-08, R2006-07, R2006-05

FIGURE 1
Project Location



PROPOSAL AND ANALYSIS

The applicant is requesting the approval of General Plan Amendment GPA2019-004, Rezone R2019-005, Rezone R2019-006, Vesting Tentative Tract Map TM6264, and Vesting Tentative Tract Map TM6239. The development request entails two separate subdivisions comprised of a 169-lot single-family planned residential subdivision located east of Locan Avenue and a 36-lot single-family planned residential subdivision located west of Locan Avenue. The general plan amendment request encompass the two project sites as shown in **Figure 1**. Rezone R2019-005 and TM6264 are associated with the proposed 36-lot single-family planned residential development project. Rezone R2019-006 and TM6239 corresponds with the proposed 169-lot single-family planned residential development project. The requested entitlements and their associated projects are further elaborated in this report.

General Plan Amendment

The existing General Plan Land Use Diagram and the Herndon Shepherd Specific Plan currently designate the Project areas as Very Low Density Residential (0.6 to 2.0 DU/Ac). It is the applicant’s request to amend the General Plan Land Use Diagram and the Herndon Shepherd Specific Plan from the current designation to the Medium Density Residential (4.1 to 7.0 DU/Ac) designation. As a part of the general plan amendment request, the applicant provided a letter of justification included as **Attachment 10**.

Under the current Very Low Density land use designation, the combined Project areas would be able to accommodate 84 single-family residential lots. The applicant's request to re-designate to Medium Density Residential could potentially provide an aggregate Project area maximum of 296 single-family residential lots. However, the applicant is proposing a total of 205 single-family residential lots between both developments. With approximately 42.39 acres in total, the density of the combined Projects is approximately 4.8 dwelling units per acre, which would be at the lower end of the proposed Medium Density Residential range of 4.1 to 7.0 dwelling units per acre.

The Project sites are among the last of the few remaining undeveloped properties within the area. Properties surrounding the Project areas have been developed with single-family residential subdivisions comparable to the proposal. Furthermore, several of the existing developments were approved in conjunction with like general plan amendments. For instance, the re-designation of properties south of the proposed Projects allowed for the development of TM6128 which is a medium density residential development. Other general plan amendment requests in the area range from Low Density Residential to the Medium Density Residential designations.

Although the applicant is requesting to deviate from the current General Plan designation, the Projects being proposed are compatible with development in the immediate vicinity.

Zoning

The applicant is requesting two separate rezone actions associated with each of the proposed tentative tract maps. Properties within both Project areas are currently Zoned R-1-AH (Single-Family Residential 18,000 minimum), which is associated with large lot single-family rural uses. The rezone request is to reclassify the Project areas to the R-1-PRD (Single-Family Planned Residential Development) Zone District that allow for single-family small lot uses. The R-1-PRD Zone District is consistent with the Medium Density land use designation proposed in conjunction with the general plan amendment.

Planned residential developments require approval of a planned residential permit. This process may be accomplished through a Rezone action to the R-1-PRD Zone District. Planned developments are intended to provide developers with flexibility, allowing for the modification of development standards such as lot coverage, building height, setbacks, fencing and wall height, landscaping, open space and street layout. The return is efficient use of land with incorporated enhanced amenities such as additional open space, or improvements to existing public facilities. The proposed development standards, amenities, and parking will be further discussed within this report with each of the proposed tentative tract maps.

In addition to the entitlements requested, a subsequent residential site plan review to memorialize the architecture, elevations, landscaping, opens spaces, and amenities will be required with Project approval.

TM6264

Vesting Tentative Tract Map TM6264 is a 36-lot single-family planned residential subdivision proposed on approximately 5 acres of property on the west side of Locan Avenue. The development is gated and offers private streets with sidewalks on one side. **Attachment 8** exhibits the proposed layout of TM6264.

Planned Residential Development Standards

Below are the requested development standards the applicant has provided for TM6264:

TM6264 Planned Residential Development Standards	
Minimum Lot Area	2,470 sq. ft.
Minimum Lot Width	32 feet
Minimum Lot Depth	65 feet
Maximum Lot Coverage	60%
Maximum Building Height	35 ft./ 2-1/2 stories
Minimum Front Setback	6 feet
Minimum Side Setback	4 feet
Minimum Rear Yard Setback:	8 feet

Amenities

A neighborhood pocket park is proposed within TM6264. As shown in **Attachment 8**, the park is located near the entry of the subdivision at the southwest corner of “C” Drive and “E” Drive and between lots 23 and 36. The park is approximately 4,916 square feet and will consist of various amenities that will be further refined through the residential site plan review process with the approval of this Project. A community building including a gym and various outdoor furniture are planned within the park area. The Project also proposes increased landscaping strips along the stretch of sidewalk on the north that also serves as a buffer between the Project and the residences to the north.

Parking

Planned residential developments require two covered parking areas for each of the dwelling units. Although the applicant has not submitted plans for the residential site plan review, the Project will be required to provide a 2-car covered parking at a minimum size of 20 feet by 22 feet (interior dimension) for each of the single-family homes. Additional guest parking is satisfied by on street parking areas.

TM6239

Vesting Tentative Tract Map TM6239 is a 169-lot single-family planned residential subdivision proposed on approximately 37.39 acres of properties on the east side of Locan Avenue. The development is not gated and provides public streets with sidewalks on both sides of the streets. **Attachment 9** represents the proposed layout of TM6239.

Planned Residential Development Standards

Below are the development standards the applicant has provided for TM6239:

TM6239 Planned Residential Development Standards	
Minimum Lot Area	5,000 sq. ft.
Minimum Lot Width	50 ft. / 38 ft. (Cul-de-sac)
Minimum Lot Depth	98 ft.
Maximum Lot Coverage	60%
Maximum Building Height	35 ft./ 2-1/2 stories
Minimum Front Setback	10 ft.
Minimum Side Setback	4 ft. (interior) / 8 ft. (street side) / 10 ft. (reverse corner) / 5 ft. (key side yard)
Minimum Rear Yard Setback:	7 ft.

As provided in **Attachment 9**, the following lots are identified as reverse corner lots: 60, 74, 75, 83, 87, 108, 121, 124, 128, and 169.

Amenities

As required by the Circulation Element of the City’s General Plan, the applicant will be installing a portion of the trail system that connects the Lineal Park to the north with the subdivision to the south, thus contributing pedestrian connectivity to the park for neighboring developments. The trail will provide a 10-foot wide paved path with landscaping strips on both sides that vary in width throughout the Project site. Additionally, a large excess portion of “Outlot B” will be dedicated as open space area.

The General Plan also requires an east-west trail north of the Project. The applicant proposes to relocate the trail system approximately 1000 feet to the south, parallel to Trenton Avenue. The trail will connect with the north-south trail system leading to the Lineal Park and establishing added porosity through the subdivision. This trail is intended to provide an enhanced pedestrian access from the area of Locan Avenue to the Lineal Park trail system. Initially, the configuration of the trail was proposed with a 20-foot wide right-of-way inclusive of a 6-foot wide paved path with 8-feet of landscaping on one side and 6-feet of landscaping on the other side. After meeting with staff, modifications were agreed upon to provide an 8-foot wide paved path with 6-feet of landscaping on each side within the 20-foot trail right-of-way. Engineering conditions as presented in **Attachment 1** have been modified to include

the agreed upon configuration of the trail. The relocation of the trail from the intended area as indicated in the General Plan has been reviewed and can be supported. Should the Council approve the Projects, the applicant shall continue to work with the Planning and Development Services Department on the final configuration of the trail system to assure a safe and usable pedestrian experience. Modifications and additions may include enhanced street crossings and additional width of paved paths near Locan Avenue. With this, potential minor modifications may be required to the conceptual layout of TM6239 shown in **Attachment 9**.

Both trail systems will be improved with landscaping and other details such as lighting and benches that will be further defined through the residential site plan review process with the approval of this Project. The City will also work with the applicant on determining maintenance responsibilities for the trail systems.

Parking

As previously stated, the parking requirements for planned residential developments require 2-car covered garage or carport for each of the dwelling units. Although the applicant has not submitted plans for the residential site plan review, the Project will be required to provide a 2-car garage at a minimum size of 20 feet by 22 feet (interior dimension) for each single-family home. Additional guest parking is available in the form of on-street parking.

Traffic and Circulation

TM6264

Vesting Tentative Tract Map TM6264 proposes a network of private streets within the development with one point of access along Locan Avenue. For safety response, a 20-foot wide emergency vehicle access (EVA) is proposed at the north end of Drive “E” onto Moody Avenue. All interior streets, Drives “A” through “E,” are 36-feet wide from curb to curb and allow for parking on both sides of the streets. A 5-foot sidewalk is proposed along the outer stretch of the streets. The sidewalk tapers down to 4-feet in width along the northern stretch of property line. This allows the developer opportunity to provide wider landscaping strips for the aesthetic enhancement of this area of the development.

As aforementioned, the development is gated and will provide access from Locan Avenue. The configuration of the gated entry has been reviewed and satisfies Engineering Division requirements. The gated entry and EVA must also adhere to the standards of the Fire Department as listed in the conditions of approval in **Attachment 1**.

TM6239

The street network in Vesting Tentative Tract Map TM6239 are proposed public streets. Access to the development is provided via Locan Avenue at Loyola and Trenton Avenues, as well as from DeWolf Avenue through Loyola Avenue and the existing residential subdivision to the east. All interior streets of the Project meet minimum street standards and improvement requirements of the City’s Development Code, with street widths ranging from a minimum 36-feet to 40-feet from curb to curb. Both sides of the streets provide 5-foot sidewalks with a 2-foot park strip. Streets that are less than 40-feet wide must meet specific

standards. The proposed 36-foot wide streets must not serve more than 400 average daily trips (ADT) or 40 homes, must be 400 feet or less from a 40-foot street if no secondary access point is available, and must be within 1000 feet or less from a 40-foot street if secondary access points are available. The 36-foot streets proposed within the Project all meet the City Street standards, including Vermont, Blackwood, Reddington, Moody, Traverse, the cul-de-sac street portion Loyola, and the cul-de-sac street portion of N. Kaweah. Vehicle parking can be accommodated on both sides of all interior streets.

There are two 60-foot wide access easements (Rabioli and Cook Avenues) that currently provide vehicle access to the properties via a privately maintained drive. Upon development of TM6239, these private drives will not be necessary. Abandonment of the easements will be necessary to accommodate lots that are proposed within the easement area. A condition of approval has been added to address this issue.

Water and Sewer Services

The City Engineering Division studied the water and sewer impacts of the Project and concluded that the proposed amendment can be accommodated by the existing and planned sewer and water lines.

Community Facilities District

The Projects will be required to contribute to the Community Facilities District. Community Facilities Districts (CFD's) are a means of providing additional funding for the provisions of public facilities and services for public safety and other important municipal services in newly developing areas of the community where the city would not otherwise be able to afford to continue to provide an adequate level of service as it continues to grow.

A condition of approval has been added to the tentative tract maps requiring participation in the CFD.

Regional Housing Needs and Assessment

In accordance with state housing law, the City is required to demonstrate that it has enough property designated for residential development to accommodate housing demand for all income categories. This is referred as the Regional Housing Needs Allocation (RHNA). The City has accomplished this, in part, by creating a zoning overlay program (RHN Overlay) which specifies that properties meeting certain criteria can be developed with high density residential uses, beginning at 35 units per acre. The eligible properties are identified as "Housing Element Sites" on an inventory approved by the City Council in 2018. As indicated previously, one of the parcels comprising the Project site is Housing Element Site #8 (APN: 558-020-12) which is approximately 3-acres in size.

Per City policy, if development below the target density is proposed on a Housing Element Site, a written finding is required to determine if the remaining Sites would be sufficient to accommodate the City's RHNA. If remaining sites are not adequate, new parcels must be designated. The Site inventory can change (parcels can be added or removed), but the inventory must always be capable of accommodating the minimum number of units defined

in the City's RHNA. For this discussion, the RHNA includes a total of 4,209 dwelling units that must be accommodated at densities of at least 20 units per acre.

In 2018, the City Council adopted two programs to accommodate these units, including the aforementioned zoning overlay program, and a separate program allowing residential development on properties zoned for public facilities. Together, these two programs demonstrated the ability to accommodate up to 5,156 units, which exceeds the RHNA by 947 units. This "surplus" of 947 units was intentional, allowing flexibility in the event that some sites were not developed with high density residential uses. Subsequent to the City's action to approve the two housing programs, a private developer was successful in obtaining approval of a rezoning and development application (Rezone R2018-11, CUP2018-13, and SPR2018-25) for a new high density residential project on 7.5 acres, with a yield of 158 units. This 7.5 acre site, and the 158 new units, may be added to the inventory, increasing the surplus to 1,105 units.

At 35 dwelling units per acre (DU/Ac), Housing Element Site #8 was projected to accommodate 105 multi-family units. Therefore, in order to allow the Project to move forward, the City must demonstrate the ability for the remaining Housing Element Sites to absorb the "loss". Based on the surplus described above, the removal of Housing Element Site #8 from the inventory and the loss of 105 units will not limit the City's ability to accommodate its RHNA requirement. The designation of replacement parcels is not required.

Review and Comments by Agencies

The Project was distributed to all City Divisions as well as outside agencies, including Cal Trans, Clovis Unified School District, Fresno Irrigation District, Fresno Metropolitan Flood Control District, AT&T, PG&E, San Joaquin Valley Air Pollution Control District, and the State Department of Fish and Wildlife. Comments received are included in **Attachment 10** only if the agency has provided concerns, conditions, or mitigation measures. Routine responses and comment letters are placed in the administrative record and provided to the applicant for their records.

Clovis Unified School District Comments

Clovis Unified School District (CUSD) provided letters dated September 23, 2019, reflecting the district's concern with the increase in density and its ability to accommodate future students resulting from the aggregate Projects. Currently the area is served by Dry Creek Elementary, Bud Rank Elementary, Alta Sierra Intermediate, Granite Ridge Intermediate, Buchanan High School, and Clovis North High School. In addition, the school district also provided the school facility fee collected from residential developments. The CUSD letter is included in **Attachment 11**.

Planning Commission Comments

The proposal was considered by the Planning Commission on Thursday, October 24, 2019. The following are the vote counts of the Planning Commission related to each entitlement request:

Entitlement:	Planning Commission Vote:
Adoption of Mitigated Negative Declaration	5-0 (approved)
Request for approval of GPA2019-004	4-1 (approved)
Request for approval of R2019-005	4-1 (approved)
Request for approval of R2019-006	4-1 (approved)
Request for approval of TM6264	1-4 (denied)
Request for approval of TM6239	4-1 (approved)

TM6264

The Planning Commission’s action regarding TM6264 resulted in the denial of the project. After a motion was made and seconded to approve the map as presented, the motion failed. A motion to reconsider the item did not receive a second. Leading up to the action, the focal points of the Planning Commission’s deliberation had been on the applicant’s proposal to place sidewalk on only one side of the internal street, and to a lesser extent the proposal to allow 3’ minimum side setbacks. The Applicant has appealed the Planning Commission’s denial and requests that the City Council approve the Map.

Several Commission members expressed concerns regarding the absence of sidewalks on one side of the interior streets of TM6264. Comments are related to the limitations of walkability and potential safety concerns of residences walking in the streets. Other concerns that were discussed related to TM6264 include the limited side yard setback of 3 feet proposed on one side of the residence. Several Commissioners felt that the proposed setback was not sufficient for storing trash receptacles and may hinder safety response.

In response to Planning Commission concerns, the applicant revised the proposed 3-foot side yard setback to 4 feet. There have been several subdivisions approved in the City with reduced side yard setbacks. Regarding the concerns of walkability, the applicant felt that the scale and the gated element of the Project significantly reduces any safety concerns of having sidewalks on only one side of the interior streets. There are several Planned Residential Subdivisions in the City that were approved with no sidewalks. Some examples include TM5539 and TM6026 located west of the Project site in Harlan Ranch.

TM6239

The Planning Commission approved TM6239 as the Project was initially proposed. However, several neighbors near the northeast area of the Project expressed concerns regarding potential incompatibility between their existing larger-lot development and the proposed smaller lot project. They were also concerned with the increase in traffic on Loyola Avenue generated from this project, fearing for the safety of their children that play within their cul-de-sacs.

Although the Project was recommended for approval to the City Council by the Planning Commission as submitted, the applicant made changes to accommodate the concerns of the neighbors. A single lot was removed from the tract map to widen the lots facing onto Loyola Avenue, directly across from the affected neighbors. The lots in this area initially ranged from 60 to 67 feet wide. The applicant's revision increased the lot widths along revised lots 116-121, now ranging from 77 to 82 feet in width. This area is the most northeastern area of the Project. The applicant also widened lot 54 at the southeast corner of Moody and Blackwood Avenue from 58 feet to 65 feet.

Public Outreach and Comments

Amendments to the General Plan require that the developer conduct two neighborhood meetings, one prior to the Planning Commission hearing and the second prior to the City Council hearing. The applicant held the first neighborhood meeting on November 28, 2018 prior to submittal of the application. The meeting was held at Bud Rank Elementary School, where 13 neighbors were in attendance. Although City staff was not in attendance during this meeting, a sign in sheet, agenda, and summary by the applicant was provided to staff. Staff did receive a letter of concern from a collective of neighbors near the most northeastern part of the Project TM6239. The letter reflected the neighbors' concerns of the impact on the integrity of their neighborhood and the safety of their children from the Project. The letter is incorporated into **Attachment 12**.

Following the Planning Commission hearing, a second neighborhood meeting was held by the applicant on October 28, 2019 with several neighbors and City staff in attendance. The concerns of neighbors and potential modifications were discussed during the meeting.

Additionally, a public notice was sent to area residents within 800 feet of the property boundaries. Staff has not received additional comments or concerns from the public upon finalization of this report.

California Environmental Quality Act (CEQA)

The City of Clovis has completed an environmental review of the proposed project as required by the State of California. The review includes an assessment of the Project's impact on natural and manmade environments. The City Planner has recommended approval of a Mitigated Negative Declaration, a written statement announcing that the Projects will not have a significant effect on the environment. Recommendation of the proposed Mitigated Negative Declaration does not necessarily mean this project will be approved.

The City published the notice of this public hearing in the Business Journal on Wednesday, November 6, 2019.

Consistency with General Plan and Policies

Staff has evaluated the Project in light of the General Plan Land Use goals and policies. The following goals and policies reflect Clovis’ desire to maintain Clovis’ tradition of responsible planning and well managed growth to preserve the quality of life in existing neighborhoods and ensure the development of new neighborhoods with an equal quality of life. The goals and policies seek to foster more compact development patterns that can reduce the number, length, and duration of auto trips.

Policy 3.5 **Fiscal Sustainability.** The City shall require establishment of community facility districts, lighting and landscaping maintenance districts, special districts, and other special funding for financing tools in conjunction with or as a condition of development, building or permit approval, or annexation or sphere of influence amendments when necessary to ensure that new development is fiscally neutral or beneficial.

Goal 6: A city that grows and develops in a manner that implements its vision, sustains the integrity of its guiding principles, and requires few and infrequent amendments to the General Plan.

Policy 6.1: **Amendment criteria.** The City Council may approve amendments to the General Plan when the City Council is satisfied that the following conditions are met:

- The proposed change is and will be fiscally neutral or positive.
- The proposed change can be adequately served by public facilities and would not negatively impact service on existing development or the ability to service future development.

Policy 6.2 **Smart growth.** The City is committed to the following smart growth goals.

- Create a range of housing opportunities and choices.
- Create walkable neighborhoods.
- Foster distinctive, attractive communities with a strong sense of place.
- Mix land uses.
- Strengthen and direct development toward existing communities.
- Take advantage of compact building design.

FISCAL IMPACT

None

REASON FOR RECOMMENDATION

Approval of the Projects will help facilitate the development of a large portion of the few remaining undeveloped properties in the area. The Projects are compatible with the surrounding single-family residential subdivisions and would provide additional amenities for

neighborhoods in the vicinity. The Projects do not substantially impact sewer, water, and other public services and will contribute to their proportionate share of infrastructure. Therefore, staff recommends that the City Council approve GPA2019-004, R2019-005, R2019-006, TM6239, and grant the applicant's appeal and approve TM6264, subject to the conditions of approval listed as **Attachment 1**.

The findings to consider when making a decision on a general plan amendment application include:

1. The proposed amendment is internally consistent with the goals, policies, and actions of the General Plan; and
2. The proposed amendment would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City; and
3. If applicable, the parcel is physically suitable (including absence of physical constraints, access, compatibility with adjoining land uses, and provision of utilities) for the requested/anticipated project.
4. There is a compelling reason for the amendment.

The findings to consider when making a decision on a rezone application include:

1. The removal of Housing Element Site #8 from the inventory and the loss of 105 units will not limit the City's ability to accommodate its RHNA requirement. The designation of replacement parcels is not required.
2. The proposed amendment is consistent with the goals, policies, and actions of the General Plan; and
3. The proposed amendment would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City.
4. The parcel is physically suitable (including absence of physical constraints, access, compatibility with adjoining land uses, and provision of utilities) for the requested zoning designations and anticipated land uses/projects. (§ 2, Ord. 14-13, eff. October 8, 2014)

The findings to consider when making a decision on a tentative subdivision map application are as follows:

1. The proposed map, subdivision design, and improvements are consistent with the General Plan and any applicable specific plan;
2. The site is physically suitable for the type and proposed density of development;
3. The design of the subdivision and the proposed improvements are not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat;
4. The design of the subdivision or type of improvements is not likely to cause serious public health or safety problems;
5. 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. This finding may also be made if the review

- authority finds that alternate easements for access or use will be provided, and that they will be substantially equivalent to ones previously acquired by the public. This finding shall apply only to easements of record, or to easements established by judgment of a court of competent jurisdiction, and no authority is hereby granted to the review authority to determine that the public at large has acquired easements of access through or use of property within the proposed subdivision;
6. The discharge of sewage from the proposed subdivision into the community sewer system will not result in violation of existing requirements prescribed by the California Regional Water Quality Control Board;
 7. The design of the subdivision provides, to the extent feasible, passive or natural heating and cooling opportunities; and
 8. The proposed subdivision, its design, density, and type of development and improvements conform to the regulations of this Development Code and the regulations of any public agency having jurisdiction by law.

In light of court decisions, it is appropriate for the City to make findings of consistency between the required dedications and the proposed development. Every dedication condition needs to be evaluated to confirm that there is a rough proportionality, or that a required degree of connection exists between the dedication imposed and the proposed development. The City of Clovis has made a finding that the dedication of property for this Project satisfies the development's proportionate contribution to the City's circulation system. The circulation system directly benefits the subject property by providing access and transportation routes that service the site.

ACTIONS FOLLOWING APPROVAL

The second reading of the Rezone Ordinances will be heard by the City Council at its next regular meeting and if approved, will go into effect 30 days from its passage and adoption.

Prepared by: Lily Cha, Assistant Planner

Reviewed by: City Manager *JH*

CONDITIONS OF APPROVAL

ATTACHMENT 1 to 1-D

ATTACHMENT 1
Conditions of Approval- GPA2019-004

Planning Division Comments
(Lily Cha, Assistant Planner – 559-324-2335)

1. Development of the single-family planned residential development shall be consistent with the General Plan Medium Density Designation (4.1 – 7.1 DU/Ac).

**ATTACHMENT 1-A
Conditions of Approval- R2019-005**

**Planning Division Comments
(Lily Cha, Assistant Planner – 559-324-2335)**

- 2. Rezone R2019-005 shall become effective only upon approval General Plan Amendment GPA2019-004 by the City Council.
- 3. Rezone R2019-005 approves an R-1-PRD (Single Family Planned Residential Development) Zone District.
- 4. As an amenity for the Project, the developer shall include a park, community building, and public seating, as well as the pedestrian walkway with enhanced landscaping as shown in TM6264.
- 5. All transformers shall be located underground. Pad mounted transformers may be considered through approval of a separate Administrative Use Permit.
- 6. All landscaping (open space and private yards) shall conform to the City of Clovis Water Efficient Landscape Ordinance.
- 7. Setbacks shall be measured to the exterior face of the framing of the structure. Exceptions to the setbacks are identified in Section 9.24.100 of the Clovis Municipal Code.
- 8. The following are development standards approved for R2019-005:

TM6264 Planned Residential Development Standards	
Minimum Lot Area	2,470 sq. ft.
Minimum Lot Width	32 feet
Minimum Lot Depth	65 feet
Maximum Lot Coverage	60%
Maximum Building Height	35 ft./ 2-1/2 stories
Minimum Front Setback	6 feet
Minimum Side Setback	4 feet
Minimum Rear Yard Setback:	8 feet

**ATTACHMENT 1-B
Conditions of Approval- R2019-006**

**Planning Division Comments
(Lily Cha, Assistant Planner – 559-324-2335)**

- 9. Rezone R2019-006 shall become effective only upon approval General Plan Amendment GPA2019-004 by the City Council.
- 10. Rezone R2019-006 approves an R-1-PRD (Single Family Planned Residential Development) Zone District.
- 11. The applicant shall provide amenities as required by the planned residential development standard.
- 12. All transformers shall be located underground. Pad mounted transformers may be considered through approval of a separate Administrative Use Permit.
- 13. All landscaping (open space and private yards) shall conform to the City of Clovis Water Efficient Landscape Ordinance.
- 14. Setbacks shall be measured to the exterior face of the framing of the structure. Exceptions to the setbacks are identified in Section 9.24.100 of the Clovis Municipal Code.
- 15. The following are development standards approved for R2019-006:

TM6239 Planned Residential Development Standards	
Minimum Lot Area	5,000 sq. ft.
Minimum Lot Width	50 ft. / 38 ft. (Cul-de-sac)
Minimum Lot Depth	98 ft.
Maximum Lot Coverage	60%
Maximum Building Height	35 ft./ 2-1/2 stories
Minimum Front Setback	10 ft.
Minimum Side Setback	4 ft. (interior) / 8 ft. (street side) / 10 ft. (revers corner) / 5 ft. (key side yard)
Minimum Rear Yard Setback:	7 ft.

ATTACHMENT 1-C
Conditions of Approval- Vesting Tentative Tract Map TM6264

Planning Division Comments
(Lily Cha, Assistant Planner – 559-324-2335)

16. TM6264 is approved per the Attachment 8 of the accompanying staff report.

17. Development Standards for TM6264 shall be per the Residential Development Standards as follows:

TM6264 Planned Residential Development Standards	
Minimum Lot Area	2,470 sq. ft.
Minimum Lot Width	32 feet
Minimum Lot Depth	65 feet
Maximum Lot Coverage	60%
Maximum Building Height	35 ft./ 2-1/2 stories
Minimum Front Setback	6 feet
Minimum Side Setback	4 feet
Minimum Rear Yard Setback:	8 feet

18. Garages shall be a minimum dimension of 20' x 22' (interior clear).

19. This Project requires the submittal and approval of a residential site plan review. Specific color and materials of the models, walls, landscaping, and fencing will be evaluated.

20. Landscape plans shall be reviewed and approved separately by the landscape review committee for tree and landscape type and location.

21. The developer shall construct a minimum six-foot high solid wall along the length of the property lines.

22. Upon final recordation of this tentative tract map, it shall be the applicant's responsibility to furnish to the Planning Department an electronic (PDF) copy of the original map obtained from the Fresno County Recorder's Office.

23. The applicant shall relay all conditions of approval for Vesting Tentative Tract Map TM6264 to all subsequent purchasers of individual lots, if applicable, and/or to subsequent purchasers of this entire tract map development.

24. The applicant shall record a Notice of Nonconformance dealing with any structure used for model homes where the garage is converted for the use as a sales office.
25. All lighting shall be screened from direct view from the public right-of-way and adjacent residential properties.
26. All landscaping shall conform to the City of Clovis Water Efficient Landscape Ordinance.
27. The developer shall comply with all mitigation measures identified in the Initial Study Mitigated Negative Declaration prepared for the Project, included as Attachment 12 to the staff report.
28. The applicant shall obtain City approval in advance of temporary and permanent subdivision signs through separate sign review, consistent with the development criteria of the Clovis Municipal Code.
29. The developer shall contact cultural resources staff at Table Mountain Rancheria prior to ground-disturbance to coordinate a training session on how to appropriately identify potential artifacts.
30. All transformers for this subdivision can be located above ground subject to review and approval of the required landscape screening material. Landscaping shall be reviewed through the residential site plan review process. Transformers shall not be placed in public spaces.
31. The applicant shall install pedestrian lighting along common areas. Spacing and location will be evaluated during residential site plan review.

Fire Department Conditions
(Gary Sawhill, Department Representative - 324-2224)

Roads / Access

32. **Street Width:** Fire apparatus access width shall be determined by measuring from “base of curb” to “base of curb” for roadways that have curbs. When roadways do not have curbs, the measurements shall be from the edge of the roadway surface (approved all weather surface).
33. **Street Width for Single Family Residences:** Shall comply with Clovis Fire Standard #1.1
34. **Security Gates:** All security gates shall comply with Clovis Fire Department Gates Standard #1.5. Plans shall be submitted for review and permits issued by Fire Department prior to installation. This includes the EVA on the north end of tract.

- 35. **Temporary Street Signs:** The applicant shall install temporary street signs that meet City Temporary Street Sign Standard #1.9 prior to issuance of building permits within a subdivision.
- 36. **Two Points of Access:** Any development to this parcel will require a minimum of two (2) points of access to be reviewed and approved by the Clovis Fire Department. All required access drives shall remain accessible during all phases of construction which includes paving, concrete work, underground work, landscaping, perimeter walls. Gate design at EVA shall be approved by Clovis Fire Department
- 37. **All Weather Access & Water Supply:** The applicant shall provide all weather access to the site during all phases of construction to the satisfaction of the approved Clovis Fire Department Standard #1.2 or #1.3.

Water Systems

- 38. **Residential Fire Hydrant:** The applicant shall install four (4) 4 ½” x 2 ½” approved Residential Type fire hydrant(s) and “Blue Dot” hydrant locators, paint fire hydrant(s) yellow with blue top and caps, and paint the curb red as specified by the adopted Clovis Fire Department Standard #1.4. Plans shall be submitted to the Clovis Fire Department for review and approval prior to installation. The hydrant(s) shall be charged and in operation prior to any framing or combustible material being brought onto the site. Hydrants curb markings and blue dots to be completed prior to occupancy of any homes.
- 39. **Looped Water Main:** The applicant shall install approved looped water main capable of the necessary flow of water for adequate fire protection and approved by the Clovis Fire Department

Administration Department Conditions
(John Holt, Department Representative – (559) 324-2111)

- 40. Prior to approval, recordation or filing of an annexation, final map, or site plan, the property covered by the project shall be included within or annexed to a Community Facilities District (CFD), established by the City for the provision of public facilities and services, for which proceedings have been consummated, and shall be subject to the special tax approved with the formation or annexation to the CFD. The CFD applies only to residential projects.
- 41. The applicant and the property owner acknowledge and agree that if the project were not part of a CFD, the City might lack the financial resources to operate facilities and provide public services, such as police protection, fire protection, emergency medical services, park and recreation services, street maintenance and public transit. Absent the requirement for inclusion of the project within a CFD, the City might not be able to make the finding that the project is consistent with the General Plan and relevant specific plans and might not be able to make the findings supporting approval of the

project as required by the Subdivision Map Act and the California Environmental Quality Act, and the City might be required to deny the application for the project.

42. The owner/developer shall notify all potential lot buyers prior to sale that this project is a part of a Community Facilities District and shall inform potential buyers of the special tax amount. Said notification shall be in a manner approved by the City. This requirement may be waived at the discretion of the City Council if, at the time of the approval, recordation or filing of the project, the City Council has determined that it is not necessary that the project be included in the CFD.
43. The applicants shall reimburse the City for any expense associated with the transition agreement for fire services with the Fresno County Fire Protection District that would apply to this proposal.

Engineering/ Utilities/ Solid Waste Division Conditions
(Sean Smith, Engineering Division Representative – 324-2363)
(Paul Armendariz, Department Representative – 324-2649)

Maps and Plans

44. The conditions of this tract map are written under the assumption that all dedications and improvements have been completed by the TM 6109 and TM 6190 developments, and that these dedications and improvements have been accepted by the City. Additional conditions shall be required at the discretion of the City Engineer, if the improvements and dedications by TM 6109 and TM 6190 have not been accepted by the City.
45. The applicant shall have a final tract map prepared, in the form prescribed by the Subdivision Map Act and City of Clovis Municipal Code. The final tract map shall be submitted to the City of Clovis Engineering Division, and should include, but not be limited to, final tract map, the current filing fee, closure calculations, current preliminary title report, legal descriptions and drawings of required dedications.
46. The applicant shall submit separately to the City of Clovis Engineering Division, a set of construction plans on 24" x 36" sheets with City standard title block for all required improvements and a current preliminary title report. These plans shall be prepared by a registered civil engineer, and shall include a grading plan, landscape plan, and an overall site utility plan showing locations and sizes of sewer, water, storm drain, and irrigation mains, laterals, manholes, meters, valves, hydrants, fire sprinkler services, other facilities, etc. Plan check and inspection fees per City of Clovis Resolution No. 18-61 shall be paid with the first submittal of said plans. All plans shall be submitted at or before the time the building plans are submitted to the Building Division and shall be approved by the City and all other involved agencies prior to the release of any development permits.

47. Prior to the initial submittal of the improvement plans, the applicant shall contact Sean Smith at (559) 324-2363 to setup a coordination meeting (Pre-submittal Meeting).
48. Upon approval of improvement plans, the applicant shall provide the City with the appropriate number of copies. After all improvements have been constructed and accepted by the City, the applicant shall submit to the City of Clovis Engineering Division (1) digital copy to the City in PDF format of the approved set of construction plans revised to accurately reflect all field conditions and revisions and marked "AS-BUILT" for review and approval. Upon approval of the AS-BUILTs by the City, and prior to granting of final occupancy or final acceptance, the applicant shall provide (1) digital copy to the City in PDF format.

General Provisions

49. The applicant shall pay all applicable development fees at the rate in effect at the time of payment and prior to final map approval by Council or have the fees payable directly to the City through a separate escrow account at the time of recordation of the map.
50. The applicant is advised that, pursuant to California Government Code, Section 66020, any party may protest the imposition of fees, dedications, reservations, or other exactions imposed on a development project by a local agency. Protests shall be filed in accordance with the provisions of the California Government Code and shall be filed within 90 days after conditional approval of this application is granted. The 90 day protest period for this project shall begin on the "date of approval" as indicated on the "Acknowledgment of Acceptance of Conditions" form.
51. All reimbursement requests shall be prepared and submitted in accordance with the requirements of the current version of the "Developer Reimbursement Procedures" a copy of which may be obtained at the City Engineer's Office.
52. The applicant shall install all improvements within public right-of-way and easements in accordance with the City of Clovis standards, specifications, master plans, and record drawings in effect at the time of improvement plan approval.
53. The applicant shall address all conditions, and be responsible for obtaining encroachment permits from the City of Clovis for all work performed within the City's right-of-way and easements.
54. The applicant shall submit a soils report or a waiver of soils report to the City of Clovis Engineering Division for approval by the City Engineer.
55. The applicant shall provide and pay for all geotechnical services per City policy.
56. The applicant shall comply with the requirements of the local utility, telephone, and cable companies. It shall be the responsibility of the applicant to notify the local utility, telephone, and cable companies for the removal or relocation of utility poles where

necessary. The City shall not accept first submittals without proof that the applicant has provided the improvement plans and documents showing all proposed work to the utility, telephone, and cable companies. All utility vaults in which lids cannot be sloped to match proposed finished grading, local utilities have 5% max slope, shall be located in sidewalk areas with pedestrian lids so the lid slope matches sidewalk cross slope.

57. All existing overhead and new utility facilities located on-site or within the street right-of-way along the streets adjacent to this tract shall be undergrounded unless otherwise approved by the City Engineer.
58. The applicant shall contact and address all requirements of the United States Postal Service Clovis Office for the location and type of mailboxes to be installed. The location of the facilities shall be approved by the City Engineer prior to approval of improvement plans or any construction.
59. The applicant shall contact and address Caltrans requirements. The applicant shall be required to mitigate impacts to State Highway facilities as determined by the City Engineer.

Dedications and Street Improvements

60. The applicant shall provide right-of-way acquisition or dedicate free and clear of all encumbrances and/or improve the following streets to City standards. The street improvements shall be in accordance with the City's specific plans and shall match existing improvements. The applicant's engineer shall be responsible for verifying the type, location, and grades of existing improvements.
 - a. Locan Avenue – Along frontage, dedicate to provide right-of-way acquisition for 40' (exist 20') west of centerline, and improve with sidewalk, curb return ramps, street lights, landscaping and irrigation.
 - b. Moody Avenue – Along frontage, dedicate to provide right-of-way acquisition for 37' (exist 26') south of centerline, and improve with curb, gutter, sidewalk, drive approaches, curb return ramps, street lights, landscaping and irrigation, permanent paving and overlay as necessary to match the existing permanent pavement.
 - c. Gated Developments – Provide ample vehicle stacking area outside the travel lanes of Locan Avenue that will allow vehicles to wait as vehicles are accessing the control panel to open the security gates. Design a turn-around to allow vehicles that cannot enter the complex to return to the street without backing the vehicle up. Provide the Solid Waste Division with remote controls that will allow access for all solid waste and recycling vehicles.

- d. Interior streets shall be private. For two-way traffic with no parking on both sides, the minimum travel width shall be 25' with a clear width of 30'. For two-way traffic with parking on one side, the minimum travel width shall be 32'. For two-way traffic with parking on both sides, the minimum travel width shall be 36'.
- e. Entry feature streets with median islands shall have a minimum of 22' wide travel lanes in each direction with parking or without parking.
- f. The applicant shall relinquish all access to Locan Avenue.

- 61. The applicant shall provide a dedication for a 10' public utility easement, where applicable, along all frontages or alternate widths approved by the utilities companies.
- 62. For new ADA paths of travel that connect to the existing City sidewalk, the applicant shall replace enough sidewalk (five feet minimum in length) to provide a compliant landing with appropriate transitions to existing sidewalk grades.
- 63. The applicant shall not install any fences, temporary or permanent in public right-of-way.
- 64. The applicant shall obtain "R Value" tests in quantity sufficient to represent all street areas, and have street structural sections designed by a registered civil engineer based on these "R Value" tests.

Sewer

- 65. The applicant shall identify and abandon all septic systems to City standards.
- 66. The applicant shall install sanitary sewer mains of the size and in the locations indicated below, prior to occupancy. The sewer improvements shall be in accordance with the City's master plans and shall match existing improvements. The applicant's engineer shall be responsible for verifying the size, location, and elevations of existing improvements. Any alternative routing of the mains shall require approval of the City Engineer and shall be supported by appropriate calculations.
 - a. Interior Private Streets – install 8" mains.
- 67. The applicant shall provide dedication of a 15' wide utility easement for all on-site sewer mains, not located in otherwise dedicated rights-of-way.
- 68. The applicant shall install one (1) 4" sewer service house branch to each lot within the tentative tract.
- 69. All existing sewer services that will not be used with this development shall be abandoned by cutting and capping the service at the right-of-way line.

Water

70. The applicant shall identify and abandon all water wells to City standards.
71. The applicant shall install water mains of the sizes and in the locations indicated below, and provide an adequately looped water system prior to occupancy. The water improvements shall be in accordance with the City's master plans and shall match existing improvements. The applicant's engineer shall be responsible for verifying the size, location, and elevations of existing improvements. Any alternative routing of the mains shall require approval of the City Engineer and shall be supported by appropriate calculations.
- a. Interior Private Streets – install 8" mains.
72. The applicant shall provide dedication of 15-foot wide utility easements for all on-site water mains, hydrants, blow-offs, and water meters not located in otherwise dedicated rights-of-way.
73. The applicant shall install a City standard water service to each lot of the proposed subdivision. Water services shall be grouped at property lines to accommodate automatic meter reading system, including installation of connecting conduit. The water meter shall be placed in the sidewalk and not in planters or driveways.
74. All existing water services that will not be used with this development shall be abandoned by closing the service's corporation stop and creating a physical separation between the corporation stop and the service.
75. Prior to recording a final map of any phase, the applicant shall demonstrate to the satisfaction of the City Fire Chief and City Engineer that there is adequate water pressure to serve the units to be constructed. The applicant shall work with the City Engineer to determine the adequacy of water supply/pressure for the proposed development.

Recycled Water

76. The applicant shall install recycled water mains of the sizes and in the locations indicated below. The recycled water improvements shall be in accordance with the City's master plans and shall match existing improvements. All areas utilizing recycle water for irrigation shall be clearly marked on the improvement plans. The applicant's engineer shall be responsible for verifying the size, location, and elevations of existing improvements. Any alternative routing of the mains shall require approval of the City Engineer and may require appropriate calculations.
- a. Locan Avenue – install mains as necessary to serve the paseos, trails, and the neighborhood parks.

Grading and Drainage

77. The applicant shall contact the Fresno Metropolitan Flood Control District (FMFCD) and address all requirements, pay all applicable fees required, obtain any required NPDES permit, and implement Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology to reduce or eliminate storm water pollution. Plans for these requirements shall be included in the previously required set of construction plans, and shall be submitted to and approved by FMFCD prior to the release of any development permits.
78. Grade differentials between lots and adjacent properties shall be adequately shown on the grading plan and shall be treated in a manner in conformance with City of Clovis Standard Drawing No. M-4 as modified by the City Council. Any retaining walls required on-site or in public right of way shall be masonry construction. All retaining walls shall be designed by a registered civil engineer.

Irrigation and Landscaping Facilities

79. The owner shall request annexation to and provide a covenant for the Landscape Maintenance District. The property owner acknowledges and agrees that such request serves as a petition pursuant to California State Proposition 218 and no further election shall be required for the establishment of the initial assessment. The assessment for each lot shall be obtained from the City for the tax year following the recordation of the final map. The estimated annual assessment per average sized lot is \$234.81, which is subject to change prior to issuance of building permit or final tract map approval and is subject to an annual change in the range of the assessment in the amount of the Consumer Price Index, U.S. City Average, All Urban Consumers (CPI Index), plus two percent (2%). The additional landscaping enhancements that exceed the City norms and are specific benefit to the property, such as the entry feature, columns, monuments, interior median islands, round-a-bouts, special street lights, etc, if determined to be maintained by the Landscape Maintenance District, shall be maintained by an additional landscape maintenance assessment. The applicant shall provide construction costs and deposit with the City an amount equal to 50% of the value of the enhanced landscaping hardscape features, or an alternate amount approved by the City Engineer, such as columns, monuments, and special street lights, that exceeds the City norms. The applicant shall provide the City with an estimate of the annual maintenance for the special lighting and landscaping enhancements that exceeds the City norms. The owner/developer shall notify all potential lot buyers before they actually purchase a lot that this tract is a part of a Landscape Maintenance District and shall inform potential buyers of the assessment amount. Said notification shall be in a manner approved by the City. The owner/developer shall supply all pertinent materials for the Landscape Maintenance District.
80. The applicant shall comply with the City of Clovis Water Efficient Landscape Requirements Ordinance.

81. All existing agricultural irrigation systems either on-site or in public right of way, whether FID or privately owned, shall be identified prior to any construction activity on the site. Service to all downstream users of irrigation water shall be maintained at all times through preservation of existing facilities or, if the existing facilities are required to be relocated, the relocation and replacement of the existing facilities. It is the intent that downstream users not bear any burden as a result of development of the site. Therefore, the applicant shall pay all costs related to modification, relocation, or repair of any existing irrigation facilities resulting from or necessitated by the development of the site. The applicant shall identify on site plans and construction plans, all existing irrigation systems and their disposition (abandonment, repair, relocation, and/or piping). The applicant shall consult with the Fresno Irrigation District for any additional requirements for lines to be abandoned, relocated, or piped. The applicant shall provide waivers from all users **in order to abandon or modify any irrigation pipelines or for any service interruptions resulting from development activities.**
82. The applicant shall provide a landscape and irrigation perpetual maintenance covenant recorded for landscaping installed in the public right-of-way behind the curb including easements that will not be maintained by the Clovis Landscape Maintenance District. A recordable covenant shall be submitted to and approved by the City of Clovis City Engineer prior to final map approval.
83. The applicant shall provide a perimeter wall perpetual maintenance covenant on all properties that have a perimeter wall that is installed on private property. A recordable covenant shall be submitted to and approved by the City of Clovis City Engineer prior to final map approval.

Miscellaneous

84. The applicant shall install street lights along the major streets on metal poles to local utility provider's standards at the locations designated by the City Engineer. Street light locations shall be shown on the utility plans submitted with the final map for approval. Street lights at future traffic signal locations shall be installed on approved traffic signal poles, including all conduits and pull boxes. Street lights along the major streets shall be owned and maintained by local utility providers. Proof of local utility provider's approval shall be provided. The applicant may install thematic lighting, as approved by the City Engineer. If the applicant chooses to install thematic lighting, the applicant shall provide a conceptual lighting plan identifying adjacent properties that may be incorporated with thematic lights to create a neighborhood effect. Thematic lighting shall be maintained by an additional landscape maintenance assessment.
85. The applicant shall install all major street monumentation and section corner monumentation within the limits of the project work in accordance with City Standard ST-32 prior to final acceptance of the project. Monumentation shall include all section corners, all street centerline intersection points, angle points and beginning and end

of curves (E.C.'s & B.C.'s). The applicant/contractor shall furnish brass caps. Any existing section corner or property corner monuments damaged by this development shall be reset to the satisfaction of the City Engineer. A licensed land surveyor or civil engineer licensed to perform land surveying shall certify the placement of all required monumentation prior to final acceptance. Brass caps required for installation of new monuments or replacement of existing monuments shall be provided by the contractor/the applicant and approved by City prior to installation. Within five days after the final setting of all monuments has been completed, the engineer or surveyor shall give written notice to the City Engineer that the final monuments have been set. Upon payment to the engineer or surveyor for setting the final monuments, the applicant shall present to the City Engineer evidence of the payment and receipt thereof by the engineer or surveyor.

86. A deferment, modification, or waiver of any engineering conditions shall require the express written approval of the City Engineer.

87. The conditions given herein are for the entire development. Additional requirements for individual phases may be necessary pending review by the City Engineer.

Fresno Irrigation District
(Chris Lundeen, FID Representative – 233-7161 ext. 7410)

88. The Applicant shall refer to the attached Fresno Irrigation District correspondence. If the list is not attached, please contact the FID for the list of requirements.

County of Fresno Health Department Conditions
(Kevin Tsuda, County of Fresno Health Department Representative – 600-3271)

89. The Applicant shall refer to the attached Fresno County Health Department correspondence. If the list is not attached, please contact the Health Department for the list of requirements.

Clovis Unified School District
(Michael Johnston, CUSD Representative – 327-9000)

90. The Applicant shall refer to the attached CUSD correspondence. If the list is not attached, please contact the CUSD for the list of requirements.

San Joaquin Valley Air Pollution Control District
(Carol Flores, SJVAPCD Representative – 230-55935)

91. The Applicant shall refer to the attached SJVAPCD correspondence. If the list is not attached, please contact the SJVAPCD for the list of requirements.

Fresno Metropolitan Flood Control District
(Mikel Meneses, FMFCD Representative – 456-3292)

92. The Applicant shall refer to the attached FMFCD correspondence. If the list is not attached, please contact the FMFCD for the list of requirements.

ATTACHMENT 1-D
Conditions of Approval- Vesting Tentative Tract Map TM6239

Planning Division Comments
(Lily Cha, Assistant Planner – 559-324-2335)

93. TM6239 is approved per the Attachment 9 of the accompanying staff report.

94. Development Standards for TM6239 shall be per the Residential Development Standards as follows:

TM6239 Planned Residential Development Standards	
Minimum Lot Area	5,000 sq. ft.
Minimum Lot Width	50 ft. / 38 ft. (Cul-de-sac)
Minimum Lot Depth	98 ft.
Maximum Lot Coverage	60%
Maximum Building Height	35 ft./ 2-1/2 stories
Minimum Front Setback	10 ft.
Minimum Side Setback	4 ft. (interior) / 8 ft. (street side) / 10 ft. (revers corner) / 5 ft. (key side yard)
Minimum Rear Yard Setback:	7 ft.

95. Garages shall be a minimum dimension of 20' x 20' (interior clear).

96. This Project requires the submittal and approval of a residential site plan review. Specific color and materials of the models, walls, landscaping, and fencing will be evaluated.

97. The applicant shall contribute a proportionate share towards the development of the trail system within the Project area as required by the General Plan land use diagram.

98. Landscape plans shall be reviewed and approved separately by the landscape review committee for tree and landscape type and location.

99. The developer shall construct a minimum six-foot high solid wall along the length of the property lines.

100. Upon final recordation of this tentative tract map, it shall be the applicant's responsibility to furnish to the Planning Department an electronic (PDF) copy of the original map obtained from the Fresno County Recorder's Office.

- 101. The applicant shall relay all conditions of approval for Vesting Tentative Tract Map TM6239 to all subsequent purchasers of individual lots, if applicable, and/or to subsequent purchasers of this entire tract map development.
- 102. The applicant shall record a Notice of Nonconformance dealing with any structure used for model homes where the garage is converted for the use as a sales office.
- 103. All lighting shall be screened from direct view from the public right-of-way and adjacent residential properties.
- 104. All landscaping shall conform to the City of Clovis Water Efficient Landscape Ordinance.
- 105. The developer shall comply with all mitigation measures identified in the Initial Study Mitigated Negative Declaration prepared for the Project, included as Attachment 12 to the staff report.
- 106. The applicant shall obtain City approval in advance of temporary and permanent subdivision signs through separate sign review, consistent with the development criteria of the Clovis Municipal Code.
- 107. The developer shall contact cultural resources staff at Table Mountain Rancheria prior to ground-disturbance to coordinate a training session on how to appropriately identify potential artifacts.
- 108. All transformers for this subdivision can be located above ground subject to review and approval of the required landscape screening material. Landscaping shall be reviewed through the residential site plan review process. Transformers shall not be placed in public spaces.
- 109. The applicant shall install pedestrian lighting along common areas. Spacing and location will be evaluated during residential site plan review.

Fire Department Conditions
(Gary Sawhill, Department Representative - 324-2224)

Roads / Access

- 110. **Street Width:** Fire apparatus access width shall be determined by measuring from “base of curb” to “base of curb” for roadways that have curbs. When roadways do not have curbs, the measurements shall be from the edge of the roadway surface (approved all weather surface).
- 111. **Street Width for Single Family Residences:** Shall comply with Clovis Fire Standard #1.1

112. **Temporary Street Signs:** The applicant shall install temporary street signs that meet City Temporary Street Sign Standard #1.9 prior to issuance of building permits within a subdivision.
113. **Two Points of Access:** Any development to this parcel will require a minimum of two (2) points of access to be reviewed and approved by the Clovis Fire Department. All required access drives shall remain accessible during all phases of construction which includes paving, concrete work, underground work, landscaping, perimeter walls.
114. **All Weather Access & Water Supply:** The applicant shall provide all weather access to the site during all phases of construction to the satisfaction of the approved Clovis Fire Department Standard #1.2 or #1.3.

Water Systems

115. **Residential Fire Hydrant:** The applicant shall install fourteen (14) 4 ½" x 2 ½" approved Residential Type fire hydrant(s) and "Blue Dot" hydrant locators, paint fire hydrant(s) yellow with blue top and caps, and paint the curb red as specified by the adopted Clovis Fire Department Standard #1.4. Plans shall be submitted to the Clovis Fire Department for review and approval prior to installation. The hydrant(s) shall be charged and in operation prior to any framing or combustible material being brought onto the site. Hydrants curb markings and blue dots to be completed prior to occupancy of any homes.
116. **Looped Water Main:** The applicant shall install approved looped water main capable of the necessary flow of water for adequate fire protection and approved by the Clovis Fire Department

Administration Department Conditions (John Holt, Department Representative – (559) 324-2111)

117. Prior to approval, recordation or filing of an annexation, final map, or site plan, the property covered by the project shall be included within or annexed to a Community Facilities District (CFD), established by the City for the provision of public facilities and services, for which proceedings have been consummated, and shall be subject to the special tax approved with the formation or annexation to the CFD. The CFD applies only to residential projects.
118. The applicant and the property owner acknowledge and agree that if the project were not part of a CFD, the City might lack the financial resources to operate facilities and provide public services, such as police protection, fire protection, emergency medical services, park and recreation services, street maintenance and public transit. Absent the requirement for inclusion of the project within a CFD, the City might not be able to make the finding that the project is consistent with the General Plan and relevant specific plans and might not be able to make the findings supporting approval of the

project as required by the Subdivision Map Act and the California Environmental Quality Act, and the City might be required to deny the application for the project.

119. The owner/developer shall notify all potential lot buyers prior to sale that this project is a part of a Community Facilities District and shall inform potential buyers of the special tax amount. Said notification shall be in a manner approved by the City. This requirement may be waived at the discretion of the City Council if, at the time of the approval, recordation or filing of the project, the City Council has determined that it is not necessary that the project be included in the CFD.
120. The applicants shall reimburse the City for any expense associated with the transition agreement for fire services with the Fresno County Fire Protection District that would apply to this proposal.

Engineering/ Utilities/ Solid Waste Division Conditions
(Sean Smith, Engineering Division Representative – 324-2363)
(Paul Armendariz, Department Representative – 324-2649)

Maps and Plans

121. The conditions of this tract map are written under the assumption that all dedications and improvements have been completed by the adjacent TM 6190 development, and that these dedications and improvements have been accepted by the City. Additional conditions shall be required at the discretion of the City Engineer, if the improvements and dedications by TM 6190 have not been accepted by the City.
122. The applicant shall have a final tract map prepared, in the form prescribed by the Subdivision Map Act and City of Clovis Municipal Code. The final tract map shall be submitted to the City of Clovis Engineering Division, and should include, but not be limited to, final tract map, the current filing fee, closure calculations, current preliminary title report, legal descriptions and drawings of required dedications.
123. The applicant shall submit separately to the City of Clovis Engineering Division, a set of construction plans on 24" x 36" sheets with City standard title block for all required improvements and a current preliminary title report. These plans shall be prepared by a registered civil engineer, and shall include a grading plan, landscape plan, overall site utility plan showing locations and sizes of sewer, water, storm drain, and irrigation mains, laterals, manholes, meters, valves, hydrants, fire sprinkler services, other facilities, etc. Plan check and inspection fees per City of Clovis Resolution No. 18-61 shall be paid with the first submittal of said plans. All plans shall be submitted at or before the time the building plans are submitted to the Building Division and shall be approved by the City and all other involved agencies prior to the release of any development permits.
124. Prior to the initial submittal of the improvement plans, the applicant shall contact Sean Smith at (559) 324-2363 to setup a coordination meeting (Pre-submittal Meeting).

125. Upon approval of improvement plans, the applicant shall provide the City with the appropriate number of copies. After all improvements have been constructed and accepted by the City, the applicant shall submit to the City of Clovis Engineering Division (1) digital copy to the City in PDF format of the approved set of construction plans revised to accurately reflect all field conditions and revisions and marked "AS-BUILT" for review and approval. Upon approval of the AS-BUILTs by the City, and prior to granting of final occupancy or final acceptance, the applicant shall provide (1) digital copy to the City in PDF format.

General Provisions

126. The applicant shall pay all applicable development fees at the rate in effect at the time of payment and prior to final map approval by Council or have the fees payable directly to the City through a separate escrow account at the time of recordation of the map.

127. The applicant is advised that, pursuant to California Government Code, Section 66020, any party may protest the imposition of fees, dedications, reservations, or other exactions imposed on a development project by a local agency. Protests shall be filed in accordance with the provisions of the California Government Code and shall be filed within 90 days after conditional approval of this application is granted. The 90 day protest period for this project shall begin on the "date of approval" as indicated on the "Acknowledgment of Acceptance of Conditions" form.

128. All reimbursement requests shall be prepared and submitted in accordance with the requirements of the current version of the "Developer Reimbursement Procedures" a copy of which may be obtained at the City Engineer's Office.

129. The applicant shall install all improvements within public right-of-way and easements in accordance with the City of Clovis standards, specifications, master plans, and record drawings in effect at the time of improvement plan approval.

130. The applicant shall address all conditions, and be responsible for obtaining encroachment permits from the City of Clovis for all work performed within the City's right-of-way and easements.

131. The applicant shall submit a soils report or a waiver of soils report to the City of Clovis Engineering Division for approval by the City Engineer.

132. The applicant shall provide and pay for all geotechnical services per City policy.

133. The applicant shall comply with the requirements of the local utility, telephone, and cable companies. It shall be the responsibility of the applicant to notify the local utility, telephone, and cable companies for the removal or relocation of utility poles where necessary. The City shall not accept first submittals without proof that the applicant

has provided the improvement plans and documents showing all proposed work to the utility, telephone, and cable companies. All utility vaults in which lids cannot be sloped to match proposed finished grading, local utilities have 5% max slope, shall be located in sidewalk areas with pedestrian lids so the lid slope matches sidewalk cross slope.

- 134. All existing overhead and new utility facilities located on-site or within the street right-of-way along the streets adjacent to this tract shall be undergrounded unless otherwise approved by the City Engineer.
- 135. The applicant shall contact and address all requirements of the United States Postal Service Clovis Office for the location and type of mailboxes to be installed. The location of the facilities shall be approved by the City Engineer prior to approval of improvement plans or any construction.
- 136. The applicant shall contact and address Caltrans requirements. The applicant shall be required to mitigate impacts to State Highway facilities as determined by the City Engineer.

Dedications and Street Improvements

- 137. The applicant shall provide right-of-way acquisition or dedicate free and clear of all encumbrances and/or improve the following streets to City standards. The street improvements shall be in accordance with the City's specific plans and shall match existing improvements. The applicant's engineer shall be responsible for verifying the type, location, and grades of existing improvements.
 - a. Locan Avenue – Along frontage between Powers and Loyola Avenues, dedicate to provide right-of-way acquisition for 40' (exist 30') east of centerline, and improve with curb, gutter, sidewalk, curb return ramps, street lights, landscaping and irrigation, permanent paving and overlay as necessary to match the existing permanent pavement.
 - b. Teague Avenue – Along frontage between Redington Avenue and the west property line, dedicate to provide right-of-way acquisition for 27' (exist 16') north of centerline, and improve with curb, gutter, sidewalk, permanent paving and overlay as necessary to match the existing permanent pavement, and transitional paving as needed.
 - c. Powers Avenue – Along frontage, dedicate to provide right-of-way acquisition for 25' (exist 15') south of centerline, and improve with curb, gutter, sidewalk, curb return ramps, permanent paving and overlay as necessary to match the existing permanent pavement.
 - d. Trenton Avenue – Between Locan and Kaweah Avenues, dedicate to provide right-of-way acquisition for 27' (exist varies) north and south of centerline, and improve with curb, gutter, sidewalk, drive approaches, curb

return ramps, street lights, landscaping and irrigation, 36' (18' north + 18' south) permanent paving, and transitional paving as needed.

- e. Loyola Avenue – Between Locan and Kaweah Avenues, dedicate to provide right-of-way acquisition for 27' (exist varies') north and south of centerline, and improve with curb, gutter, sidewalk, drive approaches, curb return ramps, street lights, landscaping and irrigation, 36' (18' north + 18' south) permanent paving, and transitional paving as needed.
- f. Loyola Avenue – Between Blackwood Avenue and the east property line, dedicate to provide right-of-way acquisition for 27' (exist 16') south of centerline, and improve with curb, gutter, sidewalk, drive approaches, curb return ramps, street lights, permanent paving and overlay as necessary to match the existing permanent pavement. For orderly development, improvements shall include a driveway approach immediately adjacent to the east of the east property line.
- g. North DeWolf Avenue – At Powers Avenue, the applicant shall perform an all-stop warrant study. The applicant shall relocate the existing utility vault at the northwest corner of the intersection and install a crosswalk on the north leg of the intersection, if an all-way stop is warranted.
- h. State Route 168 – The applicant shall coordinate with CalTrans to install an additional dedicated eastbound right-turn lane at Owens Mountain Parkway. The applicant shall perform a queue study at this intersection to determine the appropriate lengths of storage for all turning movements and construct accordingly.
- i. Interior Streets – Dedicate to provide for 50' or 54' of right-of-way in conformance with the City policy on street widths, and improve with curb, gutter, 5' sidewalk adjacent to the curb, drive approaches, curb return ramps, streetlights, permanent paving, and all transitional paving as needed.
- j. Cul-De-Sacs - dedicate to provide for 52' radius and improve with curb, gutter, sidewalk, street lights, 43' permanent paving and all transitional paving as needed.
- k. The applicant shall relinquish all access to Locan Avenue.
- l. The applicant shall dedicate right-of-way and provide for a north-south paseo, connecting the existing paseos at Tract Map 6072 and Tract Map 6018. The pathway north of Loyola shall be 10' wide.
- m. The applicant shall dedicate right-of-way and provide for an 8' sidewalk on the north side of Trenton Avenue between Blackwood and Locan Avenues.

- n. The applicant shall provide adequate access to the existing resident at APN 558-020-05 and abandon the existing private access easement within Tract 5720A.
138. The applicant shall abandon the corner cutoff at the southeast corner of Lot 35 of Tract map 5289 to provide a continuous right-of-way line into Tract 6239.
139. The applicant shall provide a dedication for a 10' public utility easement, where applicable, along all frontages or alternate widths approved by the utilities companies.
140. For new ADA paths of travel that connect to the existing City sidewalk, the applicant shall replace enough existing sidewalk (minimum five feet in length) to provide a compliant landing with appropriate transitions to existing sidewalk grades.
141. If the applicant is required to make onsite ADA path of travel improvements, then the applicant may be required to remove and replace concrete improvements along the property frontage that do not meet current City of Clovis and ADA standards.
142. The applicant shall not install any fences, temporary or permanent in public right-of-way.
143. The applicant shall provide preliminary title report, legal description and drawings for all dedications required which are not on the site. All contact with owners, appraisers, etc. of the adjacent properties where dedication is needed shall be made only by the City. The City will prepare an estimate of acquisition costs including but not limited to appraised value, appraisal costs, negotiation costs, and administrative costs. The applicant shall pay such estimated costs as soon as they are determined by the City.
144. The sideyard side of all corner lots shall have full width sidewalk except where planter strips or meandering sidewalk is proposed.
145. The applicant shall obtain "R Value" tests in quantity sufficient to represent all street areas, and have street structural sections designed by a registered civil engineer based on these "R Value" tests.
146. The applicant shall, at the ends of any permanent pavement abutting undeveloped property, install 2" x 6" redwood header boards that shall be placed prior to the street surfacing.
147. Standard barricades with reflectors shall be installed at ends of streets abutting undeveloped property and any other locations to be specified by the City Engineer.

Sewer

148. The applicant shall identify and abandon all septic systems to City standards.

149. The applicant shall install sanitary sewer mains of the size and in the locations indicated below, prior to occupancy. The sewer improvements shall be in accordance with the City's master plans and shall match existing improvements. The applicant's engineer shall be responsible for verifying the size, location, and elevations of existing improvements. Any alternative routing of the mains shall require approval of the City Engineer and shall be supported by appropriate calculations.

- b. Trenton Avenue – install 8" main between Whitmore and Kaweah Avenues.
- c. Loyola Avenue – install 8" main between Whitmore and Kaweah Avenues.
- d. Interior Streets – install 8" mains.

150. The applicant shall install one (1) 4" sewer service house branch to each lot within the tentative tract.

151. All existing sewer services that will not be used with this development shall be abandoned by cutting and capping the service at the right-of-way line.

152. The applicant shall notify all property owners annexed to the City and along streets where a new sewer main will be constructed to determine if they wish to be connected to City sewer. Property owners shall work directly with the applicant regarding costs and location. The applicant shall notify property owners that sewer connection fees are required if they choose to connect.

Water

153. The applicant shall identify and abandon all water wells to City standards.

154. The applicant shall install water mains of the sizes and in the locations indicated below, and provide an adequately looped water system prior to occupancy. The water improvements shall be in accordance with the City's master plans and shall match existing improvements. The applicant's engineer shall be responsible for verifying the size, location, and elevations of existing improvements. Any alternative routing of the mains shall require approval of the City Engineer and shall be supported by appropriate calculations.

- b. Trenton Avenue – install 8" main between Whitmore and Kaweah Avenues.
- c. Loyola Avenue – install 8" main between Whitmore and Kaweah Avenues.
- d. Interior Streets – install 8" mains.

155. The applicant shall install a City standard water service to each lot of the proposed subdivision. Water services shall be grouped at property lines to accommodate automatic meter reading system, including installation of connecting conduit. The water meter shall be placed in the sidewalk and not in planters or driveways.

156. All existing water services that will not be used with this development shall be abandoned by closing the service's corporation stop and creating a physical separation between the corporation stop and the service.
157. The applicant shall notify all property owners' annexed to the City and along streets where a new water main will be constructed to determine if they wish to be connected to City water. Property owners shall work directly with the applicant regarding costs and location. The applicant shall notify property owners that water connection fees are required if they choose to connect.
158. Prior to recording a final map of any phase, the applicant shall demonstrate to the satisfaction of the City Fire Chief and City Engineer that there is adequate water pressure to serve the units to be constructed. The applicant shall work with the City Engineer to determine the adequacy of water supply/pressure for the proposed development.

Recycled Water

159. The applicant shall install recycled water mains of the sizes and in the locations indicated below. The recycled water improvements shall be in accordance with the City's master plans and shall match existing improvements. All areas utilizing recycle water for irrigation shall be clearly marked on the improvement plans. The applicant's engineer shall be responsible for verifying the size, location, and elevations of existing improvements. Any alternative routing of the mains shall require approval of the City Engineer and may require appropriate calculations.
- b. Locan Avenue, Trenton Avenue and North-South Paseo – install mains as necessary to serve the corresponding landscape irrigation.

Grading and Drainage

160. The applicant shall contact the Fresno Metropolitan Flood Control District (FMFCD) and address all requirements, pay all applicable fees required, obtain any required NPDES permit, and implement Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology to reduce or eliminate storm water pollution. Plans for these requirements shall be included in the previously required set of construction plans, and shall be submitted to and approved by FMFCD prior to the release of any development permits.
161. Grade differentials between lots and adjacent properties shall be adequately shown on the grading plan and shall be treated in a manner in conformance with City of Clovis Standard Drawing No. M-4 as modified by the City Council. Any retaining walls required on-site or in public right of way shall be masonry construction. All retaining walls shall be designed by a registered civil engineer.

Irrigation and Landscaping Facilities

162. The applicant, as a portion of the required tract improvements, shall provide landscaping and irrigation as required herein. The landscaping and irrigation shall be installed in public right-of-way and the area reserved for landscaping. The irrigation and landscape improvements shall be in accordance with the City's master plans and shall match existing improvements. The applicant's engineer shall be responsible for verifying the size, location, and elevations of existing improvements. Plans for the required landscaping and irrigation systems shall be prepared by an appropriately registered professional at the applicant's expense and shall be approved by the City of Clovis Planning and Development Services Department and Public Utilities Department prior to the beginning of construction or the recording of the final tract map, whichever occurs first. Landscape and irrigation facilities that the City Landscape Maintenance District shall maintain: the paseos, paseo lights, and the landscape strip along Locan Avenue.
163. All park and landscape improvements shall be installed, accepted for maintenance by the City prior to issuance of 40% of the Tract's building permits. If the park and landscape improvements are not constructed for any reason within two (2) years of the recordation of the final map of Tract, City shall have the right to request from surety and receive upon City's demand, sufficient funding to complete the construction of improvements for the park and street landscaping. The two year period may be extended at City's sole option and discretion and upon such conditions as City shall determine.
164. The owner shall request annexation to and provide a covenant for the Landscape Maintenance District. The property owner acknowledges and agrees that such request serves as a petition pursuant to California State Proposition 218 and no further election shall be required for the establishment of the initial assessment. The assessment for each lot shall be obtained from the City for the tax year following the recordation of the final map. The estimated annual assessment per average sized lot is \$234.81, which is subject to change prior to issuance of building permit or final tract map approval and is subject to an annual change in the range of the assessment in the amount of the Consumer Price Index, U.S. City Average, All Urban Consumers (CPI Index), plus two percent (2%). The additional landscaping enhancements that exceed the City norms and are specific benefit to the property, such as the entry feature, columns, monuments, interior median islands, round-a-bouts, special street lights, etc., if determined to be maintained by the Landscape Maintenance District, shall be maintained by an additional landscape maintenance assessment. The applicant shall provide construction costs and deposit with the City an amount equal to 50% of the value of the enhanced landscaping hardscape features, or an alternate amount approved by the City Engineer, such as columns, monuments, and special street lights, that exceeds the City norms. The applicant shall provide the City with an estimate of the annual maintenance for the special lighting and landscaping enhancements that exceeds the City norms. The owner/developer shall notify all

potential lot buyers before they actually purchase a lot that this tract is a part of a Landscape Maintenance District and shall inform potential buyers of the assessment amount. Said notification shall be in a manner approved by the City. The owner/developer shall supply all pertinent materials for the Landscape Maintenance District.

165.The applicant shall comply with the City of Clovis Water Efficient Landscape Requirements Ordinance.

166.All existing agricultural irrigation systems either on-site or in public right of way, whether FID or privately owned, shall be identified prior to any construction activity on the site. Service to all downstream users of irrigation water shall be maintained at all times through preservation of existing facilities or, if the existing facilities are required to be relocated, the relocation and replacement of the existing facilities. It is the intent that downstream users not bear any burden as a result of development of the site. Therefore, the applicant shall pay all costs related to modification, relocation, or repair of any existing irrigation facilities resulting from or necessitated by the development of the site. The applicant shall identify on site plans and construction plans, all existing irrigation systems and their disposition (abandonment, repair, relocation, and/or piping). The applicant shall consult with the Fresno Irrigation District for any additional requirements for lines to be abandoned, relocated, or piped. The applicant shall provide waivers from all users **in order to abandon or modify any irrigation pipelines or for any service interruptions resulting from development activities.**

167.The applicant shall provide a perimeter wall perpetual maintenance covenant on all properties that have a perimeter wall that is installed on private property. A recordable covenant shall be submitted to and approved by the City of Clovis City Engineer prior to final map approval.

Miscellaneous

168.The applicant shall install street lights along the major streets on metal poles to local utility provider's standards at the locations designated by the City Engineer. Street light locations shall be shown on the utility plans submitted with the final map for approval. Street lights at future traffic signal locations shall be installed on approved traffic signal poles, including all conduits and pull boxes. Street lights along the major streets shall be owned and maintained by local utility providers. Proof of local utility provider's approval shall be provided. The applicant may install thematic lighting, as approved by the City Engineer. If the applicant chooses to install thematic lighting, the applicant shall provide a conceptual lighting plan identifying adjacent properties that may be incorporated with thematic lights to create a neighborhood effect. Thematic lighting shall be maintained by an additional landscape maintenance assessment.

169.The applicant shall install all major street monumentation and section corner monumentation within the limits of the project work in accordance with City Standard

ST-32 prior to final acceptance of the project. Monumentation shall include all section corners, all street centerline intersection points, angle points and beginning and end of curves (E.C.'s & B.C.'s). The applicant/contractor shall furnish brass caps. Any existing section corner or property corner monuments damaged by this development shall be reset to the satisfaction of the City Engineer. A licensed land surveyor or civil engineer licensed to perform land surveying shall certify the placement of all required monumentation prior to final acceptance. Brass caps required for installation of new monuments or replacement of existing monuments shall be provided by the contractor/the applicant and approved by City prior to installation. Within five days after the final setting of all monuments has been completed, the engineer or surveyor shall give written notice to the City Engineer that the final monuments have been set. Upon payment to the engineer or surveyor for setting the final monuments, the applicant shall present to the City Engineer evidence of the payment and receipt thereof by the engineer or surveyor.

170.A deferment, modification, or waiver of any engineering conditions shall require the express written approval of the City Engineer.

171.The conditions given herein are for the entire development. Additional requirements for individual phases may be necessary pending review by the City Engineer.

Fresno Irrigation District

(Chris Lundeen, FID Representative – 233-7161 ext. 7410)

172.The Applicant shall refer to the attached Fresno Irrigation District correspondence. If the list is not attached, please contact the FID for the list of requirements.

County of Fresno Health Department Conditions

(Kevin Tsuda, County of Fresno Health Department Representative – 600-3271)

173.The Applicant shall refer to the attached Fresno County Health Department correspondence. If the list is not attached, please contact the Health Department for the list of requirements.

Clovis Unified School District

(Michael Johnston, CUSD Representative – 327-9000)

174.The Applicant shall refer to the attached CUSD correspondence. If the list is not attached, please contact the CUSD for the list of requirements.

San Joaquin Valley Air Pollution Control District

(Carol Flores, SJVAPCD Representative – 230-55935)

175.The Applicant shall refer to the attached SJVAPCD correspondence. If the list is not attached, please contact the SJVAPCD for the list of requirements.

Fresno Metropolitan Flood Control District
(Mikel Meneses, FMFCD Representative – 456-3292)

176. The Applicant shall refer to the attached FMFCD correspondence. If the list is not attached, please contact the FMFCD for the list of requirements.

**DRAFT
RESOLUTION 19-__**

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CLOVIS APPROVING A
MITIGATED NEGATIVE DECLARATION FOR GENERAL PLAN AMENDMENT GPA2019-
004, REZONE R2019-005, REZONE R2019-006, VESTING TENTATIVE TRACT MAP
TM6264, VESTING TENTATIVE TRACT MAP TM6239 PURSUANT TO CEQA
GUIDELINES**

WHEREAS, the project proponent, Valley Coastal Development, LLC., 1396 W. Herndon Avenue Suite 101, Fresno, CA 93711, has applied for various files including General Plan Amendment GPA2019-004, R2019-005, R2019-006, TM6264 and TM6239 for properties located north of Teague Avenue, between Temperance and DeWolf Avenues, in the City of Clovis, County of Fresno, California; and

WHEREAS, the City of Clovis ("City") caused to be prepared an Initial Study (hereinafter incorporated by reference) on October 2019, for the Project to evaluate potentially significant adverse environmental impacts and on the basis of that study it was determined that no significant environmental impacts would result from this Project, and that mitigation measures would be required for the Project; and

WHEREAS, on the basis of this Initial Study, a Mitigated Negative Declaration has been prepared, circulated, and made available for public comment pursuant to the California Environmental Quality Act ("CEQA"), Public Resources Code, section 21000, et seq., and Guidelines for implementation of CEQA, 14 California Code of Regulations, sections 15000, et seq. from October 2019; and

WHEREAS, the City Council has independently reviewed, evaluated, and considered the Initial Study, Mitigated Negative Declaration and all comments, written and oral, received from persons who reviewed the Mitigated Negative Declaration, or otherwise commented on the Project.

NOW, THEREFORE, BE IT RESOLVED, that the City of Clovis resolves as follows:

1. Adopts the foregoing recitals as true and correct.
2. Finds that the Initial Study and Mitigated Negative Declaration for the Project are adequate and have been completed in compliance with CEQA and the CEQA Guidelines.
3. Finds and declares that the Initial Study and Mitigated Negative Declaration were presented to the City Council and that the City Council has independently reviewed, evaluated, and considered the Initial Study, Mitigated Negative Declaration and all comments, written and oral, received from persons who reviewed the Initial Study and Mitigated Negative Declaration, or otherwise

commented on the Project prior to approving the Project and recommends the adoption of a Mitigated Negative Declaration for this project.

4. Approves and adopts the Mitigation Monitoring Program set forth in Attachment A, including the mitigation measures identified therein and as described in the Mitigated Negative Declaration.
5. Directs that the record of these proceedings be contained in the Department of Planning and Development Services located at 1033 Fifth Street, Clovis, California 93612, and that the custodian of the record be the Deputy City Planner or other person designated by the Planning and Development Services Director.
6. The Planning and Development Services 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.

* * * * *

The foregoing resolution was introduced and adopted at a regular meeting of the City Council of the City of Clovis held on _____, 2019 by the following vote, to wit.

AYES:
NOES:
ABSENT:
ABSTAIN:

DATED:

Mayor

City Clerk

**ATTACHMENT A:
Mitigation Monitoring Program**

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
4. Biological				
BIO-1	A pre-activity survey should be conducted by a qualified biologist knowledgeable in the identification of burrowing owls in the northern portion of the project area of proposed TM6239 to confirm no burrowing owls have taken up residence either overwintering or nesting in the spring/ summer.	City of Clovis Planning	<i>Prior to Permits and During Construction</i>	
4. Biological				
BIO-2	If burrowing owls are detected on-site a no-work Environmentally Sensitive Area (ESA) buffer around the occupied burrow should be established in consultation with a qualified biologist	City of Clovis Planning	<i>Prior to Permits and During Construction</i>	
BIO-3	A pre-activity survey for migratory birds and birds should be conducted prior to tree removal, unless tree removal occurs outside the nesting period. Tree removal should occur between February and August.	City of Clovis Planning	<i>Prior to Permits and During Construction</i>	
5. Cultural and 18. Tribal Cultural Resources				
CUL-1 TCR-1	If prehistoric or historic-era cultural or archaeological materials are encountered	City of Clovis Planning	<i>Prior to Permits and During Construction</i>	

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	<p>during construction activities, all work in the immediate vicinity of the find shall halt until a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, can evaluate the significance of the find and make recommendations. Cultural resource materials may include prehistoric resources such as flaked and ground stone tools and debris, shell, bone, ceramics, and fire-affected rock as well as historic resources such as glass, metal, wood, brick, or structural remnants</p> <p>If the qualified professional archaeologist determines that the discovery represents a potentially significant cultural resource, additional investigations may be required to mitigate adverse impacts from project implementation. These additional studies may include avoidance, testing, and evaluation or data recovery excavation.</p> <p>If a potentially-eligible resource is encountered, then the qualified professional archaeologist, the Lead Agency, and the project proponent shall arrange for either 1) total avoidance of the resource</p>	<p>Table Mountain Rancheria</p>		

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	<p>or 2) test excavations to evaluate eligibility and, if eligible, total data recovery. The determination shall be formally documented in writing and submitted to the Lead Agency as verification that the provisions for managing unanticipated discoveries have been met.</p>			
<p>CUL-2 TCR-2</p>	<p>If human remains are discovered during construction or operational activities, further excavation or disturbance shall be prohibited pursuant to Section 7050.5 of the California Health and Safety Code. The specific protocol, guidelines, and channels of communication outlined by the Native American Heritage Commission, in accordance with Section 7050.5 of the Health and Safety Code, Section 5097.98 of the Public Resources Code (Chapter 1492, Statutes of 1982, Senate Bill 297), and Senate Bill 447 (Chapter 44, Statutes of 1987), shall be followed. Section 7050.5(c) shall guide the potential Native American involvement, in the event of discovery of human remains, at the direction of the County coroner. All reports, correspondence, and determinations regarding the discovery of human remains on the project site shall be</p>	<p>City of Clovis Planning Table Mountain rancheria</p>	<p><i>Prior to Permits and During Construction</i></p>	

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	submitted to the Lead Agency.			
7. Geology and Soils				
GEO-1	<p>If prehistoric or historic-era cultural materials are encountered during construction activities, all work in the immediate vicinity of the find shall halt until a qualified professional archaeologist and/or paleontologist, meeting the Secretary of the Interior’s Professional Qualification Standards for prehistoric and historic archaeologist, can evaluate the significance of the find and make recommendations. Cultural resource materials may include prehistoric resources such as flaked and ground stone tools and debris, shell, bone, ceramics, and fire-affected rock as well as historic resources such as glass, metal, wood, brick, or structural remnants.</p> <p>If the qualified professional determines that the discovery represents a potentially significant cultural resource, additional investigations may be required to mitigate adverse impacts from project implementation.</p>	City of Clovis Planning	<i>Prior to Permits and During Construction</i>	

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	<p>These additional studies may include avoidance, testing, and evaluation or data recovery excavation.</p> <p>If a potentially-eligible resource is encountered, then the qualified professional archaeologist and/or paleontologist, the Lead Agency, and the project proponent shall arrange for either 1) total avoidance of the resource or 2) test excavations to evaluate eligibility and, if eligible, total data recovery. The determination shall be formally documented in writing and submitted to the Lead Agency as verification that the provisions for managing unanticipated discoveries have been met.</p>			
17. Transportation				
TRAF- 1	The Project proponent and/or applicant shall work with City staff to develop a solution for traffic control and pay a fair share of costs for the installation of the traffic control devices prior to issuance of building permits.	City of Clovis Planning	<i>Prior to Permits and During Construction</i>	

**DRAFT
RESOLUTION 19-__**

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CLOVIS APPROVING
GENERAL PLAN AMENDMENT GPA2019-004, A REQUEST TO AMEND THE GENERAL
PLAN AND HERNDON SHEPHERD SPECIFIC PLAN TO RE-DESIGNATE
APPROXIMATELY 42.39 ACRES OF PROPERTY FROM THE VERY LOW DENSITY
RESIDENTIAL TO THE MEDIUM DENSITY RESIDENTIAL CLASSIFICATION FOR
PROPERTIES LOCATED NORTH OF TEAGUE AVENUE BETWEEN TEMPERANCE AND
DEWOLF AVENUES**

WHEREAS Valley Coastal Development, LLC., 1396 W. Herndon Avenue Suite 101, Fresno, CA 93711, has applied for a General Plan Amendment GPA2019-004; and

WHEREAS, The Applicant submitted an application for a general plan amendment to amend the General Plan and Herndon Shepherd Specific Plan to re-designate land from the Very Low Density Residential (0.6 to 2.0 DU/Ac) to the Medium Density Residential (4.1 to 7.0 DU/Ac) classification for the construction of 206 single-family homes within the project sites located north of Teague Avenue between Temperance and DeWolf Avenues, in the City of Clovis, County of Fresno, California; and

WHEREAS, the proposed General Plan Amendment GPA2019-004, was assessed under the provisions of the California Environmental Quality Act (CEQA) and the potential effects on the environment were considered by the City Council, together with comments received and public comments, and the entire public record was reviewed; and

WHEREAS, staff does recommend adoption of a Mitigated Negative Declaration for GPA2019-004 and

WHEREAS, a public notice was sent out to area residents within 800 feet of said property boundaries twenty-one days prior to said hearing; and

WHEREAS, a duly noticed hearing was held on November 18, 2019 and

WHEREAS, on November 18, 2019, the City Council considered testimony and information received at the public hearing and the oral and written reports from City staff, as well as other documents contained in the record of proceedings relating to General Plan Amendment GPA2019-004 which are maintained at the offices of the City of Clovis Department of Planning and Development Services; and

WHEREAS, after hearing evidence gathered by itself and on its behalf and after making the following findings, namely:

- a. The proposed amendment is internally consistent with the goals, policies, and actions of the General Plan; and

- b. The proposed amendment would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City; and
- c. If applicable, the parcel is physically suitable (including absence of physical constraints, access, compatibility with adjoining land uses, and provision of utilities) for the requested/anticipated project.
- d. There is a compelling reason for the amendment.

NOW, THEREFORE, BE IT RESOLVED, that the City of Clovis Council approves General Plan Amendment GPA2019-004.

* * * * *

The foregoing resolution was introduced and adopted at a regular meeting of the City Council of the City of Clovis held on _____, 2019 by the following vote, to wit.

AYES:
NOES:
ABSENT:
ABSTAIN:

DATED:

Mayor

City Clerk

**DRAFT
ORDINANCE 19-_____**

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CLOVIS AMENDING SECTIONS 9.080.020 OF CHAPTER 2 AND 9.86.010 OF CHAPTER 6 OF TITLE 9 OF THE CLOVIS MUNICIPAL CODE RELATING TO THE REQUEST TO APPROVE A REZONE OF APPROXIMATELY 5 ACRES OF PROPERTY LOCATED NORTH OF TEAGUE AVENUE AND WEST OF LOCAN AVENUE FROM THE R-1-AH (SINGLE FAMILY RESIDENTIAL – 18,000 SQ. FT.) TO THE R-1-PRD (SINGLE FAMILY PLANNED RESIDENTIAL DEVELOPMENT) ZONE DISTRICT AND APPROVING A MITIGATED NEGATIVE DECLARATION PURSUANT TO CEQA GUIDELINES

LEGAL DESCRIPTION:

See the Attachment A

WHEREAS, Valley Coastal Development, LLC., 1396 W. Herndon Avenue Suite 101, Fresno, CA 93711, has applied for a Rezone R2019-005; and

WHEREAS, the Applicant submitted an application for a Rezone, R2012-005, a request to rezone approximately 5 acres from the R-1-AH (Single-Family Residential 18,000 sq. ft.) Zone District to the R-1-PRD (Single-Family Planned Residential) Zone District for property located north of Teague Avenue and west of Locan Avenue, in the City of Clovis, County of Fresno, California; and

WHEREAS, the Planning Commission held a noticed Public Hearing on October 24, 2019, to consider the Project Approval, at which time interested persons were given opportunity to comment on the Project; and

WHEREAS, the Planning Commission recommended that the Council approve Rezone R2019-005 subject to associated conditions of approval listed as Attachment B; and

WHEREAS, the Planning Commission's recommendations were forwarded to the City Council for consideration; and

WHEREAS, the City published Notice of a City Council Public Hearing for November 18, 2019, to consider Rezone R2019-005. A copy of the Notice was mailed to interested parties within 800 feet of the project boundaries and published in The Business Journal; and

WHEREAS, the City Council held a noticed public hearing on November 18, 2019, to consider the approval of Rezone R2019-005; and

WHEREAS, the City Council does approve a Mitigated Negative Declaration pursuant to CEQA guidelines; and

WHEREAS, on November 18, 2019, the City Council considered testimony and information received at the public hearing and the oral and written reports from City staff, as well as other documents contained in the record of proceedings relating to Rezone R2019-005, which are maintained at the offices of the City of Clovis Planning and Development Services Department; and

WHEREAS, the City Council has evaluated and considered all comments, written and oral, received from persons who reviewed Rezone R2019-005, or otherwise commented on the Project; and

The City Council of the City of Clovis does ordain as follows:

Section 1: **FINDINGS.** The Council finds as follows:

1. The proposed amendment is consistent with goals, policies, and actions of the General Plan,
2. The proposed amendment would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City.
3. The parcel is physically suitable (including absence of physical constraints, access, and compatibility with adjoining land uses, and provision of utilities) for the requested designations and anticipated land uses/ projects.
4. The City Council does approve a Mitigated Negative Declaration for the project pursuant to CEQA guidelines.

Section 2: The Official Map of the City is amended in accordance with Sections 9.08.020 and 9.86.010 of the Clovis Municipal Code by reclassification of certain land in the City of Clovis, County of Fresno, State of California, to wit:

From classification R-1-AH to classification R-1-PRD

The properties so reclassified is located near the northwest corner of Locan and Teague Avenues. In the City of Clovis, County of Fresno, California, and is more particularly described as shown in "Attachment A."

Section 3 This Ordinance shall go into effect and be in full force from and after thirty (30) days after its final passage and adoption.

Section 4: The record of proceedings is contained in the Planning and Development Services Department, located at 1033 Fifth Street, Clovis, California 93612, and the custodian of records is the City Planner.

APPROVED: November 18, 2019

Mayor
* * * * *

City Clerk
* * *

The foregoing Ordinance was introduced and read at a regular meeting of the City Council held on November 18, 2019, and was adopted at a regular meeting of said Council held on _____, by the following vote, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

DATED:

City Clerk

**ATTACHMENT A
Legal Description**

The land referred to is situated in the County of Fresno, City of Clovis, State of California, and is described as follows:

PARCEL 1:

Lot 7 in Block 1 of Carson Calimyrna Fig Orchards, as per Map thereof recorded in Book 7 Page 50 of Record of Surveys, Fresno County Records.
EXCEPTING a right of way for road purposes over the North 30 feet of Lot 8. Said easement is to be appurtenant to and for the benefit of the owners of Lots 7, 9, and 10.

PARCEL 2:

A right of way over the South 30 feet of Lot 7 of said Tract for road purposes. Said right of way to be appurtenant to and for the benefit of Lot 8, 9, and 10 referred to in Parcel 1.

APN: 559-051-14

**ATTACHMENT B
Conditions of Approval- R2019-005**

1. Rezone R2019-005 shall become effective only upon approval General Plan Amendment GPA2019-004 by the City Council.
2. Rezone R2019-005 approves an R-1-PRD (Single Family Planned Residential Development) Zone District.
3. As an amenity for the Project, the developer shall include a park, community building, and public seating, as well as the pedestrian walkway with enhanced landscaping as shown in TM6264.
4. All transformers shall be located underground. Pad mounted transformers may be considered through approval of a separate Administrative Use Permit.
5. All landscaping (open space and private yards) shall conform to the City of Clovis Water Efficient Landscape Ordinance.
6. Setbacks shall be measured to the exterior face of the framing of the structure. Exceptions to the setbacks are identified in Section 9.24.100 of the Clovis Municipal Code.
7. The following are development standards approved for R2019-005:

TM6264 Planned Residential Development Standards	
Minimum Lot Area	2,470 sq. ft.
Minimum Lot Width	32 feet
Minimum Lot Depth	65 feet
Maximum Lot Coverage	60%
Maximum Building Height	35 ft./ 2-1/2 stories
Minimum Front Setback	6 feet
Minimum Side Setback	4 feet
Minimum Rear Yard Setback:	8 feet

**DRAFT
ORDINANCE 19-**

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CLOVIS AMENDING SECTIONS 9.080.020 OF CHAPTER 2 AND 9.86.010 OF CHAPTER 6 OF TITLE 9 OF THE CLOVIS MUNICIPAL CODE RELATING TO THE REQUEST TO APPROVE A REZONE OF APPROXIMATELY 37.39 ACRES OF PROPERTY LOCATED NORTH OF TEAGUE AVENUE AND EAST OF LOCAN AVENUE FROM THE R-1-AH (SINGLE FAMILY RESIDENTIAL – 18,000 SQ. FT.) TO THE R-1-PRD (SINGLE FAMILY PLANNED RESIDENTIAL DEVELOPMENT) ZONE DISTRICT AND APPROVING A MITIGATED NEGATIVE DECLARATION PURSUANT TO CEQA GUIDELINES

LEGAL DESCRIPTION:

See the Attachment A

WHEREAS, Valley Coastal Development, LLC., 1396 W. Herndon Avenue Suite 101, Fresno, CA 93711, has applied for a Rezone R2019-006; and

WHEREAS, the Applicant submitted an application for a Rezone, R2012-006, a request to rezone approximately 37.39 acres from the R-1-AH (Single-Family Residential 18,000 sq. ft.) Zone District to the R-1-PRD (Single-Family Planned Residential) Zone District for property located north of Teague Avenue and east of Locan Avenue, in the City of Clovis, County of Fresno, California; and

WHEREAS, the Planning Commission held a noticed Public Hearing on October 24, 2019, to consider the Project Approval, at which time interested persons were given opportunity to comment on the Project; and

WHEREAS, the Planning Commission recommended that the Council approve Rezone R2019-006 subject to associated conditions of approval listed as Attachment B; and

WHEREAS, the Planning Commission’s recommendations were forwarded to the City Council for consideration; and

WHEREAS, the City published Notice of a City Council Public Hearing for November 18, 2019, to consider Rezone R2019-006. A copy of the Notice was mailed to interested parties within 800 feet of the project boundaries and published in The Business Journal; and

WHEREAS, the City Council does approve a Mitigated Negative Declaration pursuant to CEQA guidelines; and

WHEREAS, the City Council held a noticed public hearing on November 18, 2019, to consider the approval of Rezone R2019-006; and

WHEREAS, on November 18, 2019, the City Council considered testimony and information received at the public hearing and the oral and written reports from City staff, as well as other documents contained in the record of proceedings relating to Rezone R2019-006, which are maintained at the offices of the City of Clovis Planning and Development Services Department; and

WHEREAS, the City Council has reviewed the proposed rezoning in light of the subject parcel's inclusion in existing RHN Overlay, together with information which describes the surplus in the Housing Element Sites inventory, and determined that the rezoning and development of the site for the purpose of developing a single family subdivision will not be detrimental to the City's ability to achieve its RHNA requirement; and

WHEREAS, the City Council has evaluated and considered all comments, written and oral, received from persons who reviewed Rezone R2019-006, or otherwise commented on the Project; and

The City Council of the City of Clovis does ordain as follows:

Section 1: FINDINGS. The Council finds as follows:

1. The removal of Housing Element Site #8 from the inventory and the loss of 105 units will not limit the City's ability to accommodate its RHNA requirements. The designation of replacement parcels is not required.
2. The proposed amendment is consistent with goals, policies, and actions of the General Plan,
3. The proposed amendment would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City.
4. The parcel is physically suitable (including absence of physical constraints, access, and compatibility with adjoining land uses, and provision of utilities) for the requested designations and anticipated land uses/ projects.
5. The City Council does approve a Mitigated Negative Declaration for the project pursuant to CEQA guidelines.

Section 2: The Official Map of the City is amended in accordance with Sections 9.08.020 and 9.86.010 of the Clovis Municipal Code by reclassification of certain land in the City of Clovis, County of Fresno, State of California, to wit:

From classification R-1-AH to classification R-1-PRD

The properties so reclassified is located near the northeast corner of Locan and Teague Avenues. In the City of Clovis, County of Fresno, California, and is more particularly described as shown in "Exhibit One."

Section 3 This Ordinance shall go into effect and be in full force from and after thirty (30) days after its final passage and adoption.

Section 4: The record of proceedings is contained in the Planning and Development Services Department, located at 1033 Fifth Street, Clovis, California 93612, and the custodian of records is the City Planner.

APPROVED: November 18, 2019

Mayor
* * * * *

City Clerk

The foregoing Ordinance was introduced and read at a regular meeting of the City Council held on November 18, 2019, and was adopted at a regular meeting of said Council held on _____, by the following vote, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

DATED:

City Clerk

ATTACHMENT A
Legal Description

The land referred to is situated in the County of Fresno, City of Clovis, State of California, and is described as follows:

TRACT ONE:

PARCEL ONE:

Lot 41, together with that portion of the East half of a 40 foot road lying adjacent to and West of said Lot 41 and that portion of a 20 foot road lying adjacent to and South of said Lot 41, title to which would pass by conveyance describing said lot pursuant to that certain "Order of Abandonment" recorded August 28, 1958 in Book 4106, Page 437, Fresno County Records, all in Block 2 of Carson Calimyrna Fig Orchards, according to the map thereof recorded in Book 7 Page 50 of Record of Surveys, in the office of the County Recorder of Fresno County.

PARCEL TWO:

A non-exclusive right of way for road purposes over the North 30 feet of Lots 56, 57, and 40 and the South 30 feet of Lots 39, 42, 55 and 58, in Block 2 of Carson Calimyrna Fig Orchards, according to the map thereof recorded in Book 7 Page 50 of Record of Surveys, in the office of the County Recorder of Fresno County, for the benefit of and appurtenant to Parcel One above described and also for the benefit of all persons who may later acquire any portion of said Parcel One hereinabove described.

APN 558-020-05

TRACT TWO:

PARCEL 1:

Lot 56, together with that portion of the West half of a 40-foot road lying adjacent to and East of said Lot 56, all in Block 2 of Carson Calimyrna-Fig Orchards, in the County of Fresno, State of California, according to the Map thereof Recorded in Book 7 Page 50 of Record of Surveys, Fresno County Records.

PARCEL 2:

A non-exclusive right of way for road purposes over the South 30 feet of Lots 55, 58, and 39 and the North 30 feet of Lots 41, 40, 56 and 57, in Block 2 of Carson Calimyrna Fig Orchards,

according to the Map thereof recorded in Book 7 Page 50 of Record of Surveys, in the Office of the County Recorder of Fresno County, for the benefit of and appurtenant to Parcel One above described and also for the benefit of all persons who may later acquire any portion of said Parcel One hereinabove described.

APN: 558-020-13

The land referred to is situated in the County of Fresno, City of Clovis, State of California, and is described as follows:

TRACT ONE:

PARCEL ONE:

Lot 42, together with that portion of the East half of a 40 foot road lying adjacent to and West of said Lot 42, title to which would pass by conveyance describing said lot pursuant to that certain "Order of Abandonment" recorded August 28, 1958 in Book 4106, Page 437, Fresno County Records, all in Block 2 of Carson Calimyrna Fig Orchards, according to the map thereof recorded in Book 7 Page 50 of Record of Surveys, in the office of the County Recorder of Fresno County.

PARCEL TWO:

A non-exclusive right of way for road purposes over the South 30 feet of Lots 55, 58, and 39 and the North 30 feet of Lots 41, 40, 56 and 57, in Block 2 of Carson Calimyrna Fig Orchards, according to the map thereof recorded in Book 7 Page 50 of Record of Surveys, in the office of the County Recorder of Fresno County, for the benefit of and appurtenant to Parcel One above described and also for the benefit of all persons who may later acquire any portion of said Parcel One hereinabove described.

APN: 558-020-06

TRACT TWO:

PARCEL 1:

Lot 43, together with that portion of the East half of a 40 foot road lying adjacent to an West of said Lot 43, title to which would pass by conveyance describing said lot pursuant to that certain "Order of Abandonment" recorded August 28, 1958 in Book 4106, Page 437, Fresno County Records, all in Block 2 of Carson-Calimyrna Fig Orchards, according to the Map thereof

recorded in Book 7 Page 50 of Record of Surveys, in the Office of the County Recorder of said County.

PARCEL 2:

A non-exclusive right of way for road purposes over the North 30 feet of Lots 59, 54 and 38 of the South 30 feet of Lots 60, 63, 44, and 37, and over a 60 foot strip of land located within the 40 foot road lying between Lots 53, 54, 43, and 44 said 60 foot strip of land being the extension of the non-exclusive right of way for road purposes described in Parcel 2 herein, in Block 2 of Carson Calimyrna Fig Orchards, according to the Map thereof recorded in Book 7 Page 50 of Record of Surveys, in the Office of the County Recorder of said County, for the benefit of and appurtenant to Parcel 1 above described and also for the benefit of all persons who may later acquire any portion of said Parcel 1 hereinabove described.

APN: 558-290-06

TRACT THREE:

PARCEL ONE:

Lot 53, together with that portion of the West half of a 40 foot road lying adjacent to and East of said Lot 53, title to which would pass by conveyance describing said lot pursuant to that certain "Order of Abandonment" recorded August 28, 1958 in Book 4106, Page 437, Fresno County Records, all in Block 2 of Carson Calimyrna Fig Orchards, according to the map thereof recorded in Book 7 Page 50 of Record of Surveys, in the office of the County Recorder of Fresno County.

PARCEL TWO:

A non-exclusive right of way for road purposes over the South 30 feet of Lots 37, 44 and 60 and the North 30 feet of Lots 38, 43, 54, and 59, in Block 2 of Carson Calimyrna Fig Orchards, according to the map thereof recorded in Book 7 Page 50 of Record of Surveys, in the office of the County Recorder of Fresno County, for the benefit of and appurtenant to Parcel One above described and also for the benefit of all persons who may later acquire any portion of said Parcel One hereinabove described.

APN: 558-020-09

TRACT FOUR:

PARCEL ONE:

Lot 54, together with that portion of the West half of a 40 foot road lying adjacent to and East of said Lot 54, title to which would pass by conveyance describing said lot pursuant to that certain "Order of Abandonment" recorded August 28, 1958 in Book 4106, Page 437, Fresno County Records, all in Block 2 of Carson Calimyrna Fig Orchards, according to the map thereof recorded in Book 7 Page 50 of Record of Surveys, in the office of the County Recorder of Fresno County.

PARCEL TWO:

A non-exclusive right of way for road purposes over the North 30 feet of Lots 59, 43, and 38 and the South 30 feet of Lots 60, 53, 44 and 37, in Block 2 of Carson Calimyrna Fig Orchards, according to the map thereof recorded in Book 7 Page 50 of Record of Surveys, in the office of the County Recorder of Fresno County, for the benefit of and appurtenant to Parcel One above described and also for the benefit of all persons who may later acquire any portion of said Parcel One hereinabove described.

APN: 558-020-10

TRACT FIVE:

PARCEL ONE:

Lot 55, together with that portion of the West half of a 40 foot road lying adjacent to and East of said Lot 55, title to which would pass by conveyance describing said lot pursuant to that certain "Order of Abandonment" recorded August 28, 1958 in Book 4106, Page 437, Fresno County Records, all in Block 2 of Carson Calimyrna Fig Orchards, according to the map thereof recorded in Book 7 Page 50 of Record of Surveys, in the office of the County Recorder of Fresno County.

PARCEL TWO:

A non-exclusive right of way for road purposes over the South 30 feet of Lots 58, 42 and 39 and the North 30 feet of Lots 56, 57, 41 and 40, in Block 2 of Carson Calimyrna Fig Orchards, according to the map thereof recorded in Book 7 Page 50 of Record of Surveys, in the office of the County Recorder of Fresno County, for the benefit of and appurtenant to Parcel One above described and also for the benefit of all persons who may later acquire any portion of said Parcel One hereinabove described.

APN 558-020-11 and 558-020-12

TRACT SIX:

PARCEL 1:

Lot 56, together with that portion of the West half of a 40-foot road lying adjacent to and East of said Lot 56, all in Block 2 of Carson Calimyrna-Fig Orchards, in the County of Fresno, State of California, according to the Map thereof Recorded in Book 7 Page 50 of Record of Surveys, Fresno County Records.

PARCEL 2:

A non-exclusive right of way for road purposes over the South 30 feet of Lots 55, 58, 42 and 39, the North 30 feet of Lots 57, 41, and 40 and over a 60-foot strip of land located 30 feet on each side of the center line of the 40-foot road lying between Lots 41, 42, 55 and 56; said 60-foot strip of land being the extension of the nonexclusive right of way for road purposes described in Parcel 2, herein, in Block 2 of Carson Calimyrna-Fig Orchards, in the County of Fresno, State of California, according to the Map thereof Recorded in Book 7 Page 50 of Record of Surveys, Fresno County Record's, for the benefit of and appurtenant to Parcel 1 above described and also for the benefit of all persons who may later acquire any portion of said Parcel 1 hereinabove described.

APN: 558-020-13

TRACT SEVEN:

Parcel 1 of Parcel Map No. 3426, according to the Map thereof recorded in Book 23 Page 61 of Parcel Maps, Fresno County Records.

APN: 558-020-80

TRACT EIGHT:

PARCEL ONE:

Parcel 2 of Parcel Map No. 3426 in the County of Fresno, State of California, according to the Map thereof recorded in Book 23, Page 61 of Parcel Maps, Fresno County Records.

PARCEL TWO:

A non-exclusive right of way for road purposes over the North 30 feet of Lots 59, 54, 43 and 38 and over the South 30 feet of Lots 53, 44 and 37 and over a 60 foot strip of land located within the 40 foot road lying between Lots 53, 54, 43, 44; said 60 foot strip of land being the extension of the non-exclusive right of way for Calimyrna-Fig Orchards, in the County of Fresno, State of California, according to the Map thereof recorded in Book 7, Page 50 of Record of Surveys, Fresno County Records, for the benefit and appurtenant to Parcel A hereinabove described and also for the benefit of all persons who may later acquire any portion of said Parcel A herein above described.

PARCEL THREE:

Together with a non-exclusive right of way for road purposes over the South 30 feet of Parcel 1 of Parcel Map No. 3426, in the County of Fresno, State of California, according to the Map thereof recorded in Book 23 Page 61 of Parcel Maps, Fresno County Records.

APN: 558-020-20

ATTACHMENT B
Conditions of Approval- R2019-006

1. Rezone R2019-006 shall become effective only upon approval General Plan Amendment GPA2019-004 by the City Council.
2. Rezone R2019-006 approves an R-1-PRD (Single Family Planned Residential Development) Zone District.
3. The applicant shall provide amenities as required by the planned residential development standard.
4. All transformers shall be located underground. Pad mounted transformers may be considered through approval of a separate Administrative Use Permit.
5. All landscaping (open space and private yards) shall conform to the City of Clovis Water Efficient Landscape Ordinance.
6. Setbacks shall be measured to the exterior face of the framing of the structure. Exceptions to the setbacks are identified in Section 9.24.100 of the Clovis Municipal Code.
7. The following are development standards approved for R2019-006:

TM6239 Planned Residential Development Standards	
Minimum Lot Area	5,000 sq. ft.
Minimum Lot Width	50 ft. / 38 ft. (Cul-de-sac)
Minimum Lot Depth	98 ft.
Maximum Lot Coverage	60%
Maximum Building Height	35 ft./ 2-1/2 stories
Minimum Front Setback	10 ft.
Minimum Side Setback	4 ft. (interior) / 8 ft. (street side) / 10 ft. (reverse corner) / 5 ft. (key side yard)
Minimum Rear Yard Setback:	7 ft.

**DRAFT
RESOLUTION 19-__**

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CLOVIS APPROVING AN
APPEAL BY VALLEY COASTAL DEVELOPMENT OF THE PLANNING COMMISSION'S
DENIAL OF VESTING TENTATIVE TRACT MAP TM6264 FOR A 36-LOT SINGLE FAMILY
PLANNED RESIDENTIAL DEVELOPMENT ON APPROXIMATELY 5 ACRES OF
PROPERTY LOCATED AT THE NORTHWEST AREA OF TEAGUE AND LOCAN
AVENUES**

WHEREAS, Valley Coastal Development, LLC., 1396 W. Herndon Avenue Suite 101, Fresno, CA 93711, has applied for a Vesting Tentative Tract Map TM6264; and

WHEREAS, Vesting Tentative Tract Map TM6264, was filed on June 25, 2019, and was presented to the Clovis City Planning Commission for approval in accordance with the Subdivision Map Act of the Government of the State of California and Title 9, Chapter 2, of the Municipal Code and the City of Clovis; and

WHEREAS, the Planning Commission considered said map on October 24, 2019 and conducted proceedings resulting in the denial of said map; and

WHEREAS, Valley Coastal Development, LLC has appealed the Planning Commission's action to deny TM6264 in accordance with Section 9.90 of the Clovis Municipal Code and has requested that the City Council approve the Map; and

WHEREAS, a duly noticed hearing was held by the City Council on November 18, 2019 to consider the appeal and the request to approve TM6264; and

WHEREAS, a public notice was sent out to area residents within 800 feet of said property boundaries twenty-one days prior to said hearing; and

WHEREAS, the City Council has given careful consideration to this map on November 18, 2019, and does approve a Mitigated Negative Declaration for the project, and

WHEREAS, this Council finds and determines that approval of said map should be conditioned on all conditions recommended by the City staff, as set forth in Attachment A which is on file with the City Clerk's office.

NOW, THEREFORE, BE IT RESOLVED, that the City of Clovis resolves as follows:

- a. The proposed map is consistent with applicable general and specific plans;
- b. The design or improvement of the proposed subdivision is consistent with applicable general and specific plans;
- c. The site is physically suitable for the type of development;

- d. The site is physically suitable for the proposed density of development;
- e. The design of the subdivision or the type of improvements are not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat;
- f. The design of the subdivision or the type of improvements is not likely to cause serious public health problems; and
- g. The design of the subdivision or the type of improvements will not conflict with easements acquired by the public at large for access through the use of property within the proposed subdivision.
- h. The dedication toward public right-of-way is proportionate to the development being requested.

* * * * *

The foregoing resolution was introduced and adopted at a regular meeting of the City Council of the City of Clovis held on _____, 2019 by the following vote, to wit.

AYES:
 NOES:
 ABSENT:
 ABSTAIN:

DATED:

Mayor

City Clerk

**ATTACHMENT A
Conditions of Approval- TM6264**

1. TM6264 is approved per the Attachment 8 of the accompanying staff report.
2. Development Standards for TM6264 shall be per the Residential Development Standards as follows:

TM6264 Planned Residential Development Standards	
Minimum Lot Area	2,470 sq. ft.
Minimum Lot Width	32 feet
Minimum Lot Depth	65 feet
Maximum Lot Coverage	60%
Maximum Building Height	35 ft./ 2-1/2 stories
Minimum Front Setback	6 feet
Minimum Side Setback	4 feet
Minimum Rear Yard Setback:	8 feet

3. Garages shall be a minimum dimension of 20' x 22' (interior clear).
4. This Project requires the submittal and approval of a residential site plan review. Specific color and materials of the models, walls, landscaping, and fencing will be evaluated.
5. Landscape plans shall be reviewed and approved separately by the landscape review committee for tree and landscape type and location.
6. The developer shall construct a minimum six-foot high solid wall along the length of the property lines.
7. Upon final recordation of this tentative tract map, it shall be the applicant's responsibility to furnish to the Planning Department an electronic (PDF) copy of the original map obtained from the Fresno County Recorder's Office.
8. The applicant shall relay all conditions of approval for Vesting Tentative Tract Map TM6264 to all subsequent purchasers of individual lots, if applicable, and/or to subsequent purchasers of this entire tract map development.
9. The applicant shall record a Notice of Nonconformance dealing with any structure used for model homes where the garage is converted for the use as a sales office.
10. All lighting shall be screened from direct view from the public right-of-way and adjacent residential properties.

11. All landscaping shall conform to the City of Clovis Water Efficient Landscape Ordinance.
12. The developer shall comply with all mitigation measures identified in the Initial Study Mitigated Negative Declaration prepared for the Project, included as Attachment 12 to the staff report.
13. The applicant shall obtain City approval in advance of temporary and permanent subdivision signs through separate sign review, consistent with the development criteria of the Clovis Municipal Code.
14. The developer shall contact cultural resources staff at Table Mountain Rancheria prior to ground-disturbance to coordinate a training session on how to appropriately identify potential artifacts.
15. All transformers for this subdivision can be located above ground subject to review and approval of the required landscape screening material. Landscaping shall be reviewed through the residential site plan review process. Transformers shall not be placed in public spaces.
16. The applicant shall install pedestrian lighting along common areas. Spacing and location will be evaluated during residential site plan review.

Fire Department Conditions
(Gary Sawhill, Department Representative - 324-2224)

Roads / Access

17. **Street Width:** Fire apparatus access width shall be determined by measuring from “base of curb” to “base of curb” for roadways that have curbs. When roadways do not have curbs, the measurements shall be from the edge of the roadway surface (approved all weather surface).
18. **Street Width for Single Family Residences:** Shall comply with Clovis Fire Standard #1.1
19. **Security Gates:** All security gates shall comply with Clovis Fire Department Gates Standard #1.5. Plans shall be submitted for review and permits issued by Fire Department prior to installation. This includes the EVA on the north end of tract.
20. **Temporary Street Signs:** The applicant shall install temporary street signs that meet City Temporary Street Sign Standard #1.9 prior to issuance of building permits within a subdivision.
21. **Two Points of Access:** Any development to this parcel will require a minimum of two (2) points of access to be reviewed and approved by the Clovis Fire Department. All required access drives shall remain accessible during all phases of construction which includes

paving, concrete work, underground work, landscaping, perimeter walls. Gate design at EVA shall be approved by Clovis Fire Department

22. **All Weather Access & Water Supply:** The applicant shall provide all weather access to the site during all phases of construction to the satisfaction of the approved Clovis Fire Department Standard #1.2 or #1.3.

Water Systems

23. **Residential Fire Hydrant:** The applicant shall install four (4) 4 ½" x 2 ½" approved Residential Type fire hydrant(s) and "Blue Dot" hydrant locators, paint fire hydrant(s) yellow with blue top and caps, and paint the curb red as specified by the adopted Clovis Fire Department Standard #1.4. Plans shall be submitted to the Clovis Fire Department for review and approval prior to installation. The hydrant(s) shall be charged and in operation prior to any framing or combustible material being brought onto the site. Hydrants curb markings and blue dots to be completed prior to occupancy of any homes.
24. **Looped Water Main:** The applicant shall install approved looped water main capable of the necessary flow of water for adequate fire protection and approved by the Clovis Fire Department

Administration Department Conditions **(John Holt, Department Representative – (559) 324-2111)**

25. Prior to approval, recordation or filing of an annexation, final map, or site plan, the property covered by the project shall be included within or annexed to a Community Facilities District (CFD), established by the City for the provision of public facilities and services, for which proceedings have been consummated, and shall be subject to the special tax approved with the formation or annexation to the CFD. The CFD applies only to residential projects.
26. The applicant and the property owner acknowledge and agree that if the project were not part of a CFD, the City might lack the financial resources to operate facilities and provide public services, such as police protection, fire protection, emergency medical services, park and recreation services, street maintenance and public transit. Absent the requirement for inclusion of the project within a CFD, the City might not be able to make the finding that the project is consistent with the General Plan and relevant specific plans and might not be able to make the findings supporting approval of the project as required by the Subdivision Map Act and the California Environmental Quality Act, and the City might be required to deny the application for the project.
27. The owner/developer shall notify all potential lot buyers prior to sale that this project is a part of a Community Facilities District and shall inform potential buyers of the special tax amount. Said notification shall be in a manner approved by the City. This requirement may be waived at the discretion of the City Council if, at the time of the approval, recordation or filing of the project, the City Council has determined that it is not necessary that the project be included in the CFD.

28. The applicants shall reimburse the City for any expense associated with the transition agreement for fire services with the Fresno County Fire Protection District that would apply to this proposal.

Engineering/ Utilities/ Solid Waste Division Conditions
(Sean Smith, Engineering Division Representative – 324-2363)
(Paul Armendariz, Department Representative – 324-2649)

Maps and Plans

29. The conditions of this tract map are written under the assumption that all dedications and improvements have been completed by the TM 6109 and TM 6190 developments, and that these dedications and improvements have been accepted by the City. Additional conditions shall be required at the discretion of the City Engineer, if the improvements and dedications by TM 6109 and TM 6190 have not been accepted by the City.
30. The applicant shall have a final tract map prepared, in the form prescribed by the Subdivision Map Act and City of Clovis Municipal Code. The final tract map shall be submitted to the City of Clovis Engineering Division, and should include, but not be limited to, final tract map, the current filing fee, closure calculations, current preliminary title report, legal descriptions and drawings of required dedications.
31. The applicant shall submit separately to the City of Clovis Engineering Division, a set of construction plans on 24" x 36" sheets with City standard title block for all required improvements and a current preliminary title report. These plans shall be prepared by a registered civil engineer, and shall include a grading plan, landscape plan, and an overall site utility plan showing locations and sizes of sewer, water, storm drain, and irrigation mains, laterals, manholes, meters, valves, hydrants, fire sprinkler services, other facilities, etc. Plan check and inspection fees per City of Clovis Resolution No. 18-61 shall be paid with the first submittal of said plans. All plans shall be submitted at or before the time the building plans are submitted to the Building Division and shall be approved by the City and all other involved agencies prior to the release of any development permits.
32. Prior to the initial submittal of the improvement plans, the applicant shall contact Sean Smith at (559) 324-2363 to setup a coordination meeting (Pre-submittal Meeting).
33. Upon approval of improvement plans, the applicant shall provide the City with the appropriate number of copies. After all improvements have been constructed and accepted by the City, the applicant shall submit to the City of Clovis Engineering Division (1) digital copy to the City in PDF format of the approved set of construction plans revised to accurately reflect all field conditions and revisions and marked "AS-BUILT" for review and approval. Upon approval of the AS-BUILTs by the City, and prior to granting of final occupancy or final acceptance, the applicant shall provide (1) digital copy to the City in PDF format.

General Provisions

34. The applicant shall pay all applicable development fees at the rate in effect at the time of payment and prior to final map approval by Council or have the fees payable directly to the City through a separate escrow account at the time of recordation of the map.
35. The applicant is advised that, pursuant to California Government Code, Section 66020, any party may protest the imposition of fees, dedications, reservations, or other exactions imposed on a development project by a local agency. Protests shall be filed in accordance with the provisions of the California Government Code and shall be filed within 90 days after conditional approval of this application is granted. The 90 day protest period for this project shall begin on the "date of approval" as indicated on the "Acknowledgment of Acceptance of Conditions" form.
36. All reimbursement requests shall be prepared and submitted in accordance with the requirements of the current version of the "Developer Reimbursement Procedures" a copy of which may be obtained at the City Engineer's Office.
37. The applicant shall install all improvements within public right-of-way and easements in accordance with the City of Clovis standards, specifications, master plans, and record drawings in effect at the time of improvement plan approval.
38. The applicant shall address all conditions, and be responsible for obtaining encroachment permits from the City of Clovis for all work performed within the City's right-of-way and easements.
39. The applicant shall submit a soils report or a waiver of soils report to the City of Clovis Engineering Division for approval by the City Engineer.
40. The applicant shall provide and pay for all geotechnical services per City policy.
41. The applicant shall comply with the requirements of the local utility, telephone, and cable companies. It shall be the responsibility of the applicant to notify the local utility, telephone, and cable companies for the removal or relocation of utility poles where necessary. The City shall not accept first submittals without proof that the applicant has provided the improvement plans and documents showing all proposed work to the utility, telephone, and cable companies. All utility vaults in which lids cannot be sloped to match proposed finished grading, local utilities have 5% max slope, shall be located in sidewalk areas with pedestrian lids so the lid slope matches sidewalk cross slope.
42. All existing overhead and new utility facilities located on-site or within the street right-of-way along the streets adjacent to this tract shall be undergrounded unless otherwise approved by the City Engineer.
43. The applicant shall contact and address all requirements of the United States Postal Service Clovis Office for the location and type of mailboxes to be installed. The location of the

facilities shall be approved by the City Engineer prior to approval of improvement plans or any construction.

44. The applicant shall contact and address Caltrans requirements. The applicant shall be required to mitigate impacts to State Highway facilities as determined by the City Engineer.

Dedications and Street Improvements

45. The applicant shall provide right-of-way acquisition or dedicate free and clear of all encumbrances and/or improve the following streets to City standards. The street improvements shall be in accordance with the City's specific plans and shall match existing improvements. The applicant's engineer shall be responsible for verifying the type, location, and grades of existing improvements.

- a. Locan Avenue – Along frontage, dedicate to provide right-of-way acquisition for 40' (exist 20') west of centerline, and improve with sidewalk, curb return ramps, street lights, landscaping and irrigation.
- b. Moody Avenue – Along frontage, dedicate to provide right-of-way acquisition for 37' (exist 26') south of centerline, and improve with curb, gutter, sidewalk, drive approaches, curb return ramps, street lights, landscaping and irrigation, permanent paving and overlay as necessary to match the existing permanent pavement.
- c. Gated Developments – Provide ample vehicle stacking area outside the travel lanes of Locan Avenue that will allow vehicles to wait as vehicles are accessing the control panel to open the security gates. Design a turn-a-round to allow vehicles that cannot enter the complex to return to the street without backing the vehicle up. Provide the Solid Waste Division with remote controls that will allow access for all solid waste and recycling vehicles.
- d. Interior streets shall be private. For two-way traffic with no parking on both sides, the minimum travel width shall be 25' with a clear width of 30'. For two-way traffic with parking on one side, the minimum travel width shall be 32'. For two-way traffic with parking on both sides, the minimum travel width shall be 36'.
- e. Entry feature streets with median islands shall have a minimum of 22' wide travel lanes in each direction with parking or without parking.
- f. The applicant shall relinquish all access to Locan Avenue.

46. The applicant shall provide a dedication for a 10' public utility easement, where applicable, along all frontages or alternate widths approved by the utilities companies.

47. For new ADA paths of travel that connect to the existing City sidewalk, the applicant shall replace enough sidewalk (five feet minimum in length) to provide a compliant landing with appropriate transitions to existing sidewalk grades.
48. The applicant shall not install any fences, temporary or permanent in public right-of-way.
49. The applicant shall obtain "R Value" tests in quantity sufficient to represent all street areas, and have street structural sections designed by a registered civil engineer based on these "R Value" tests.

Sewer

50. The applicant shall identify and abandon all septic systems to City standards.
51. The applicant shall install sanitary sewer mains of the size and in the locations indicated below, prior to occupancy. The sewer improvements shall be in accordance with the City's master plans and shall match existing improvements. The applicant's engineer shall be responsible for verifying the size, location, and elevations of existing improvements. Any alternative routing of the mains shall require approval of the City Engineer and shall be supported by appropriate calculations.
- a. Interior Private Streets – install 8" mains.
52. The applicant shall provide dedication of a 15' wide utility easement for all on-site sewer mains, not located in otherwise dedicated rights-of-way.
53. The applicant shall install one (1) 4" sewer service house branch to each lot within the tentative tract.
54. All existing sewer services that will not be used with this development shall be abandoned by cutting and capping the service at the right-of-way line.

Water

55. The applicant shall identify and abandon all water wells to City standards.
56. The applicant shall install water mains of the sizes and in the locations indicated below, and provide an adequately looped water system prior to occupancy. The water improvements shall be in accordance with the City's master plans and shall match existing improvements. The applicant's engineer shall be responsible for verifying the size, location, and elevations of existing improvements. Any alternative routing of the mains shall require approval of the City Engineer and shall be supported by appropriate calculations.
- a. Interior Private Streets – install 8" mains.

57. The applicant shall provide dedication of 15-foot wide utility easements for all on-site water mains, hydrants, blow-offs, and water meters not located in otherwise dedicated rights-of-way.
58. The applicant shall install a City standard water service to each lot of the proposed subdivision. Water services shall be grouped at property lines to accommodate automatic meter reading system, including installation of connecting conduit. The water meter shall be placed in the sidewalk and not in planters or driveways.
59. All existing water services that will not be used with this development shall be abandoned by closing the service's corporation stop and creating a physical separation between the corporation stop and the service.
60. Prior to recording a final map of any phase, the applicant shall demonstrate to the satisfaction of the City Fire Chief and City Engineer that there is adequate water pressure to serve the units to be constructed. The applicant shall work with the City Engineer to determine the adequacy of water supply/pressure for the proposed development.

Recycled Water

61. The applicant shall install recycled water mains of the sizes and in the locations indicated below. The recycled water improvements shall be in accordance with the City's master plans and shall match existing improvements. All areas utilizing recycle water for irrigation shall be clearly marked on the improvement plans. The applicant's engineer shall be responsible for verifying the size, location, and elevations of existing improvements. Any alternative routing of the mains shall require approval of the City Engineer and may require appropriate calculations.
 - a. Locan Avenue – install mains as necessary to serve the paseos, trails, and the neighborhood parks.

Grading and Drainage

62. The applicant shall contact the Fresno Metropolitan Flood Control District (FMFCD) and address all requirements, pay all applicable fees required, obtain any required NPDES permit, and implement Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology to reduce or eliminate storm water pollution. Plans for these requirements shall be included in the previously required set of construction plans, and shall be submitted to and approved by FMFCD prior to the release of any development permits.
63. Grade differentials between lots and adjacent properties shall be adequately shown on the grading plan and shall be treated in a manner in conformance with City of Clovis Standard Drawing No. M-4 as modified by the City Council. Any retaining walls required on-site or in public right of way shall be masonry construction. All retaining walls shall be designed by a registered civil engineer.

Irrigation and Landscaping Facilities

64. The owner shall request annexation to and provide a covenant for the Landscape Maintenance District. The property owner acknowledges and agrees that such request serves as a petition pursuant to California State Proposition 218 and no further election shall be required for the establishment of the initial assessment. The assessment for each lot shall be obtained from the City for the tax year following the recordation of the final map. The estimated annual assessment per average sized lot is \$234.81, which is subject to change prior to issuance of building permit or final tract map approval and is subject to an annual change in the range of the assessment in the amount of the Consumer Price Index, U.S. City Average, All Urban Consumers (CPI Index), plus two percent (2%). The additional landscaping enhancements that exceed the City norms and are specific benefit to the property, such as the entry feature, columns, monuments, interior median islands, roundabouts, special street lights, etc, if determined to be maintained by the Landscape Maintenance District, shall be maintained by an additional landscape maintenance assessment. The applicant shall provide construction costs and deposit with the City an amount equal to 50% of the value of the enhanced landscaping hardscape features, or an alternate amount approved by the City Engineer, such as columns, monuments, and special street lights, that exceeds the City norms. The applicant shall provide the City with an estimate of the annual maintenance for the special lighting and landscaping enhancements that exceeds the City norms. The owner/developer shall notify all potential lot buyers before they actually purchase a lot that this tract is a part of a Landscape Maintenance District and shall inform potential buyers of the assessment amount. Said notification shall be in a manner approved by the City. The owner/developer shall supply all pertinent materials for the Landscape Maintenance District.
65. The applicant shall comply with the City of Clovis Water Efficient Landscape Requirements Ordinance.
66. All existing agricultural irrigation systems either on-site or in public right of way, whether FID or privately owned, shall be identified prior to any construction activity on the site. Service to all downstream users of irrigation water shall be maintained at all times through preservation of existing facilities or, if the existing facilities are required to be relocated, the relocation and replacement of the existing facilities. It is the intent that downstream users not bear any burden as a result of development of the site. Therefore, the applicant shall pay all costs related to modification, relocation, or repair of any existing irrigation facilities resulting from or necessitated by the development of the site. The applicant shall identify on site plans and construction plans, all existing irrigation systems and their disposition (abandonment, repair, relocation, and/or piping). The applicant shall consult with the Fresno Irrigation District for any additional requirements for lines to be abandoned, relocated, or piped. The applicant shall provide waivers from all users **in order to abandon or modify any irrigation pipelines or for any service interruptions resulting from development activities.**
67. The applicant shall provide a landscape and irrigation perpetual maintenance covenant recorded for landscaping installed in the public right-of-way behind the curb including

easements that will not be maintained by the Clovis Landscape Maintenance District. A recordable covenant shall be submitted to and approved by the City of Clovis City Engineer prior to final map approval.

68. The applicant shall provide a perimeter wall perpetual maintenance covenant on all properties that have a perimeter wall that is installed on private property. A recordable covenant shall be submitted to and approved by the City of Clovis City Engineer prior to final map approval.

Miscellaneous

69. The applicant shall install street lights along the major streets on metal poles to local utility provider's standards at the locations designated by the City Engineer. Street light locations shall be shown on the utility plans submitted with the final map for approval. Street lights at future traffic signal locations shall be installed on approved traffic signal poles, including all conduits and pull boxes. Street lights along the major streets shall be owned and maintained by local utility providers. Proof of local utility provider's approval shall be provided. The applicant may install thematic lighting, as approved by the City Engineer. If the applicant chooses to install thematic lighting, the applicant shall provide a conceptual lighting plan identifying adjacent properties that may be incorporated with thematic lights to create a neighborhood effect. Thematic lighting shall be maintained by an additional landscape maintenance assessment.
70. The applicant shall install all major street monumentation and section corner monumentation within the limits of the project work in accordance with City Standard ST-32 prior to final acceptance of the project. Monumentation shall include all section corners, all street centerline intersection points, angle points and beginning and end of curves (E.C.'s & B.C.'s). The applicant/contractor shall furnish brass caps. Any existing section corner or property corner monuments damaged by this development shall be reset to the satisfaction of the City Engineer. A licensed land surveyor or civil engineer licensed to perform land surveying shall certify the placement of all required monumentation prior to final acceptance. Brass caps required for installation of new monuments or replacement of existing monuments shall be provided by the contractor/the applicant and approved by City prior to installation. Within five days after the final setting of all monuments has been completed, the engineer or surveyor shall give written notice to the City Engineer that the final monuments have been set. Upon payment to the engineer or surveyor for setting the final monuments, the applicant shall present to the City Engineer evidence of the payment and receipt thereof by the engineer or surveyor.
71. A deferment, modification, or waiver of any engineering conditions shall require the express written approval of the City Engineer.
72. The conditions given herein are for the entire development. Additional requirements for individual phases may be necessary pending review by the City Engineer.

Fresno Irrigation District
(Chris Lundeen, FID Representative – 233-7161 ext. 7410)

73. The Applicant shall refer to the attached Fresno Irrigation District correspondence. If the list is not attached, please contact the FID for the list of requirements.

County of Fresno Health Department Conditions
(Kevin Tsuda, County of Fresno Health Department Representative – 600-3271)

74. The Applicant shall refer to the attached Fresno County Health Department correspondence. If the list is not attached, please contact the Health Department for the list of requirements.

Clovis Unified School District
(Michael Johnston, CUSD Representative – 327-9000)

75. The Applicant shall refer to the attached CUSD correspondence. If the list is not attached, please contact the CUSD for the list of requirements.

San Joaquin Valley Air Pollution Control District
(Carol Flores, SJVAPCD Representative – 230-55935)

76. The Applicant shall refer to the attached SJVAPCD correspondence. If the list is not attached, please contact the SJVAPCD for the list of requirements.

Fresno Metropolitan Flood Control District
(Mikel Meneses, FMFCD Representative – 456-3292)

77. The Applicant shall refer to the attached FMFCD correspondence. If the list is not attached, please contact the FMFCD for the list of requirements.

**DRAFT
RESOLUTION 19-__**

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CLOVIS APPROVING A VESTING TENTATIVE TRACT MAP TM6239 FOR A 169-LOT SINGLE FAMILY PLANNED RESIDENTIAL DEVELOPMENT ON APPROXIMATELY 37.39 ACRES OF PROPERTY LOCATED AT THE NORTHEAST AREA OF TEAGUE AND LOCAN AVENUES

WHEREAS, Valley Coastal Development, LLC., 1396 W. Herndon Avenue Suite 101, Fresno, CA 93711, has applied for a Vesting Tentative Tract Map TM6239; and

WHEREAS, Vesting Tentative Tract Map TM6239, was filed on June 25, 2019, and was presented to the Clovis City Council for approval in accordance with the Subdivision Map Act of the Government of the State of California and Title 9, Chapter 2, of the Municipal Code and the City of Clovis; and

WHEREAS, the Planning Commission has considered said map on October 24, 2019 approving said map; and

WHEREAS, a public notice was sent out to area residents within 800 feet of said property boundaries twenty-one days prior to said hearing; and

WHEREAS, a duly noticed hearing was held on November 18, 2019; and

WHEREAS, the City Council has given careful consideration to this map on November 18, 2019, and does approve a Mitigated Negative Declaration for the project, and

WHEREAS, this Council finds and determines that approval of said map should be conditioned on all conditions recommended by the City staff, as set forth in Attachment A which is on file with the City Clerk’s office.

NOW, THEREFORE, BE IT RESOLVED, that the City of Clovis resolves as follows:

- a. The proposed map is consistent with applicable general and specific plans;
- b. The design or improvement of the proposed subdivision is consistent with applicable general and specific plans;
- c. The site is physically suitable for the type of development;
- d. The site is physically suitable for the proposed density of development;
- e. The design of the subdivision or the type of improvements are not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat;

- f. The design of the subdivision or the type of improvements is not likely to cause serious public health problems; and
- g. The design of the subdivision or the type of improvements will not conflict with easements acquired by the public at large for access through the use of property within the proposed subdivision.
- h. The dedication toward public right-of-way is proportionate to the development being requested.

* * * * *

The foregoing resolution was introduced and adopted at a regular meeting of the City Council of the City of Clovis held on _____, 2019 by the following vote, to wit.

AYES:
NOES:
ABSENT:
ABSTAIN:

DATED:

Mayor

City Clerk

**ATTACHMENT A
Conditions of Approval- TM6239**

- 1. TM6239 is approved per the Attachment 9 of the accompanying staff report.
- 2. Development Standards for TM6239 shall be per the Residential Development Standards as follows:

TM6239 Planned Residential Development Standards	
Minimum Lot Area	5,000 sq. ft.
Minimum Lot Width	50 ft. / 38 ft. (Cul-de-sac)
Minimum Lot Depth	98 ft.
Maximum Lot Coverage	60%
Maximum Building Height	35 ft./ 2-1/2 stories
Minimum Front Setback	10 ft.
Minimum Side Setback	4 ft. (interior) / 8 ft. (street side) / 10 ft. (revers corner) / 5 ft. (key side yard)
Minimum Rear Yard Setback:	7 ft.

- 3. Garages shall be a minimum dimension of 20' x 20' (interior clear).
- 4. This Project requires the submittal and approval of a residential site plan review. Specific color and materials of the models, walls, landscaping, and fencing will be evaluated.
- 5. The applicant shall contribute a proportionate share towards the development of the trail system within the Project area as required by the General Plan land use diagram.
- 6. Landscape plans shall be reviewed and approved separately by the landscape review committee for tree and landscape type and location.
- 7. The developer shall construct a minimum six-foot high solid wall along the length of the property lines.
- 8. Upon final recordation of this tentative tract map, it shall be the applicant's responsibility to furnish to the Planning Department an electronic (PDF) copy of the original map obtained from the Fresno County Recorder's Office.
- 9. The applicant shall relay all conditions of approval for Vesting Tentative Tract Map TM6239 to all subsequent purchasers of individual lots, if applicable, and/or to subsequent purchasers of this entire tract map development.

10. The applicant shall record a Notice of Nonconformance dealing with any structure used for model homes where the garage is converted for the use as a sales office.
11. All lighting shall be screened from direct view from the public right-of-way and adjacent residential properties.
12. All landscaping shall conform to the City of Clovis Water Efficient Landscape Ordinance.
13. The developer shall comply with all mitigation measures identified in the Initial Study Mitigated Negative Declaration prepared for the Project, included as Attachment 12 to the staff report.
14. The applicant shall obtain City approval in advance of temporary and permanent subdivision signs through separate sign review, consistent with the development criteria of the Clovis Municipal Code.
15. The developer shall contact cultural resources staff at Table Mountain Rancheria prior to ground-disturbance to coordinate a training session on how to appropriately identify potential artifacts.
16. All transformers for this subdivision can be located above ground subject to review and approval of the required landscape screening material. Landscaping shall be reviewed through the residential site plan review process. Transformers shall not be placed in public spaces.
17. The applicant shall install pedestrian lighting along common areas. Spacing and location will be evaluated during residential site plan review.

Fire Department Conditions
(Gary Sawhill, Department Representative - 324-2224)

Roads / Access

18. **Street Width:** Fire apparatus access width shall be determined by measuring from “base of curb” to “base of curb” for roadways that have curbs. When roadways do not have curbs, the measurements shall be from the edge of the roadway surface (approved all weather surface).
19. **Street Width for Single Family Residences:** Shall comply with Clovis Fire Standard #1.1
20. **Temporary Street Signs:** The applicant shall install temporary street signs that meet City Temporary Street Sign Standard #1.9 prior to issuance of building permits within a subdivision.
21. **Two Points of Access:** Any development to this parcel will require a minimum of two (2) points of access to be reviewed and approved by the Clovis Fire Department. All required

access drives shall remain accessible during all phases of construction which includes paving, concrete work, underground work, landscaping, perimeter walls.

22. **All Weather Access & Water Supply:** The applicant shall provide all weather access to the site during all phases of construction to the satisfaction of the approved Clovis Fire Department Standard #1.2 or #1.3.

Water Systems

23. **Residential Fire Hydrant:** The applicant shall install fourteen (14) 4 ½" x 2 ½" approved Residential Type fire hydrant(s) and "Blue Dot" hydrant locators, paint fire hydrant(s) yellow with blue top and caps, and paint the curb red as specified by the adopted Clovis Fire Department Standard #1.4. Plans shall be submitted to the Clovis Fire Department for review and approval prior to installation. The hydrant(s) shall be charged and in operation prior to any framing or combustible material being brought onto the site. Hydrants curb markings and blue dots to be completed prior to occupancy of any homes.
24. **Looped Water Main:** The applicant shall install approved looped water main capable of the necessary flow of water for adequate fire protection and approved by the Clovis Fire Department

Administration Department Conditions **(John Holt, Department Representative – (559) 324-2111)**

25. Prior to approval, recordation or filing of an annexation, final map, or site plan, the property covered by the project shall be included within or annexed to a Community Facilities District (CFD), established by the City for the provision of public facilities and services, for which proceedings have been consummated, and shall be subject to the special tax approved with the formation or annexation to the CFD. The CFD applies only to residential projects.
26. The applicant and the property owner acknowledge and agree that if the project were not part of a CFD, the City might lack the financial resources to operate facilities and provide public services, such as police protection, fire protection, emergency medical services, park and recreation services, street maintenance and public transit. Absent the requirement for inclusion of the project within a CFD, the City might not be able to make the finding that the project is consistent with the General Plan and relevant specific plans and might not be able to make the findings supporting approval of the project as required by the Subdivision Map Act and the California Environmental Quality Act, and the City might be required to deny the application for the project.
27. The owner/developer shall notify all potential lot buyers prior to sale that this project is a part of a Community Facilities District and shall inform potential buyers of the special tax amount. Said notification shall be in a manner approved by the City. This requirement may be waived at the discretion of the City Council if, at the time of the approval, recordation or filing of the project, the City Council has determined that it is not necessary that the project be included in the CFD.

28. The applicants shall reimburse the City for any expense associated with the transition agreement for fire services with the Fresno County Fire Protection District that would apply to this proposal.

Engineering/ Utilities/ Solid Waste Division Conditions
(Sean Smith, Engineering Division Representative – 324-2363)
(Paul Armendariz, Department Representative – 324-2649)

Maps and Plans

29. The conditions of this tract map are written under the assumption that all dedications and improvements have been completed by the adjacent TM 6190 development, and that these dedications and improvements have been accepted by the City. Additional conditions shall be required at the discretion of the City Engineer, if the improvements and dedications by TM 6190 have not been accepted by the City.
30. The applicant shall have a final tract map prepared, in the form prescribed by the Subdivision Map Act and City of Clovis Municipal Code. The final tract map shall be submitted to the City of Clovis Engineering Division, and should include, but not be limited to, final tract map, the current filing fee, closure calculations, current preliminary title report, legal descriptions and drawings of required dedications.
31. The applicant shall submit separately to the City of Clovis Engineering Division, a set of construction plans on 24" x 36" sheets with City standard title block for all required improvements and a current preliminary title report. These plans shall be prepared by a registered civil engineer, and shall include a grading plan, landscape plan, overall site utility plan showing locations and sizes of sewer, water, storm drain, and irrigation mains, laterals, manholes, meters, valves, hydrants, fire sprinkler services, other facilities, etc. Plan check and inspection fees per City of Clovis Resolution No. 18-61 shall be paid with the first submittal of said plans. All plans shall be submitted at or before the time the building plans are submitted to the Building Division and shall be approved by the City and all other involved agencies prior to the release of any development permits.
32. Prior to the initial submittal of the improvement plans, the applicant shall contact Sean Smith at (559) 324-2363 to setup a coordination meeting (Pre-submittal Meeting).
33. Upon approval of improvement plans, the applicant shall provide the City with the appropriate number of copies. After all improvements have been constructed and accepted by the City, the applicant shall submit to the City of Clovis Engineering Division (1) digital copy to the City in PDF format of the approved set of construction plans revised to accurately reflect all field conditions and revisions and marked "AS-BUILT" for review and approval. Upon approval of the AS-BUILTs by the City, and prior to granting of final occupancy or final acceptance, the applicant shall provide (1) digital copy to the City in PDF format.

General Provisions

34. The applicant shall pay all applicable development fees at the rate in effect at the time of payment and prior to final map approval by Council or have the fees payable directly to the City through a separate escrow account at the time of recordation of the map.
35. The applicant is advised that, pursuant to California Government Code, Section 66020, any party may protest the imposition of fees, dedications, reservations, or other exactions imposed on a development project by a local agency. Protests shall be filed in accordance with the provisions of the California Government Code and shall be filed within 90 days after conditional approval of this application is granted. The 90 day protest period for this project shall begin on the "date of approval" as indicated on the "Acknowledgment of Acceptance of Conditions" form.
36. All reimbursement requests shall be prepared and submitted in accordance with the requirements of the current version of the "Developer Reimbursement Procedures" a copy of which may be obtained at the City Engineer's Office.
37. The applicant shall install all improvements within public right-of-way and easements in accordance with the City of Clovis standards, specifications, master plans, and record drawings in effect at the time of improvement plan approval.
38. The applicant shall address all conditions, and be responsible for obtaining encroachment permits from the City of Clovis for all work performed within the City's right-of-way and easements.
39. The applicant shall submit a soils report or a waiver of soils report to the City of Clovis Engineering Division for approval by the City Engineer.
40. The applicant shall provide and pay for all geotechnical services per City policy.
41. The applicant shall comply with the requirements of the local utility, telephone, and cable companies. It shall be the responsibility of the applicant to notify the local utility, telephone, and cable companies for the removal or relocation of utility poles where necessary. The City shall not accept first submittals without proof that the applicant has provided the improvement plans and documents showing all proposed work to the utility, telephone, and cable companies. All utility vaults in which lids cannot be sloped to match proposed finished grading, local utilities have 5% max slope, shall be located in sidewalk areas with pedestrian lids so the lid slope matches sidewalk cross slope.
42. All existing overhead and new utility facilities located on-site or within the street right-of-way along the streets adjacent to this tract shall be undergrounded unless otherwise approved by the City Engineer.
43. The applicant shall contact and address all requirements of the United States Postal Service Clovis Office for the location and type of mailboxes to be installed. The location of the

facilities shall be approved by the City Engineer prior to approval of improvement plans or any construction.

44. The applicant shall contact and address Caltrans requirements. The applicant shall be required to mitigate impacts to State Highway facilities as determined by the City Engineer.

Dedications and Street Improvements

45. The applicant shall provide right-of-way acquisition or dedicate free and clear of all encumbrances and/or improve the following streets to City standards. The street improvements shall be in accordance with the City's specific plans and shall match existing improvements. The applicant's engineer shall be responsible for verifying the type, location, and grades of existing improvements.

- a. Locan Avenue – Along frontage between Powers and Loyola Avenues, dedicate to provide right-of-way acquisition for 40' (exist 30') east of centerline, and improve with curb, gutter, sidewalk, curb return ramps, street lights, landscaping and irrigation, permanent paving and overlay as necessary to match the existing permanent pavement.
- b. Teague Avenue – Along frontage between Redington Avenue and the west property line, dedicate to provide right-of-way acquisition for 27' (exist 16') north of centerline, and improve with curb, gutter, sidewalk, permanent paving and overlay as necessary to match the existing permanent pavement, and transitional paving as needed.
- c. Powers Avenue – Along frontage, dedicate to provide right-of-way acquisition for 25' (exist 15') south of centerline, and improve with curb, gutter, sidewalk, curb return ramps, permanent paving and overlay as necessary to match the existing permanent pavement.
- d. Trenton Avenue – Between Locan and Kaweah Avenues, dedicate to provide right-of-way acquisition for 27' (exist varies) north and south of centerline, and improve with curb, gutter, sidewalk, drive approaches, curb return ramps, street lights, landscaping and irrigation, 36' (18' north + 18' south) permanent paving, and transitional paving as needed.
- e. Loyola Avenue – Between Locan and Kaweah Avenues, dedicate to provide right-of-way acquisition for 27' (exist varies) north and south of centerline, and improve with curb, gutter, sidewalk, drive approaches, curb return ramps, street lights, landscaping and irrigation, 36' (18' north + 18' south) permanent paving, and transitional paving as needed.
- f. Loyola Avenue – Between Blackwood Avenue and the east property line, dedicate to provide right-of-way acquisition for 27' (exist 16') south of centerline, and improve with curb, gutter, sidewalk, drive approaches, curb return ramps,

street lights, permanent paving and overlay as necessary to match the existing permanent pavement. For orderly development, improvements shall include a driveway approach immediately adjacent to the east of the east property line.

- g. North DeWolf Avenue – At Powers Avenue, the applicant shall perform an all-stop warrant study. The applicant shall relocate the existing utility vault at the northwest corner of the intersection and install a crosswalk on the north leg of the intersection, if an all-way stop is warranted.
 - h. State Route 168 – The applicant shall coordinate with CalTrans to install an additional dedicated eastbound right-turn lane at Owens Mountain Parkway. The applicant shall perform a queue study at this intersection to determine the appropriate lengths of storage for all turning movements and construct accordingly.
 - i. Interior Streets – Dedicate to provide for 50' or 54' of right-of-way in conformance with the City policy on street widths, and improve with curb, gutter, 5' sidewalk adjacent to the curb, drive approaches, curb return ramps, streetlights, permanent paving, and all transitional paving as needed.
 - j. Cul-De-Sacs - dedicate to provide for 52' radius and improve with curb, gutter, sidewalk, street lights, 43' permanent paving and all transitional paving as needed.
 - k. The applicant shall relinquish all access to Locan Avenue.
 - l. The applicant shall dedicate right-of-way and provide for a north-south paseo, connecting the existing paseos at Tract Map 6072 and Tract Map 6018. The pathway north of Loyola shall be 10' wide.
 - m. The applicant shall dedicate right-of-way and provide for an 8' sidewalk on the north side of Trenton Avenue between Blackwood and Locan Avenues.
 - n. The applicant shall provide adequate access to the existing resident at APN 558-020-05 and abandon the existing private access easement within Tract 5720A.
46. The applicant shall abandon the corner cutoff at the southeast corner of Lot 35 of Tract map 5289 to provide a continuous right-of-way line into Tract 6239.
47. The applicant shall provide a dedication for a 10' public utility easement, where applicable, along all frontages or alternate widths approved by the utilities companies.
48. For new ADA paths of travel that connect to the existing City sidewalk, the applicant shall replace enough existing sidewalk (minimum five feet in length) to provide a compliant landing with appropriate transitions to existing sidewalk grades.

49. If the applicant is required to make onsite ADA path of travel improvements, then the applicant may be required to remove and replace concrete improvements along the property frontage that do not meet current City of Clovis and ADA standards.
50. The applicant shall not install any fences, temporary or permanent in public right-of-way.
51. The applicant shall provide preliminary title report, legal description and drawings for all dedications required which are not on the site. All contact with owners, appraisers, etc. of the adjacent properties where dedication is needed shall be made only by the City. The City will prepare an estimate of acquisition costs including but not limited to appraised value, appraisal costs, negotiation costs, and administrative costs. The applicant shall pay such estimated costs as soon as they are determined by the City.
52. The sideyard side of all corner lots shall have full width sidewalk except where planter strips or meandering sidewalk is proposed.
53. The applicant shall obtain "R Value" tests in quantity sufficient to represent all street areas, and have street structural sections designed by a registered civil engineer based on these "R Value" tests.
54. The applicant shall, at the ends of any permanent pavement abutting undeveloped property, install 2" x 6" redwood header boards that shall be placed prior to the street surfacing.
55. Standard barricades with reflectors shall be installed at ends of streets abutting undeveloped property and any other locations to be specified by the City Engineer.

Sewer

56. The applicant shall identify and abandon all septic systems to City standards.
57. The applicant shall install sanitary sewer mains of the size and in the locations indicated below, prior to occupancy. The sewer improvements shall be in accordance with the City's master plans and shall match existing improvements. The applicant's engineer shall be responsible for verifying the size, location, and elevations of existing improvements. Any alternative routing of the mains shall require approval of the City Engineer and shall be supported by appropriate calculations.
 - a. Trenton Avenue – install 8" main between Whitmore and Kaweah Avenues.
 - b. Loyola Avenue – install 8" main between Whitmore and Kaweah Avenues.
 - c. Interior Streets – install 8" mains.
58. The applicant shall install one (1) 4" sewer service house branch to each lot within the tentative tract.
59. All existing sewer services that will not be used with this development shall be abandoned by cutting and capping the service at the right-of-way line.

60. The applicant shall notify all property owners annexed to the City and along streets where a new sewer main will be constructed to determine if they wish to be connected to City sewer. Property owners shall work directly with the applicant regarding costs and location. The applicant shall notify property owners that sewer connection fees are required if they choose to connect.

Water

61. The applicant shall identify and abandon all water wells to City standards.

62. The applicant shall install water mains of the sizes and in the locations indicated below, and provide an adequately looped water system prior to occupancy. The water improvements shall be in accordance with the City's master plans and shall match existing improvements. The applicant's engineer shall be responsible for verifying the size, location, and elevations of existing improvements. Any alternative routing of the mains shall require approval of the City Engineer and shall be supported by appropriate calculations.

- a. Trenton Avenue – install 8" main between Whitmore and Kaweah Avenues.
- b. Loyola Avenue – install 8" main between Whitmore and Kaweah Avenues.
- c. Interior Streets – install 8" mains.

63. The applicant shall install a City standard water service to each lot of the proposed subdivision. Water services shall be grouped at property lines to accommodate automatic meter reading system, including installation of connecting conduit. The water meter shall be placed in the sidewalk and not in planters or driveways.

64. All existing water services that will not be used with this development shall be abandoned by closing the service's corporation stop and creating a physical separation between the corporation stop and the service.

65. The applicant shall notify all property owners' annexed to the City and along streets where a new water main will be constructed to determine if they wish to be connected to City water. Property owners shall work directly with the applicant regarding costs and location. The applicant shall notify property owners that water connection fees are required if they choose to connect.

66. Prior to recording a final map of any phase, the applicant shall demonstrate to the satisfaction of the City Fire Chief and City Engineer that there is adequate water pressure to serve the units to be constructed. The applicant shall work with the City Engineer to determine the adequacy of water supply/pressure for the proposed development.

Recycled Water

67. The applicant shall install recycled water mains of the sizes and in the locations indicated below. The recycled water improvements shall be in accordance with the City's master

plans and shall match existing improvements. All areas utilizing recycle water for irrigation shall be clearly marked on the improvement plans. The applicant's engineer shall be responsible for verifying the size, location, and elevations of existing improvements. Any alternative routing of the mains shall require approval of the City Engineer and may require appropriate calculations.

- a. Locan Avenue, Trenton Avenue and North-South Paseo – install mains as necessary to serve the corresponding landscape irrigation.

Grading and Drainage

68. The applicant shall contact the Fresno Metropolitan Flood Control District (FMFCD) and address all requirements, pay all applicable fees required, obtain any required NPDES permit, and implement Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology to reduce or eliminate storm water pollution. Plans for these requirements shall be included in the previously required set of construction plans, and shall be submitted to and approved by FMFCD prior to the release of any development permits.
69. Grade differentials between lots and adjacent properties shall be adequately shown on the grading plan and shall be treated in a manner in conformance with City of Clovis Standard Drawing No. M-4 as modified by the City Council. Any retaining walls required on-site or in public right of way shall be masonry construction. All retaining walls shall be designed by a registered civil engineer.

Irrigation and Landscaping Facilities

70. The applicant, as a portion of the required tract improvements, shall provide landscaping and irrigation as required herein. The landscaping and irrigation shall be installed in public right-of-way and the area reserved for landscaping. The irrigation and landscape improvements shall be in accordance with the City's master plans and shall match existing improvements. The applicant's engineer shall be responsible for verifying the size, location, and elevations of existing improvements. Plans for the required landscaping and irrigation systems shall be prepared by an appropriately registered professional at the applicant's expense and shall be approved by the City of Clovis Planning and Development Services Department and Public Utilities Department prior to the beginning of construction or the recording of the final tract map, whichever occurs first. Landscape and irrigation facilities that the City Landscape Maintenance District shall maintain: the paseos, paseo lights, and the landscape strip along Locan Avenue.
71. All park and landscape improvements shall be installed, accepted for maintenance by the City prior to issuance of 40% of the Tract's building permits. If the park and landscape improvements are not constructed for any reason within two (2) years of the recordation of the final map of Tract, City shall have the right to request from surety and receive upon City's demand, sufficient funding to complete the construction of improvements for the park

and street landscaping. The two year period may be extended at City's sole option and discretion and upon such conditions as City shall determine.

72. The owner shall request annexation to and provide a covenant for the Landscape Maintenance District. The property owner acknowledges and agrees that such request serves as a petition pursuant to California State Proposition 218 and no further election shall be required for the establishment of the initial assessment. The assessment for each lot shall be obtained from the City for the tax year following the recordation of the final map. The estimated annual assessment per average sized lot is \$234.81, which is subject to change prior to issuance of building permit or final tract map approval and is subject to an annual change in the range of the assessment in the amount of the Consumer Price Index, U.S. City Average, All Urban Consumers (CPI Index), plus two percent (2%). The additional landscaping enhancements that exceed the City norms and are specific benefit to the property, such as the entry feature, columns, monuments, interior median islands, roundabouts, special street lights, etc., if determined to be maintained by the Landscape Maintenance District, shall be maintained by an additional landscape maintenance assessment. The applicant shall provide construction costs and deposit with the City an amount equal to 50% of the value of the enhanced landscaping hardscape features, or an alternate amount approved by the City Engineer, such as columns, monuments, and special street lights, that exceeds the City norms. The applicant shall provide the City with an estimate of the annual maintenance for the special lighting and landscaping enhancements that exceeds the City norms. The owner/developer shall notify all potential lot buyers before they actually purchase a lot that this tract is a part of a Landscape Maintenance District and shall inform potential buyers of the assessment amount. Said notification shall be in a manner approved by the City. The owner/developer shall supply all pertinent materials for the Landscape Maintenance District.
73. The applicant shall comply with the City of Clovis Water Efficient Landscape Requirements Ordinance.
74. All existing agricultural irrigation systems either on-site or in public right of way, whether FID or privately owned, shall be identified prior to any construction activity on the site. Service to all downstream users of irrigation water shall be maintained at all times through preservation of existing facilities or, if the existing facilities are required to be relocated, the relocation and replacement of the existing facilities. It is the intent that downstream users not bear any burden as a result of development of the site. Therefore, the applicant shall pay all costs related to modification, relocation, or repair of any existing irrigation facilities resulting from or necessitated by the development of the site. The applicant shall identify on site plans and construction plans, all existing irrigation systems and their disposition (abandonment, repair, relocation, and/or piping). The applicant shall consult with the Fresno Irrigation District for any additional requirements for lines to be abandoned, relocated, or piped. The applicant shall provide waivers from all users **in order to abandon or modify any irrigation pipelines or for any service interruptions resulting from development activities.**

75. The applicant shall provide a perimeter wall perpetual maintenance covenant on all properties that have a perimeter wall that is installed on private property. A recordable covenant shall be submitted to and approved by the City of Clovis City Engineer prior to final map approval.

Miscellaneous

76. The applicant shall install street lights along the major streets on metal poles to local utility provider's standards at the locations designated by the City Engineer. Street light locations shall be shown on the utility plans submitted with the final map for approval. Street lights at future traffic signal locations shall be installed on approved traffic signal poles, including all conduits and pull boxes. Street lights along the major streets shall be owned and maintained by local utility providers. Proof of local utility provider's approval shall be provided. The applicant may install thematic lighting, as approved by the City Engineer. If the applicant chooses to install thematic lighting, the applicant shall provide a conceptual lighting plan identifying adjacent properties that may be incorporated with thematic lights to create a neighborhood effect. Thematic lighting shall be maintained by an additional landscape maintenance assessment.

77. The applicant shall install all major street monumentation and section corner monumentation within the limits of the project work in accordance with City Standard ST-32 prior to final acceptance of the project. Monumentation shall include all section corners, all street centerline intersection points, angle points and beginning and end of curves (E.C.'s & B.C.'s). The applicant/contractor shall furnish brass caps. Any existing section corner or property corner monuments damaged by this development shall be reset to the satisfaction of the City Engineer. A licensed land surveyor or civil engineer licensed to perform land surveying shall certify the placement of all required monumentation prior to final acceptance. Brass caps required for installation of new monuments or replacement of existing monuments shall be provided by the contractor/the applicant and approved by City prior to installation. Within five days after the final setting of all monuments has been completed, the engineer or surveyor shall give written notice to the City Engineer that the final monuments have been set. Upon payment to the engineer or surveyor for setting the final monuments, the applicant shall present to the City Engineer evidence of the payment and receipt thereof by the engineer or surveyor.

78. A deferment, modification, or waiver of any engineering conditions shall require the express written approval of the City Engineer.

79. The conditions given herein are for the entire development. Additional requirements for individual phases may be necessary pending review by the City Engineer.

Fresno Irrigation District

(Chris Lundeen, FID Representative – 233-7161 ext. 7410)

80. The Applicant shall refer to the attached Fresno Irrigation District correspondence. If the list is not attached, please contact the FID for the list of requirements.

County of Fresno Health Department Conditions

(Kevin Tsuda, County of Fresno Health Department Representative – 600-3271)

81. The Applicant shall refer to the attached Fresno County Health Department correspondence. If the list is not attached, please contact the Health Department for the list of requirements.

Clovis Unified School District

(Michael Johnston, CUSD Representative – 327-9000)

82. The Applicant shall refer to the attached CUSD correspondence. If the list is not attached, please contact the CUSD for the list of requirements.

San Joaquin Valley Air Pollution Control District

(Carol Flores, SJVAPCD Representative – 230-55935)

83. The Applicant shall refer to the attached SJVAPCD correspondence. If the list is not attached, please contact the SJVAPCD for the list of requirements.

Fresno Metropolitan Flood Control District

(Mikel Meneses, FMFCD Representative – 456-3292)

84. The Applicant shall refer to the attached FMFCD correspondence. If the list is not attached, please contact the FMFCD for the list of requirements.

NOTES:

1. ALL STREET DEDICATIONS AND OFFSITE STREET IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF TRACT 6264.
2. ANY UTILITIES REQUIRING RELOCATION SHALL BE THE RESPONSIBILITY AND THE EXPENSE OF THE DEVELOPER.
3. STREETS, CURB AND GUTTER, AND SIDEWALK TO BE CONSTRUCTED TO CITY OF CLOVIS STANDARDS.
4. ALL CONSTRUCTION WORK ON THIS PROJECT IS SUBJECT TO INTERRUPTION IF THE ROAD SYSTEM BECOMES IMPASSABLE FOR FIRE APPARATUS DUE TO RAIN OR OTHER OBSTACLES.
5. FIRE HYDRANTS SHALL BE TESTED, PAINTED, NUMBERED AND APPROVED AND ALL SURFACE ACCESS ROADS SHALL BE INSTALLED AND MADE SERVICEABLE PRIOR TO AND DURING THE TIME OF CONSTRUCTION.
6. TWO MEANS OF INGRESS/EGRESS MUST BE MAINTAINED DURING ALL PHASES OF DEVELOPMENT.
7. STREET TREES SHALL BE LOCATED A MINIMUM OF TEN (10) FEET FROM DRIVE APPROACHES, WATER AND SEWER SERVICES, STREET FURNITURE SUCH AS FIRE HYDRANTS AND UTILITY BOXES, AND 20 FEET FROM STREET LIGHTS, STREET TREES SHALL BE SPACED ALONG STREETS AS UNIFORMLY AS POSSIBLE.

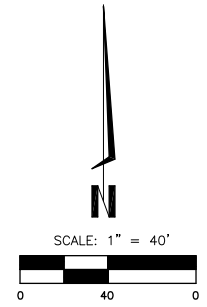
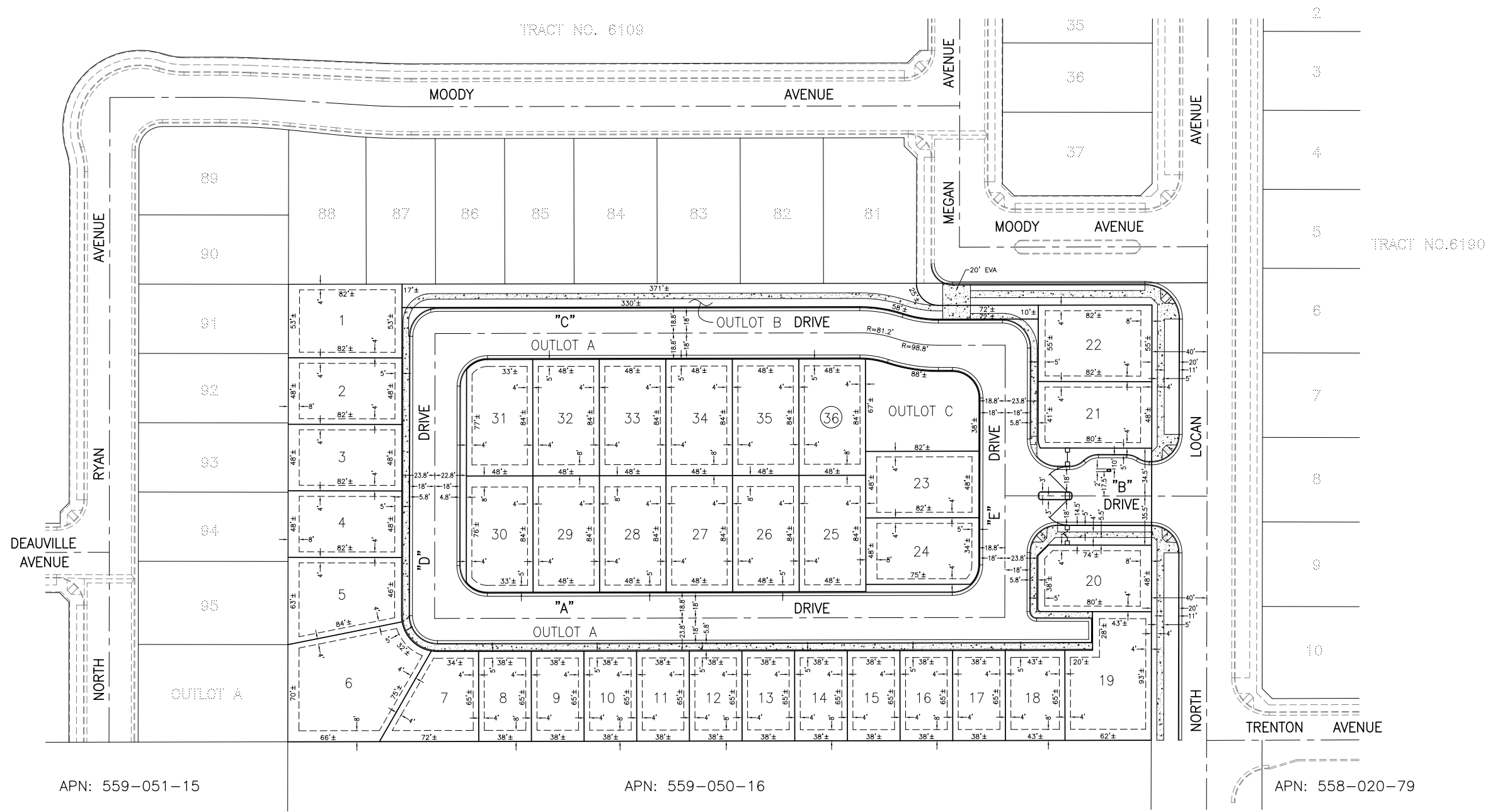
CONDITIONAL USE PERMIT

A PLANNED UNIT DEVELOPMENT

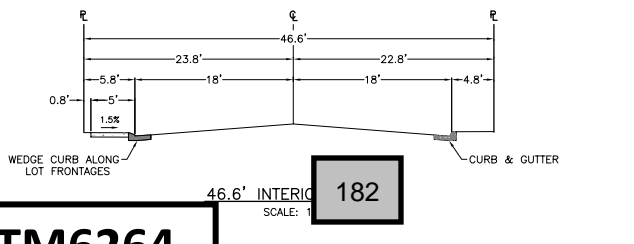
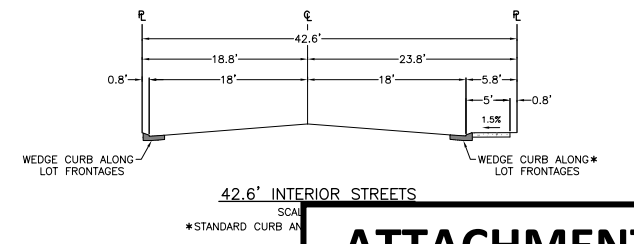
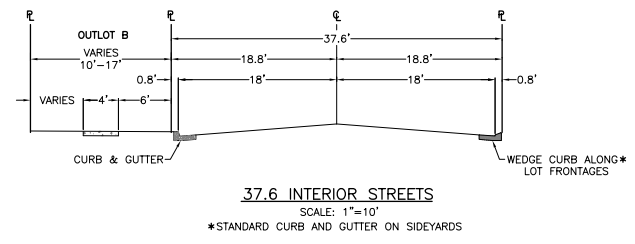
CUP# 2019-

TT-6264

CONSISTING OF ONE SHEET



- LEGEND:**
- CENTERLINE
 - CURB
 - CURB AND GUTTER
 - EXISTING PROPERTY LINE
 - PROPOSED PROPERTY LINE
 - PROPOSED SETBACK LINE



ATTACHMENT 8- TM6264

182

GARY G. GIANNETTA
 CIVIL ENGINEERING & LAND SURVEYING
 1119 "S" STREET
 FRESNO, CA 93721
 (559) 264-3590 FAX (559) 264-0696

DATE PREPARED: 5/29/19
 DATE REVISED: 11/5/19

TENTATIVE SUBDIVISION MAP TRACT No. 6239

A VESTING MAP
A PHASED MAP
APN 558-502-01
APN 558-290-06
APN 558-020-06, 09-13, 19-20
GROSS AREA = 35.07 ACRES
NET AREA = 34.77 ACRES

SCALE: 1"=100'

LOT	AREA (Sq. Ft.)	LOT	AREA (Sq. Ft.)	LOT	AREA (Sq. Ft.)
1	7,285	58	5,250	115	5,971
2	7,716	59	5,489	116	9,362
3	7,649	60	7,735	117	9,240
4	5,306	61	5,600	118	9,240
5	6,601	62	6,720	119	9,240
6	6,734	63	5,600	120	9,240
7	5,301	64	6,720	121	9,814
8	6,907	65	5,600	122	8,631
9	6,951	66	6,720	123	7,299
10	6,515	67	7,648	124	7,392
11	7,155	68	11,815	125	5,600
12	7,580	69	10,842	126	6,720
13	7,581	70	6,896	127	6,720
14	5,514	71	5,750	128	7,549
15	6,285	72	6,900	129	6,841
16	7,433	73	6,900	130	8,536
17	5,575	74	7,434	131	7,801
18	6,941	75	7,533	132	5,575
19	6,996	76	5,850	133	5,600
20	7,557	77	5,850	134	7,460
21	7,464	78	6,735	135	7,208
22	6,782	79	7,191	136	5,600
23	7,268	80	7,171	137	6,720
24	5,776	81	7,112	138	5,600
25	7,201	82	7,739	139	6,720
26	6,639	83	7,766	140	5,600
27	5,167	84	5,810	141	6,720
28	5,491	85	5,600	142	6,207
29	5,533	86	5,600	143	6,128
30	5,250	87	6,139	144	5,720
31	5,759	88	7,843	145	5,600
32	5,674	89	7,303	146	6,720
33	5,250	90	8,456	147	5,600
34	5,759	91	10,001	148	6,720
35	6,014	92	6,818	149	5,600
36	7,977	93	7,121	150	7,208
37	7,038	94	5,934	151	8,779
38	5,277	95	7,643	152	7,525
39	5,278	96	6,976	153	10,935
40	5,278	97	5,979	154	14,039
41	7,305	98	5,773	155	14,873
42	6,454	99	6,578	156	10,776
43	5,513	100	6,253	157	7,553
44	5,274	101	5,416	158	8,771
45	5,250	102	5,750	159	7,662
46	5,250	103	6,312	160	7,080
47	5,250	104	6,312	161	7,080
48	7,516	105	5,750	162	7,080
49	10,549	106	5,750	163	7,080
50	7,708	107	5,727	164	7,080
51	5,420	108	7,175	165	7,080
52	5,460	109	5,518	166	7,080
53	5,942	110	6,692	167	7,080
54	6,833	111	5,550	168	7,198
55	5,561	112	6,660	169	8,233
56	5,250	113	5,550		
57	5,250	114	6,660		

OUTLOT A 4,218
OUTLOT B 26,744
OUTLOT C 8,122

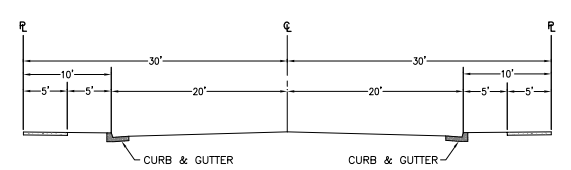
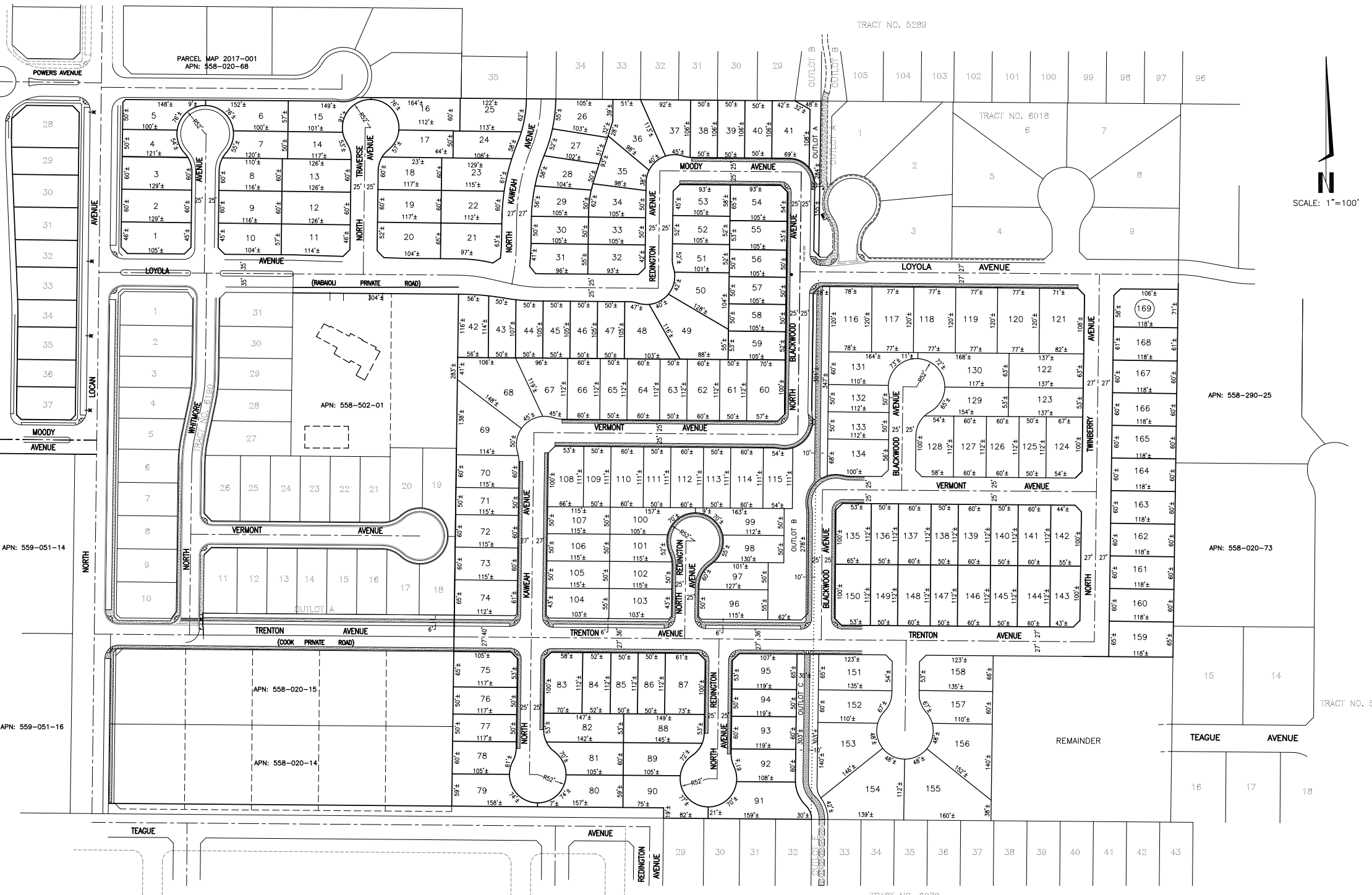
- NOTES:**
1. AREA = 35.07 ACRES
2. DENSITY = 4.85 UNITS/ACRE
3. MINIMUM LOT SIZE = 5,167 Sq. Ft.
4. AVERAGE LOT SIZE = 6,670 Sq. Ft.

SUBDIVIDER
GRANVILLE HOMES
1396 WEST HERNDON SUITE 101
FRESNO, CA 93711
(559) 436-0900

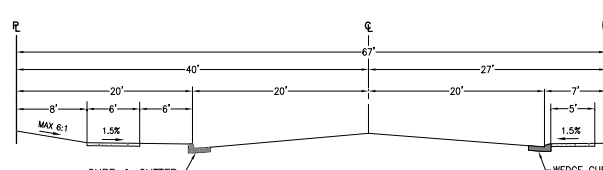
GARY G. GIANNETTA
CIVIL ENGINEERING & LAND SURVEYING
1119 "S" STREET
FRESNO, CA 93721
(559) 264-3690 FAX (559) 264-0696

DATE: 7/22/19 REV: 10/29/19 REV: 11/4/19

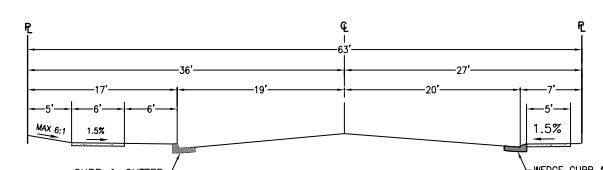
ATTACHMENT 9- TM6239



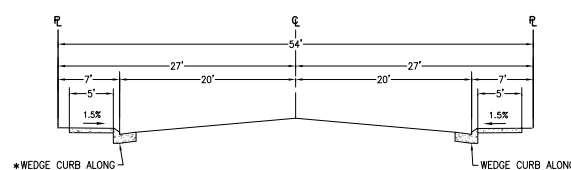
LOYOLA AVENUE
SCALE: 1"=10'



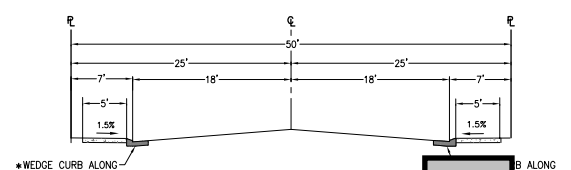
TRENTON AVENUE
WEST BOUNDARY TO KAMESH AVENUE
(FUTURE LOCAN AVENUE TO WEST)
SCALE: 1"=10'
*STANDARD CURB AND GUTTER ON SIDYARDS



TRENTON AVENUE
KAMESH AVENUE TO BLACKWOOD AVENUE
SCALE: 1"=10'
*STANDARD CURB AND GUTTER ON SIDYARDS



54' INTERIOR STREETS
SCALE: 1"=10'
*STANDARD CURB AND GUTTER ON SIDYARDS



50' INTERIOR STREETS

183

**GARY G. GIANNETTA
CONSULTING CIVIL ENGINEER
1119 S STREET
FRESNO, CA 93721
559-264-3590
FAX 559-264-0696**

AGENDA ITEM NO. 9.

June 25, 2019

Mr. Bryan Araki
City Planner
City of Clovis
1033 Fifth Street
Clovis, CA 93612

RE: Tract 6239

Dear Mr. Araki:

The proposed Plan Amendment includes eight existing five acre parcels. One parcel is on the west side of Locan Avenue between 330 feet and 660 feet north of Teague Avenue. The other seven parcels are located on the east side of Locan Avenue in the area between Locan Avenue and 1980 feet east of Locan Avenue and from Teague Avenue to Powers Avenue.

The proposed homebuilder for Tentative Tract Maps 6239 and 6264, which include all of the land within the proposed land use change, is Granville Homes. Granville Homes is currently constructing homes in Tract 6109 on the west side of Locan Avenue, on property adjacent to and across the street from proposed Plan Amendment parcels. The sales volume of the Tract 6109 homes has created the need to provide for more lots. The seven parcels within the proposed Plan Amendment on the east side of Locan Avenue are within Tentative Tract 6239 with lot sizes for the Tract 6109 houses.

The proposed Plan Amendment five acre parcel on the west side of Locan Avenue is for Tentative Tract 6264. Based on the public input from prospective buyers visiting the Tract 6109 sales office, Granville Homes is proposing to develop an alternate type of housing for the area. Tentative Tract 6264 is a 35 lot gated single family residential neighborhood with private streets and common area open space with community gym building.

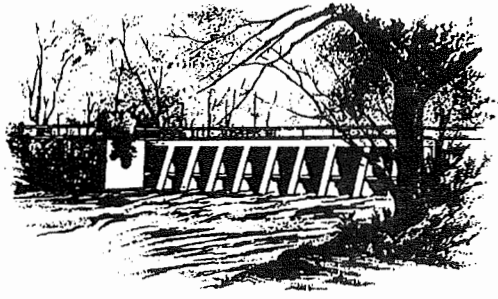
We feel that the proposed Plan Amendment, with the additional land for the Tract 6109 houses and an alternate housing product, will help provide needed housing for the community.

Sincerely,



Gary Giannetta
Project Engineer

CORRESPONDENCE FROM PUBLIC AGENCIES



YOUR MOST VALUABLE RESOURCE - WATER

OFFICE OF

AGENDA ITEM NO. 9.

FRESNO IRRIGATION DISTRICT

TELEPHONE (559) 233-7161
FAX (559) 233-8227
2907 S. MAPLE AVENUE
FRESNO, CALIFORNIA 93725-2208

October 3, 2019

Lily Cha
City of Clovis
Planning Division
1033 Fifth Street
Clovis, CA 93612

RE: Tract Map 6239 and TM 6264
SW Shepherd and DeWolf Avenues

Dear Ms. Cha:

The Fresno Irrigation District (FID) has reviewed the Development Review Committee Application No. 2018-48 for which the applicant is proposing the construction of a single-family residential development, APNs:588-290-06, 558-020-06, 09,10,11,12,13,18,19, and 20. This request is being processed concurrently with GPA 2019-004, R2019-005, R2019-006, and TM6264. FID has the following comments:

1. FID previously reviewed and commented on the subject property on August 29, 2018 as Development Review Committee Application No. 2018-48. Those comments and conditions still apply and a copy has been attached for your reference.

Additional comments:

Tract Map 6264

1. FID does not own, operate, or maintain any facilities located on the subject properties, as shown on the attached FID exhibit map. The properties are located approximately one mile outside FID's boundary.
2. The proposed development may negatively impact local groundwater supplies. The area is currently mostly open land with little to no water demand. Under current circumstances the project area is experiencing a modest but continuing groundwater overdraft. FID suggests the City of Clovis require the proposed development balance anticipated groundwater use with sufficient recharge of imported surface water in order to preclude increasing the area's existing groundwater overdraft.

3. California enacted landmark legislation in 2014 known as the Sustainable Groundwater Management Act (SGMA). The act requires the formation of local groundwater sustainability agencies (GSAs) that must assess conditions in their local water basins and adopt locally-based management plans. FID and the City of Clovis are members of the North Kings Groundwater Sustainability Agency which will manage the groundwater basin within the FID service area. This area is completely reliant on groundwater pumping and SGMA will impact all users of groundwater and those who rely on it. The City of Clovis should consider the impacts of the development on the City's ability to comply with requirements of SGMA.

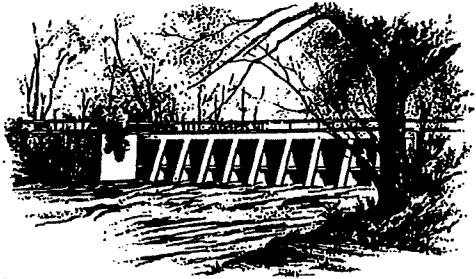
Thank you for submitting this for our review. We appreciate the opportunity to review and comment on the subject documents for the proposed project. If you have any questions please feel free to contact Chris Lundeen at (559) 233-7161 extension 7410 or clundeen@fresnoirrigation.com.

Sincerely,



Laurence Kimura, P.E.
Chief Engineer

Attachment



YOUR MOST VALUABLE RESOURCE - WATER

OFFICE OF
FRESNO
IRRIGATION DISTRICT

TELEPHONE (559) 233-7161
FAX (559) 233-8227
2907 S. MAPLE AVENUE
FRESNO, CALIFORNIA 93725-2208

August 29, 2018

Ms. Courtney Thongsavath
Planning Division
City of Clovis
1033 Fifth Street
Clovis, CA 93612

RE: Development Review Committee Application No. 2018-48
S/W Shepherd and DeWolf avenues

Dear Ms. Thongsavath:

The Fresno Irrigation District (FID) has reviewed the Development Review Committee Application No. 2018-48 for which the applicant is proposing the construction of a single-family residential development, APNs: 588-290-06, 558-020-06, 09, 10, 11, 12, 13, 18, 19, and 20. FID has the following comments:

1. FID does not own, operate, or maintain any facilities located on the subject properties, as shown on the attached FID exhibit map. The properties are located approximately 1 mile outside FID's boundary.
2. The proposed development may negatively impact local groundwater supplies. The area is currently mostly open land with little to no water demand. Under current circumstances the project area is experiencing a modest but continuing groundwater overdraft. FID suggests the City of Clovis require the proposed development balance anticipated groundwater use with sufficient recharge of imported surface water in order to preclude increasing the area's existing groundwater overdraft.
3. California enacted landmark legislation in 2014 known as the Sustainable Groundwater Management Act (SGMA). The act requires the formation of local groundwater sustainability agencies (GSAs) that must assess conditions in their local water basins and adopt locally-based management plans. FID and the City of Clovis are members of the North Kings Groundwater Sustainability Agency which will manage the groundwater basin within the FID service area. This area is completely reliant on groundwater pumping and SGMA will impact all users of groundwater and those who rely on it. The City of Clovis should consider the impacts of the development on the City's ability to comply with requirements of SGMA.

Courtney Thongsavath
RE: DRC No. 2018-48
August 29, 2018
Page 2 of 2

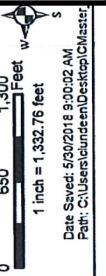
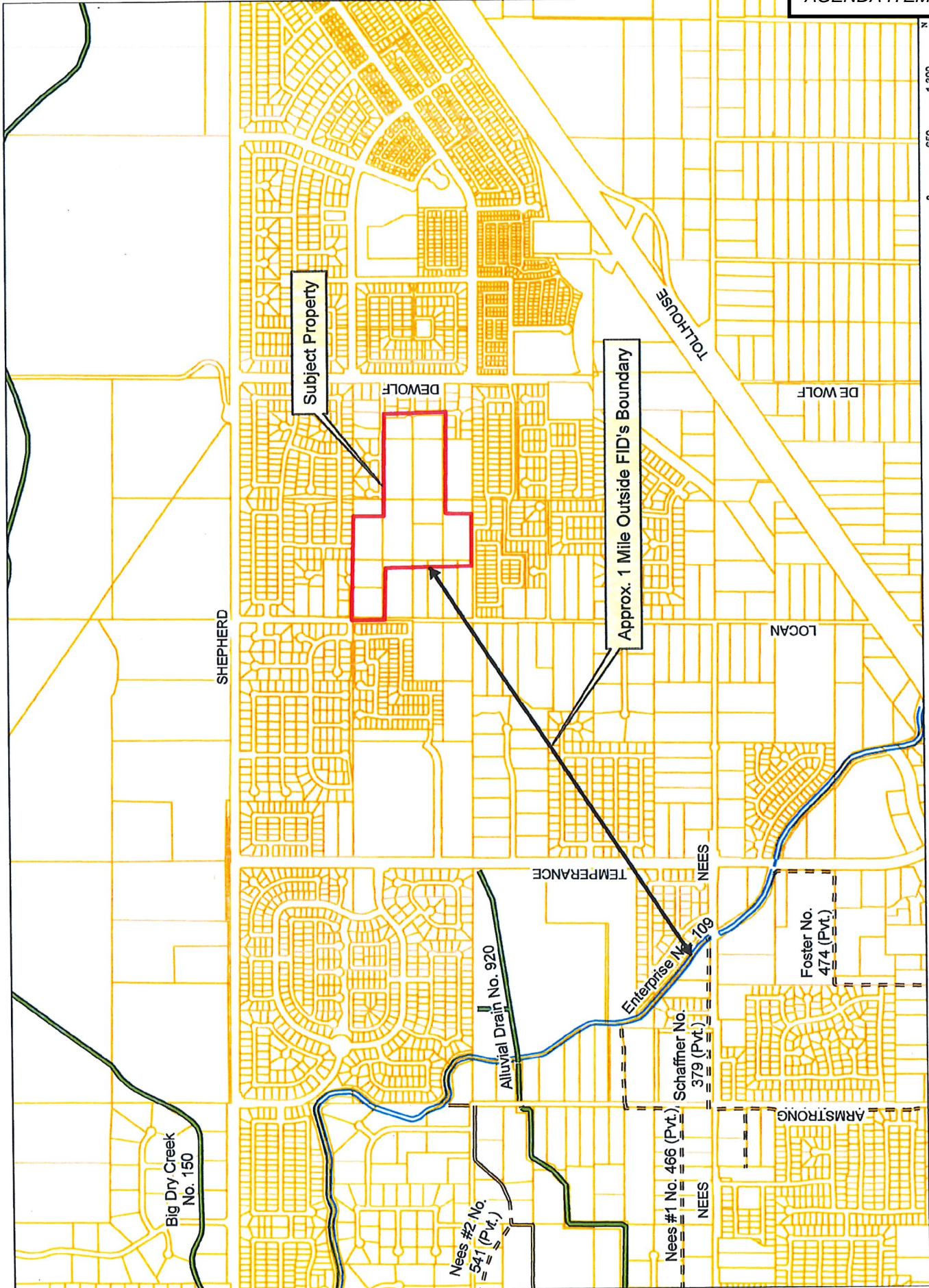
Thank you for submitting this for our review. We appreciate the opportunity to review and comment on the subject documents for the proposed project. If you have any questions please feel free to contact Chris Lundeen at (559) 233-7161 extension 7410 or clundeen@fresnoirrigation.com.

Sincerely,



Laurence Kimura, P.E.
Chief Engineer

Attachment



- Legend
- Parcel
 - FMFCD Acquired Basins
 - FMFCD Proposed Basins
 - FID Boundary
 - Stream Group
 - Other-Creek/River
 - Other-Pipeline
 - FID Pipeline
 - Private Pipeline
 - Abandoned Pipeline
 - FID Canal
 - Private Canal
 - Abandoned Canal
 - Railroad
 - Streets & Hwys

This map was produced by the Fresno Irrigation District and is provided for reference and informational purposes only and is not intended to show map scale accuracy or all inclusive map features, nor for legal purposes. FID makes no statements regarding the accuracy of this map as the features shown are in their approximate location. Please contact the FID Engineering Dept. at (559) 233-7161 for further information on FID facilities.



September 18, 2019

LU0020209
2604

Lily Cha, Assistant Planner
City of Clovis
Planning and Development Services Department
1033 Fifth Street
Clovis, CA 93612

Dear Ms. Cha:

PROJECT NUMBER: GPA2019-004, R2019-005, R2019-006, TM6239, TM6264

GPA2019-004, A request to amend the General Plan to redesignate approximately 39.7 acres of land located south of Shepherd Avenue, between Locan and Dewolf Avenues, and approximately 5.00 acres of land located on the west side of Locan Avenue, south of Shepherd Avenue, from Very Low Density Residential (2/1 to 4.0 DU/Ac) to Medium Density Residential (4.1 to 7.0 DU/Ac). **R2019-005**, A request to rezone approximately 5.00 acres of land located on the west side of Locan Avenue, south of Shepherd Avenue, from the R-1-AH Zone District to R-1-PRD Zone District. **R2019-006**, A request to rezone approximately 39.7 acres of land located south of Shepherd Avenue, between Locan and Dewolf Avenues, from the R-1-AH Zone District to R-1-PRD Zone District. **TM6239**, A request to approve a vesting tentative tract map for a 170-lot single-family planned residential development for land located south of Shepherd Avenue, between Locan and Dewolf Avenues. **TM6264**, A request to approve a vesting tentative tract map for a 36-lot single-family planned residential development for land located south of Shepherd Avenue on the west side of Locan Avenue.

APN: 559-051-14

ZONING: R-1-AH

ADDRESS: Both sides of Locan and Dewolf Avenues, south of Shepherd Avenue

Recommended Conditions of Approval:

- Construction permits for development should be subject to assurance of sewer capacity of the Regional Wastewater Treatment Facility. Concurrence should be obtained from the California Regional Water Quality Control Board (RWQCB). For more information, contact staff at (559) 445-5116.
- Construction permits for the development should be subject to assurance that the City of Clovis community water system has the capacity and quality to serve this project. Concurrence should be obtained from the State Water Resources Control Board, Division of Drinking Water-Southern Branch. For more information call (559) 447-3300.
- The proposed demolition/construction projects have the potential to expose nearby residents and tenants to elevated noise levels. Consideration should be given to your City's municipal code.
- As a measure to protect ground water, all water wells and/or septic systems that exist or have been abandoned within the project area should be properly destroyed by an appropriately licensed contractor.

Promotion, preservation and protection of the community's health

1221 Fulton Street /P. O. Box 11867, Fresno, CA 93775

(559) 600-3271 • FAX (559) 600-7629

The County of Fresno is an Equal Employment Opportunity Employer

www.co.fresno.ca.us • www.fcdph.org

- Should any underground storage tank(s) be found during the project, the applicant shall apply for and secure an Underground Storage Tank Removal Permit from the Fresno County Department of Public Health, Environmental Health Division. Contact the Certified Unified Program Agency at (559) 600-3271 for more information.

The following comments pertain to the demolition of existing structures:

- Should the structures have an active rodent or insect infestation, the infestation should be abated prior to demolition of the structures in order to prevent the spread of vectors to adjacent properties.
- In the process of demolishing the existing structures, the contractor may encounter asbestos containing construction materials and materials coated with lead based paints.
- If asbestos containing materials are encountered, contact the San Joaquin Valley Air Pollution Control District at (559) 230-6000 for more information.
- If the structures were constructed prior to 1979 or if lead-based paint is suspected to have been used in these structures, then prior to demolition and/or remodel work the contractor should contact the following agencies for current regulations and requirements:
 - California Department of Public Health, Childhood Lead Poisoning Prevention Branch, at (510) 620-5600.
 - United States Environmental Protection Agency, Region 9, at (415) 947-8000.
 - State of California, Industrial Relations Department, Division of Occupational Safety and Health, Consultation Service (CAL-OSHA) at (559) 454-5302.
- Any construction materials deemed hazardous as identified in the demolition process must be characterized and disposed of in accordance with current federal, state, and local requirements.

REVIEWED BY:

Kevin Tsuda

Kevin Tsuda, R.E.H.S.
Environmental Health Specialist II

(559) 600-33271

KT

cc: Steven Rhodes- Environmental Health Division (CT. 55.20, 55.18)
Valley Coastal Development- Applicant (dphelps@gvhomes.com)



September 23, 2019

Lily Cha
Planning and Development Services Dept.
1033 Fifth St.
Clovis, CA 93612

SUBJECT: TM 6264, R2019-005, GPA2019-004
West side of Locan Avenue, south of Shepherd Avenue

Dear Ms. Cha:

The purpose of this letter is to provide school district information relative to the above-referenced development and to comply with Business and Professions Code section 11010, subdivision (b)(11)(A) regarding the provision of school-related information to the developer/owner and the State Department of Real Estate.

In regards to this project with GPA2019-004 the district has concern regarding the re-designation of the approximately 39.7 acres of land located south of Shepherd Avenue, between Locan and Dewolf Avenues, and approximately 5.00 acres of land located on the west side of Locan Avenue, south of Shepherd Avenues. Currently this project site has a designation of Very Low Density (2.1 to 4.0 DU/AC), the district does not feel confident in the ability to accommodate students associated with a re-designation to Medium Density Residential (4.1 to 7.0 DU/AC). The district would like to bring this concern to the attention of the planning department and owner/sub divider.

1. Elementary School Information:

- (a) The subject land is presently within the attendance area of the elementary school (grades K-6) listed below:

School Name: *Dry Creek Elementary*
Address: *1273 N Armstrong Ave Clovis CA 93619-4203*
Telephone: *(559) 327-6500*
Capacity: *900*
Enrollment: *912 (CBEDS enrollment 2018-19 school year)*

- (b) Because of projected growth in the District and the District's plans for construction of new school facilities, it is possible that (1) adjustment of school attendance areas could occur in the future such that students residing in the project area may be required to attend an elementary school other than the school listed above, and (2) students residing in the project area may attend more than one elementary school within the District during their elementary school years.

Governing Board
Christopher Casado
Steven G. Fogg, M.D.
Susan K. Hatmaker
Ginny L. Hovseplan
Elizabeth J. Sandoval
Tiffany Stoker Madsen

Administration
Eimear O'Farrell, Ed.D.
Superintendent
Don Ulrich, Ed.D.
Deputy Superintendent
Norm Anderson
Associate Superintendent
Barry S. Jager, Jr.
Associate Superintendent
Michael Johnston
Associate Superintendent

Lily Cha
September 23, 2019
Page 2

2. Intermediate School Information:

School Name: *Alta Sierra Intermediate*
Address: *380 W Teague Ave Clovis CA 93619-8332*
Telephone: *(559) 327-3500*
Capacity: *1500*
Enrollment: *1376 (CBEDS enrollment 2018-19 school year)*

3. High School Information:

School Name: *Buchanan High School*
Address: *1560 N Minnewawa Ave Clovis CA 93619-7600*
Telephone: *(559) 327-3000*
Capacity: *3000*
Enrollment: *2726 (CBEDS enrollment 2018-19 school year)*

- 4. Bus transportation is currently provided for grades K-6 students residing further than one mile from school and for grades 7-12 students residing further than two and one-half miles from school. Transportation will be available for students attending the above-identified elementary, intermediate and high schools in accordance with District standards in effect at the time of enrollment.
- 5. The District currently levies a school facilities fee of \$5.15 per square foot (as of July 1, 2019) for residential development. The fee is adjusted periodically in accordance with law. New development on the subject property will be subject to the fee in place at the time fee certificates are obtained.

The District hereby requests that the information in this letter be provided by the owner/subdivider to all prospective purchasers of property within the project.

Thank you for the opportunity to comment on the project. Please contact me if you have any questions regarding this letter.

Sincerely,

Michael Johnston
Associate Superintendent
Administrative Services



September 23, 2019

Lily Cha
Planning and Development Services Dept.
1033 Fifth St.
Clovis, CA 93612

SUBJECT: TM 6239, R2019-006, GPA2019-004
South of Shepherd Avenue, between Locan and Dewolf Avenues

Dear Ms. Cha:

The purpose of this letter is to provide school district information relative to the above-referenced development and to comply with Business and Professions Code section 11010, subdivision (b)(11)(A) regarding the provision of school-related information to the developer/owner and the State Department of Real Estate.

In regards to this project with GPA2019-004 the district has concern regarding the re-designation of the approximately 39.7 acres of land located south of Shepherd Avenue, between Locan and Dewolf Avenues, and approximately 5.00 acres of land located on the west side of Locan Avenue, south of Shepherd Avenues. Currently this project site has a designation of Very Low Density (2.1 to 4.0 DU/AC), the district does not feel confident in the ability to accommodate students associated with a re-designation to Medium Density Residential (4.1 to 7.0 DU/AC). The district would like to bring this concern to the attention of the planning department and owner/sub divider.

1. Elementary School Information:

- (a) The subject land is presently within the attendance area of the elementary school (grades K-6) listed below:

School Name: *Bud Rank Elementary*
Address: *3650 Powers Ave Clovis CA 93619-5900*
Telephone: *(559) 327-4900*
Capacity: *900*
Enrollment: *869 (CBEDS enrollment 2018-19 school year)*

- (b) Because of projected growth in the District and the District's plans for construction of new school facilities, it is possible that (1) adjustment of school attendance areas could occur in the future such that students residing in the project area may be required to attend an elementary school other than the school listed above, and (2) students residing in the project area may attend more than one elementary school within the District during their elementary school years.

Governing Board

Christopher Casado
Steven G. Fogg, M.D.
Susan K. Hatmaker
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Superintendent

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Norm Anderson
Associate Superintendent

Barry S. Jager, Jr.
Associate Superintendent

Michael Johnston
Associate Superintendent

Lily Cha
September 23, 2019
Page 2

2. Intermediate School Information:

School Name: *Granite Ridge Intermediate*
Address: *2770 E International Ave Fresno CA 93730-5400*
Telephone: *(559) 327-5000*
Capacity: *1600*
Enrollment: *1284 (CBEDS enrollment 2018-19 school year)*

3. High School Information:

School Name: *Clovis North High School*
Address: *2770 E International Ave Fresno CA 93730-5400*
Telephone: *(559) 327-5000*
Capacity: *3100*
Enrollment: *2549 (CBEDS enrollment 2018-19 school year)*

- 4. Bus transportation is currently provided for grades K-6 students residing further than one mile from school and for grades 7-12 students residing further than two and one-half miles from school. Transportation will be available for students attending the above-identified elementary, intermediate and high schools in accordance with District standards in effect at the time of enrollment.
- 5. The District currently levies a school facilities fee of \$5.15 per square foot (as of July 1, 2019) for residential development. The fee is adjusted periodically in accordance with law. New development on the subject property will be subject to the fee in place at the time fee certificates are obtained.

The District hereby requests that the information in this letter be provided by the owner/subdivider to all prospective purchasers of property within the project.

Thank you for the opportunity to comment on the project. Please contact me if you have any questions regarding this letter.

Sincerely,

Michael Johnston
Associate Superintendent
Administrative Services

**FRESNO METROPOLITAN FLOOD CONTROL DISTRICT
NOTICE OF REQUIREMENTS**

AGENDA ITEM NO. 9. ^{0.45}

Page 1 of 5

PUBLIC AGENCY

LILY CHA
DEPARTMENT OF PLANNING AND
DEVELOPMENT SERVICES
CITY OF CLOVIS
1033 FIFTH STREET
CLOVIS, CA 93612

DEVELOPER

VALLEY COASTAL DEVELOPMENT, LLC
1396 W. HERNDON AVE., SUITE101
FRESNO, CA 93711

PROJECT NO: **6264**
ADDRESS: **NWC LOCAN AND TRENTON AVE.**
APN: **559-051-14**

SENT: **10/28/19**

Drainage Area(s)	Preliminary Fee(s)	Development Review Service Charge(s)	Fee(s)	
BX	\$45,365.00	NOR Review	\$217.00	To be paid prior to release of District comments to Public Agency and Developer.
		Grading Plan Review	\$605.00	Amount to be submitted with first grading plan submittal.
		Storm Drain Plan Review		For amount of fee, refer to www.fresnofloodcontrol.org for form to fill out and submit with first storm drain plan submittal (blank copy attached).
Total Drainage Fee: \$45,365.00		Total Service Charge: \$822.00		

The proposed development will generate storm runoff which produces potentially significant environmental impacts and which must be properly discharged and mitigated pursuant to the California Environmental Quality Act and the National Environmental Policy Act. The District in cooperation with the City and County has developed and adopted the Storm Drainage and Flood Control Master Plan. Compliance with and implementation of this Master Plan by this development project will satisfy the drainage related CEQA/NEPA impact of the project mitigation requirements.

Pursuant to the District's Development Review Fee Policy, the subject project shall pay review fees for issuance of this Notice of Requirements (NOR) and any plan submittals requiring the District's reviews. The NOR fee shall be paid to the District by Developer before the Notice of Requirement will be submitted to the City. The Grading Plan fee shall be paid upon first submittal. The Storm Drain Plan fee shall be paid prior to return/pick up of first submittal.

The proposed development shall pay drainage fees pursuant to the Drainage Fee Ordinance prior to issuance of a building permit at the rates in effect at the time of such issuance. The fee indicated above is valid through 2/29/20 based on the site plan submitted to the District on 9/17/19 Contact FMFCD for a revised fee in cases where changes are made in the proposed site plan which materially alter the proposed impervious area.

Considerations which may affect the fee obligation(s) or the timing or form of fee payment:

- a.) Fees related to undeveloped or phased portions of the project may be deferrable.
- b.) Fees may be calculated based on the actual percentage of runoff if different than that typical for the zone district under which the development is being undertaken and if permanent provisions are made to assure that the site remains in that configuration.
- c.) Master Plan storm drainage facilities may be constructed, or required to be constructed in lieu of paying fees.
- d.) The actual cost incurred in constructing Master Plan drainage system facilities is credited against the drainage fee obligation.
- e.) When the actual costs incurred in constructing Master Plan facilities exceeds the drainage fee obligation, reimbursement will be made for the excess costs from future fees collected by the District from other development.
- f.) Any request for a drainage fee refund requires the entitlement cancellation and a written request addressed to the General Manager of the District within 60 days from payment of the fee. A non refundable \$300 Administration fee or 5% of the refund whichever is less will be retained without fee credit.

CL TRACT No. 6264

FRESNO METROPOLITAN FLOOD CONTROL DISTRICT
NOTICE OF REQUIREMENTS

AGENDA ITEM NO. 9.

Page 2 of 5

CL TRACT No. 6264

Approval of this development shall be conditioned upon compliance with these District Requirements.

1. a. Drainage from the site shall
 b. Grading and drainage patterns shall be as identified on Exhibit No. 1
 c. The grading and drainage patterns shown on the site plan conform to the adopted Storm Drainage and Flood Control Master Plan.

2. The proposed development shall construct and/or dedicate Storm Drainage and Flood Control Non Master Plan facilities located within the development or necessitated by any off-site improvements required by the approving agency:
 Developer shall construct facilities as shown on Exhibit No. 1 as NON-MASTER PLAN FACILITIES TO BE CONSTRUCTED BY DEVELOPER.
 None required.

3. The following final improvement plans and information shall be submitted to the District for review prior to final development approval:
 Grading Plan
 Street Plan
 Storm Drain Plan
 Water & Sewer Plan
 Final Map
 Drainage Report (to be submitted with tentative map)
 Other
 None Required

4. Availability of drainage facilities:
 a. Permanent drainage service is available provided the developer can verify to the satisfaction of the City that runoff can be safely conveyed to the Master Plan inlet(s).
 b. The construction of facilities required by Paragraph No. 2 hereof will provide permanent drainage service.
 c. Permanent drainage service will not be available. The District recommends temporary facilities until permanent service is available.
 d. See Exhibit No. 2.

5. The proposed development:
 Appears to be located within a 100 year flood prone area as designated on the latest Flood Insurance Rate Maps available to the District, necessitating appropriate floodplain management action. (See attached Floodplain Policy.)
 Does not appear to be located within a flood prone area.

FRESNO METROPOLITAN FLOOD CONTROL DISTRICT
NOTICE OF REQUIREMENTS

CL TRACT No. 6264

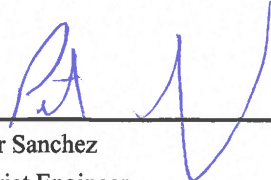
- 6. _____ The subject site contains a portion of a canal or pipeline that is used to manage recharge, storm water, and/or flood flows. The existing capacity must be preserved as part of site development. Additionally, site development may not interfere with the ability to operate and maintain the canal or pipeline.

- 7. The Federal Clean Water Act and the State General Permits for Storm Water Discharges Associated with Construction and Industrial Activities (State General Permits) require developers of construction projects disturbing one or more acres, and discharges associated with industrial activity not otherwise exempt from National Pollutant Discharge Elimination System (NPDES) permitting, to implement controls to reduce pollutants, prohibit the discharge of waters other than storm water to the municipal storm drain system, and meet water quality standards. These requirements apply both to pollutants generated during construction, and to those which may be generated by operations at the development after construction.
 - a. State General Permit for Storm Water Discharges Associated with Construction Activities, effective July 1, 2010, as amended. A State General Construction Permit is required for all clearing, grading, and disturbances to the ground that result in soil disturbance of at least one acre (or less than one acre) if part of a larger common plan of development or sale). Permittees are required to: submit a Notice of Intent and Permit Registration Documents to be covered and must pay a permit fee to the State Water Resources Control Board (State Board), develop and implement a storm water pollution prevention plan, eliminate non-storm water discharges, conduct routine site inspections, train employees in permit compliance, and complete an annual certification of compliance.
 - b. State General Permit for Storm Water Discharges Associated with Industrial Activities, April, 2014 (available at the District Office). A State General Industrial Permit is required for specific types of industries described in the NPDES regulations or by Standard Industrial Classification (SIC) code. The following categories of industries are generally required to secure an industrial permit: manufacturing; trucking; recycling; and waste and hazardous waste management. Specific exemptions exist for manufacturing activities which occur entirely indoors. Permittees are required to: submit a Notice of Intent to be covered and must pay a permit fee to the State Water Resources Control Board, develop and implement a storm water pollution prevention plan, eliminate non-storm water discharges, conduct routine site inspections, train employees in permit compliance, sample storm water runoff and test it for pollutant indicators, and annually submit a report to the State Board.
 - c. The proposed development is encouraged to select and implement storm water quality controls recommended in the Fresno-Clovis Storm Water Quality Management Construction and Post-Construction Guidelines (available at the District Office) to meet the requirements of the State General Permits, eliminate the potential for non-storm water to enter the municipal storm drain system, and where possible minimize contact with materials which may contaminate storm water runoff.


- 8. A requirement of the District may be appealed by filing a written notice of appeal with the Secretary of the District within ten days of the date of this Notice of Requirements.

- 9. The District reserves the right to modify, reduce or add to these requirements, or revise fees, as necessary to accommodate changes made in the proposed development by the developer or requirements made by other agencies.

- 10. X See Exhibit No. 2 for additional comments, recommendations and requirements.



 Peter Sanchez
 District Engineer



 Mikel Meneses
 Project Engineer

**FRESNO METROPOLITAN FLOOD CONTROL DISTRICT
NOTICE OF REQUIREMENTS**

AGENDA ITEM NO. 9.

Page 4 of 5

CC:

GARY G. GIANNETTA

1119 S STREET

FRESNO, CA 93721

CL TRACT No. 6264

**FRESNO METROPOLITAN FLOOD CONTROL DISTRICT
NOTICE OF REQUIREMENTS**

Page 5 of 5

AGENDA ITEM NO. 9.

Pursuant to the District's Development Review Fee Policy, the subject project shall pay review fees in the amount identified below for Storm Drain Review. The fee shall be paid to the District by Developer with first plan submittal. Checks shall be made out to Fresno Metropolitan Flood Control District.

Application No. CL TRACT 6264

Name / Business VALLEY COASTAL DEVELOPMENT, LLC

Project Address NWC LOCAN AND TRENTON AVE.

Project APN(s) 559-051-14

Project Acres (gross) 5.04

Please fill in the table below of proposed storm drain facilities to be constructed with this development and return completed form with first plan submittal. If you have any questions or concerns regarding the construction of facilities list, you can contact the Fresno Metropolitan Flood Control District at 559-456-3292.

Description	Qty	Unit	Price	Amount

Estimated Construction Cost _____

Fee equals lesser of

\$375.00 plus 3% of the estimated construction costs _____ Total (\$300.00 gross per acre) **\$1,512.00**

Amount Due _____

Storm Drain Facilities Cost Sheet	
15" Concrete Pipes \$79.00 LF	
18" Concrete Pipes \$83.00 LF	
24" Concrete Pipes \$94.00 LF	
30" Concrete Pipes \$111.00 LF	
36" Concrete Pipes \$131.00 LF	
42" Concrete Pipes \$152.00 LF	
48" Concrete Pipes \$178.00 LF	
54" Concrete Pipes \$217.00 LF	
60" Concrete Pipes \$255.00 LF	
66" Concrete Pipes \$301.00 LF	
72" Concrete Pipes \$347.00 LF	
84" Concrete Pipes \$388.00 LF	
96" Concrete Pipes \$420.00 LF	
15" Jacked Pipes \$555.00 LF	
18" Jacked Pipes \$608.00 LF	
24" Jacked Pipes \$687.00 LF	
30" Jacked Pipes \$766.00 LF	
36" Jacked Pipes \$846.00 LF	
42" Jacked Pipes \$898.00 LF	
48" Jacked Pipes \$951.00 LF	
54" Jacked Pipes \$1,031.00 LF	
60" Jacked Pipes \$1,110.00 LF	
66" Jacked Pipes \$1,216.00 LF	
72" Jacked Pipes \$1,374.00 LF	
84" Jacked Pipes \$1,533.00 LF	
Manholes \$4,600.00 EA	
Inlets & Laterals \$4,450.00 EA	
Outfalls \$11,500.00 EA	
Canal Outfalls \$15,000.00 EA	
Basin Excavation \$0.75 CY	
IMPROVEMENTS ADJACENT TO BASIN	
Fence, Pad, and Gate \$20.00 LF	
Mowstrip \$20.00 LF	
Arterial Paving \$82.00 LF	
Local Paving \$53.00 LF	
Curb and Gutter \$30.00 LF	
Sidewalk \$60.00 LF	
Sewer Line \$30.00 LF	
Water Line \$31.00 LF	
Street Lights \$65.00 LF	
Pump Station/Intake \$500,000.00 EA	

CL TRACT No. 6264



LEGEND

- Non-Master Plan Facilities To Be Constructed By Developer (Not Eligible For Fee Credit)
- Existing Master Plan Facilities
- Future Master Plan Facilities
- Future Non-Master Plan Facilities
- Inlet Boundary
- Direction Of Drainage
- Minimum 15' Wide Storm Drain Easement/ Major Storm Channel Easement
- Major Storm Breakover



1" = 200'

TRACT 6264
DRAINAGE AREA "BX"



EXHIBIT NO. 1
FRESNO METROPOLITAN FLOOD CONTROL DISTRICT

OTHER REQUIREMENTS
EXHIBIT NO. 2

The developer shall dedicate a Channel Easement to the District for major storm purposes as shown on Exhibit No. 1 as a condition of the final map and obtain an easement from the adjacent property to the west of this project (Outlot A of Tract 6109). No objects shall be placed in the Channel Easement that reduce the design capacity of the channel.

A minimum fifteen-foot (15') wide storm drain easement will be required whenever storm drain facilities are located on private property. No encroachments into the easement will be permitted including, but not limited to, foundations, roof overhangs, swimming pools, and trees.

Lot coverage must be provided to the District prior to submittal of improvement plans. The final drainage fee will be calculated commensurate with the lot coverage provided by the developer. If the lot coverage indicates a density higher than Master Planned, mitigation may be required. The lot coverage calculated by the District includes the front yard walkway, sidewalk walkway and the rear yard patio equaling an additional 6% of impervious area in addition to the City's typical lot coverage calculation.

The Master Plan system has been designed such that during a two-year event flow will not exceed the height of the 6-inch curb. Should wedge curb (4.5 inches height) be used the same criteria shall apply whereby flow remains below the top of curb. Any extensions or pipe size increases due to meeting the requirement listed above shall be at the developer's expense.

Basin "BX" was designed with capacity for runoff from low to very low density residential. Because of the higher density proposed by developers for urbanization of the drainage area, the basin must have additional capacity to control the excess runoff. To achieve the additional capacity without a direct charge to developers, the expanded excavation cost was not included in the drainage fee structure. Instead, each developer is required to excavate and export 1,000 c.y. of material for each residential acre of development by the developer. The District has an on-going program to issue permits to remove material from the basin. This may result in an opportunity to reduce the obligation for Basin "BX" excavation. It may also be feasible to defer this obligation if the developer can provide guarantees for future removal, subject to adequate assurances to the District. If and when the District can reduce the excavation obligation, the District will notify the developer of the lesser excavation obligation.

Development No. Tract 6264

**FRESNO METROPOLITAN FLOOD CONTROL DISTRICT
NOTICE OF REQUIREMENTS**

AGENDA ITEM NO. 9. 0.45

Page 1 of 5

PUBLIC AGENCY

LILY CHA
DEPARTMENT OF PLANNING AND
DEVELOPMENT SERVICES
CITY OF CLOVIS
1033 FIFTH STREET
CLOVIS, CA 93612

DEVELOPER

VALLEY COASTAL DEVELOPMENT, LLC
1396 W. HERNDON AVE., SUITE101
FRESNO, CA 93711

PROJECT NO: 6239

ADDRESS: NEC LOCAN AND TEAGUE AVE.

APN: 558-020-13, 10, 12, 20, 09, 05, 11, 06, 558-290-06, 558-020-80

SENT:

11/7/19

Drainage Area(s)	Preliminary Fee(s)	Development Review Service Charge(s)	Fee(s)
BX	\$345,850.00	NOR Review	\$1,724.00 To be paid prior to release of District comments to Public Agency and Developer.
		Grading Plan Review	\$4,811.00 Amount to be submitted with first grading plan submittal.
		Storm Drain Plan Review	For amount of fee, refer to www.fresnofloodcontrol.org for form to fill out and submit with first storm drain plan submittal (blank copy attached).
Total Drainage Fee: \$345,850.00		Total Service Charge: \$6,535.00	

The proposed development will generate storm runoff which produces potentially significant environmental impacts and which must be properly discharged and mitigated pursuant to the California Environmental Quality Act and the National Environmental Policy Act. The District in cooperation with the City and County has developed and adopted the Storm Drainage and Flood Control Master Plan. Compliance with and implementation of this Master Plan by this development project will satisfy the drainage related CEQA/NEPA impact of the project mitigation requirements.

Pursuant to the District's Development Review Fee Policy, the subject project shall pay review fees for issuance of this Notice of Requirements (NOR) and any plan submittals requiring the District's reviews. The NOR fee shall be paid to the District by Developer before the Notice of Requirement will be submitted to the City. The Grading Plan fee shall be paid upon first submittal. The Storm Drain Plan fee shall be paid prior to return/pick up of first submittal.

The proposed development shall pay drainage fees pursuant to the Drainage Fee Ordinance prior to issuance of a building permit at the rates in effect at the time of such issuance. The fee indicated above is valid through 2/29/20 based on the site plan submitted to the District on 9/17/19 Contact FMFCD for a revised fee in cases where changes are made in the proposed site plan which materially alter the proposed impervious area.

Considerations which may affect the fee obligation(s) or the timing or form of fee payment:

- a.) Fees related to undeveloped or phased portions of the project may be deferrable.
- b.) Fees may be calculated based on the actual percentage of runoff if different than that typical for the zone district under which the development is being undertaken and if permanent provisions are made to assure that the site remains in that configuration.
- c.) Master Plan storm drainage facilities may be constructed, or required to be constructed in lieu of paying fees.
- d.) The actual cost incurred in constructing Master Plan drainage system facilities is credited against the drainage fee obligation.
- e.) When the actual costs incurred in constructing Master Plan facilities exceeds the drainage fee obligation, reimbursement will be made for the excess costs from future fees collected by the District from other development.
- f.) Any request for a drainage fee refund requires the entitlement cancellation and a written request addressed to the General Manager of the District within 60 days from payment of the fee. A non refundable \$300 Administration fee or 5% of the refund whichever is less will be retained without fee credit.

CL TRACT No. 6239

FRESNO METROPOLITAN FLOOD CONTROL DISTRICT
NOTICE OF REQUIREMENTS

AGENDA ITEM NO. 9.

Page 2 of 5

CL TRACT No. 6239

Approval of this development shall be conditioned upon compliance with these District Requirements.

1. a. Drainage from the site shall
 b. Grading and drainage patterns shall be as identified on Exhibit No. 1
 c. The grading and drainage patterns shown on the site plan conform to the adopted Storm Drainage and Flood Control Master Plan.

2. The proposed development shall construct and/or dedicate Storm Drainage and Flood Control Master Plan facilities located within the development or necessitated by any off-site improvements required by the approving agency:
 Developer shall construct facilities as shown on Exhibit No. 1 as MASTER PLAN FACILITIES TO BE CONSTRUCTED BY DEVELOPER.
 None required.

3. The following final improvement plans and information shall be submitted to the District for review prior to final development approval:
 Grading Plan
 Street Plan
 Storm Drain Plan
 Water & Sewer Plan
 Final Map
 Drainage Report (to be submitted with tentative map)
 Other
 None Required

4. Availability of drainage facilities:
 a. Permanent drainage service is available provided the developer can verify to the satisfaction of the City that runoff can be safely conveyed to the Master Plan inlet(s).
 b. The construction of facilities required by Paragraph No. 2 hereof will provide permanent drainage service.
 c. Permanent drainage service will not be available. The District recommends temporary facilities until permanent service is available.
 d. See Exhibit No. 2.

5. The proposed development:
 Appears to be located within a 100 year flood prone area as designated on the latest Flood Insurance Rate Maps available to the District, necessitating appropriate floodplain management action. (See attached Floodplain Policy.)
 Does not appear to be located within a flood prone area.

FRESNO METROPOLITAN FLOOD CONTROL DISTRICT
NOTICE OF REQUIREMENTS

CL TRACT No. 6239

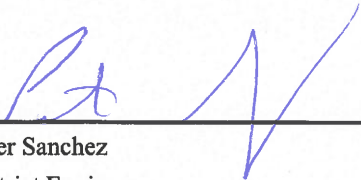
- 6. ___ The subject site contains a portion of a canal or pipeline that is used to manage recharge, storm water, and/or flood flows. The existing capacity must be preserved as part of site development. Additionally, site development may not interfere with the ability to operate and maintain the canal or pipeline.

- 7. The Federal Clean Water Act and the State General Permits for Storm Water Discharges Associated with Construction and Industrial Activities (State General Permits) require developers of construction projects disturbing one or more acres, and discharges associated with industrial activity not otherwise exempt from National Pollutant Discharge Elimination System (NPDES) permitting, to implement controls to reduce pollutants, prohibit the discharge of waters other than storm water to the municipal storm drain system, and meet water quality standards. These requirements apply both to pollutants generated during construction, and to those which may be generated by operations at the development after construction.
 - a. State General Permit for Storm Water Discharges Associated with Construction Activities, effective July 1, 2010, as amended. A State General Construction Permit is required for all clearing, grading, and disturbances to the ground that result in soil disturbance of at least one acre (or less than one acre) if part of a larger common plan of development or sale). Permittees are required to: submit a Notice of Intent and Permit Registration Documents to be covered and must pay a permit fee to the State Water Resources Control Board (State Board), develop and implement a storm water pollution prevention plan, eliminate non-storm water discharges, conduct routine site inspections, train employees in permit compliance, and complete an annual certification of compliance.
 - b. State General Permit for Storm Water Discharges Associated with Industrial Activities, April, 2014 (available at the District Office). A State General Industrial Permit is required for specific types of industries described in the NPDES regulations or by Standard Industrial Classification (SIC) code. The following categories of industries are generally required to secure an industrial permit: manufacturing; trucking; recycling; and waste and hazardous waste management. Specific exemptions exist for manufacturing activities which occur entirely indoors. Permittees are required to: submit a Notice of Intent to be covered and must pay a permit fee to the State Water Resources Control Board, develop and implement a storm water pollution prevention plan, eliminate non-storm water discharges, conduct routine site inspections, train employees in permit compliance, sample storm water runoff and test it for pollutant indicators, and annually submit a report to the State Board.
 - c. The proposed development is encouraged to select and implement storm water quality controls recommended in the Fresno-Clovis Storm Water Quality Management Construction and Post-Construction Guidelines (available at the District Office) to meet the requirements of the State General Permits, eliminate the potential for non-storm water to enter the municipal storm drain system, and where possible minimize contact with materials which may contaminate storm water runoff.

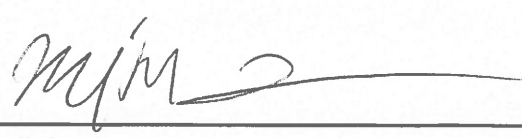
- 8. A requirement of the District may be appealed by filing a written notice of appeal with the Secretary of the District within ten days of the date of this Notice of Requirements.

- 9. The District reserves the right to modify, reduce or add to these requirements, or revise fees, as necessary to accommodate changes made in the proposed development by the developer or requirements made by other agencies.

- 10. X See Exhibit No. 2 for additional comments, recommendations and requirements.



 Peter Sanchez
 District Engineer



 Mikel Meneses
 Project Engineer

**FRESNO METROPOLITAN FLOOD CONTROL DISTRICT
NOTICE OF REQUIREMENTS**

AGENDA ITEM NO. 9.

Page 4 of 5

CC:

GARY G. GIANNETTA

1119 S STREET

FRESNO, CA 93721

CL TRACT No. 6239

**FRESNO METROPOLITAN FLOOD CONTROL DISTRICT
NOTICE OF REQUIREMENTS**

Page 5 of 5

Pursuant to the District's Development Review Fee Policy, the subject project shall pay review fees in the amount identified below for Storm Drain Review. The fee shall be paid to the District by Developer with first plan submittal. Checks shall be made out to Fresno Metropolitan Flood Control District.

Application No. CL TRACT 6239

Name / Business VALLEY COASTAL DEVELOPMENT, LLC

Project Address NEC LOCAN AND TEAGUE AVE.

Project APN(s) 558-020-13, 10, 12, 20, 09, 05, 11, 06, 558-290-06, 558-020-80

Project Acres (gross) 40.09

Please fill in the table below of proposed storm drain facilities to be constructed with this development and return completed form with first plan submittal. If you have any questions or concerns regarding the construction of facilities list, you can contact the Fresno Metropolitan Flood Control District at 559-456-3292.

Description	Qty	Unit	Price	Amount

Estimated Construction Cost _____

Fee equals lesser of

\$375.00 plus 3% of the estimated construction costs _____ Total (\$300.00 gross per acre) **\$12,027.00**

Amount Due _____

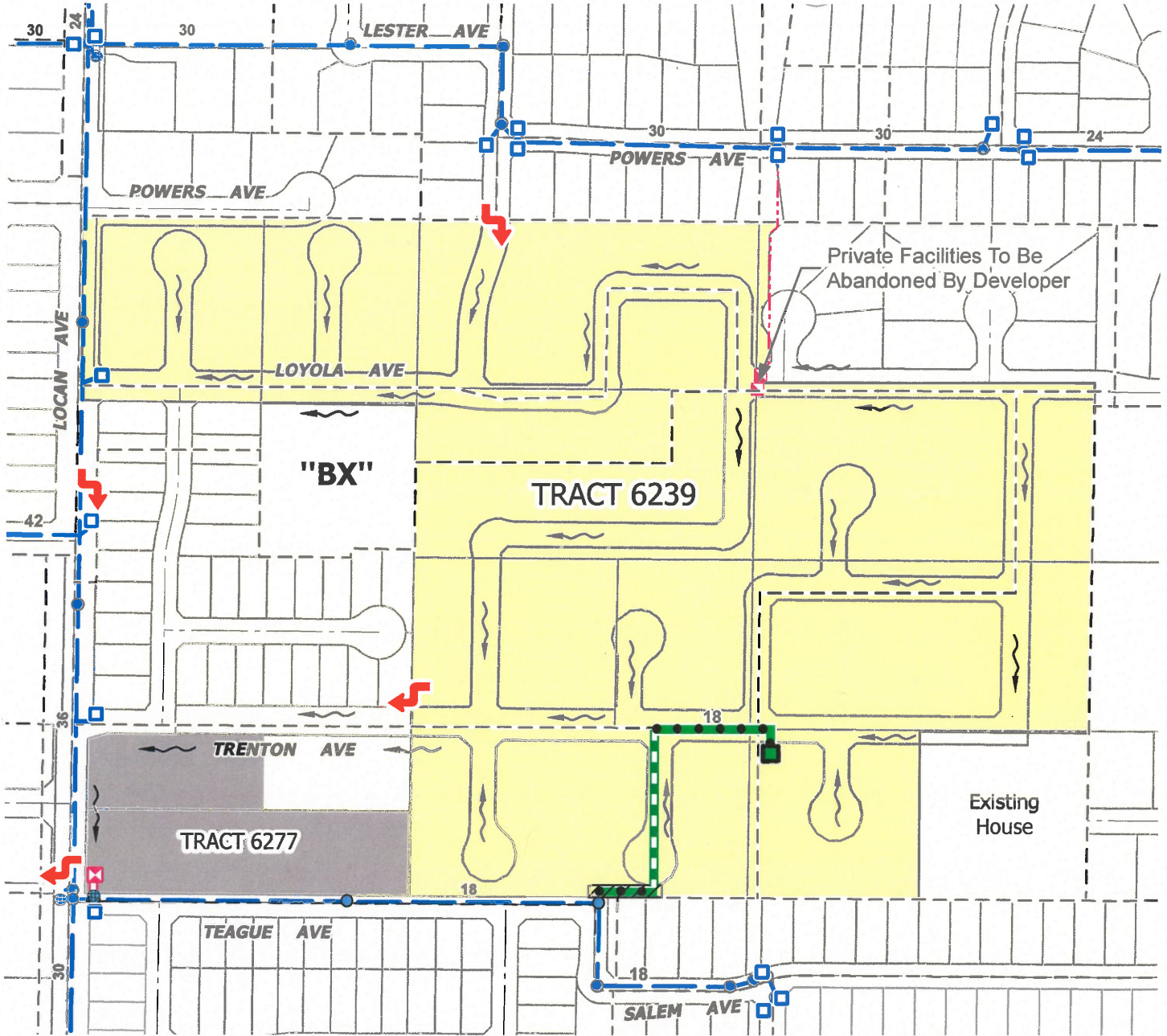
Storm Drain Facilities Cost Sheet

- 15" Concrete Pipes \$79.00 LF
- 18" Concrete Pipes \$83.00 LF
- 24" Concrete Pipes \$94.00 LF
- 30" Concrete Pipes \$111.00 LF
- 36" Concrete Pipes \$131.00 LF
- 42" Concrete Pipes \$152.00 LF
- 48" Concrete Pipes \$178.00 LF
- 54" Concrete Pipes \$217.00 LF
- 60" Concrete Pipes \$255.00 LF
- 66" Concrete Pipes \$301.00 LF
- 72" Concrete Pipes \$347.00 LF
- 84" Concrete Pipes \$388.00 LF
- 96" Concrete Pipes \$420.00 LF
- 15" Jacked Pipes \$555.00 LF
- 18" Jacked Pipes \$608.00 LF
- 24" Jacked Pipes \$687.00 LF
- 30" Jacked Pipes \$766.00 LF
- 36" Jacked Pipes \$846.00 LF
- 42" Jacked Pipes \$898.00 LF
- 48" Jacked Pipes \$951.00 LF
- 54" Jacked Pipes \$1,031.00 LF
- 60" Jacked Pipes \$1,110.00 LF
- 66" Jacked Pipes \$1,216.00 LF
- 72" Jacked Pipes \$1,374.00 LF
- 84" Jacked Pipes \$1,533.00 LF
- Manholes \$4,600.00 EA
- Inlets & Laterals \$4,450.00 EA
- Outfalls \$11,500.00 EA
- Canal Outfalls \$15,000.00 EA
- Basin Excavation \$0.75 CY
- IMPROVEMENTS ADJACENT TO BASIN**
- Fence, Pad, and Gate \$20.00 LF
- Mowstrip \$20.00 LF
- Arterial Paving \$82.00 LF
- Local Paving \$53.00 LF
- Curb and Gutter \$30.00 LF
- Sidewalk \$60.00 LF
- Sewer Line \$30.00 LF
- Water Line \$31.00 LF
- Street Lights \$65.00 LF
- Pump Station/Intake \$500,000.00 EA

CL TRACT No. 6239

NOTE: THE DISTANCE FACILITY BOUNDARIES ARE APPROXIMATE.

AGENDA ITEM NO. 9.



LEGEND

- Creditable Facilities (Master Plan Facilities To Be Constructed By Developer) - Pipeline (Size Shown) & Inlet
- Non-Master Plan Facilities To Be Constructed By Developer (Not Eligible For Fee Credit)
- Optional Master Plan Facilities To Be Constructed By Developer - Inlet & Lateral (Eligible For Fee Credit)
- Existing Master Plan Facilities
- Future Master Plan Facilities
- Minimum 15' Wide Storm Drain Easement
- Direction Of Drainage
- Major Storm Breakover



TRACT 6239
DRAINAGE AREA "BX"

EXHIBIT NO. 1

1" = 300'



FRESNO METROPOLITAN FLOOD CONTROL DISTRICT

OTHER REQUIREMENTS
EXHIBIT NO. 2

The cost of construction of Master Plan facilities, excluding dedication of storm drainage easements, is eligible for credit against the drainage fee of the drainage area served by the facilities. A Development Agreement shall be executed with the District to effect such credit. Reimbursement provisions, in accordance with the Drainage Fee Ordinance, will be included to the extent that developer's Master Plan costs for an individual drainage area exceed the fee of said area. Should the facilities cost for such individual area total less than the fee of said area, the difference shall be paid upon demand to the City or District.

The construction of the "Optional Master Plan Facilities" as shown on Exhibit No. 1 will provide permanent drainage service to the portion of Tract 6239 south of Trenton Avenue that is directed to Locan Avenue. Construction of these facilities is also a requirement of Tract 6277. If these optional facilities are not constructed, the District recommends temporary facilities until permanent service is available. Our records indicate that there may not be continuous existing curb and gutter to convey runoff to the "Optional Master Plan Facilities" located at Teague Avenue and Locan Avenue. The developer shall be required to provide documentation and/or improvements satisfactory to the City of Clovis to allow for conveyance of storm water to the inlet location. The existing Master Plan facilities and construction of the Master Plan facilities identified on Exhibit No. 1 will provide permanent drainage service to the remainder of Tract 6239.

Tract 6239 shall not block the historical drainage pattern of the existing home to remain within the related project. The developer shall verify and/or provide improvements to the satisfaction of the District that runoff from the existing home has the ability to surface drain to adjacent streets.

The developer should be aware that based on historical drainage patterns some of the streets located within Tract 6239 may need to be resized to pass larger event storms. District approval is not extended to street configuration. The developer shall submit a drainage report indicating the path of the major storm flow and calculations confirming there is adequate protection of finished floors.

Development No. Tract 6239

OTHER REQUIREMENTS
EXHIBIT NO. 2

A minimum fifteen-foot (15') wide storm drain easement will be required whenever storm drain facilities are located on private property. No encroachments into the easement will be permitted including, but not limited to, foundations, roof overhangs, swimming pools, and trees.

The Master Plan system has been designed such that during a two-year event flow will not exceed the height of the 6-inch curb. Should wedge curb (4.5 inches height) be used the same criteria shall apply whereby flow remains below the top of curb. Any extensions or pipe size increases due to meeting the requirement listed above shall be at the developer's expense.

Lot coverage must be provided to the District prior to submittal of improvement plans. The final drainage fee will be calculated commensurate with the lot coverage provided by the developer. If the lot coverage indicates a density higher than Master Planned, mitigation may be required. The lot coverage calculated by the District includes the front yard walkway, sidewalk walkway and the rear yard patio equaling an additional 6% of impervious area in addition to the City's typical lot coverage calculation.

Basin "BX" was designed with capacity for runoff from low to very low density residential. Because of the higher density proposed by developers for urbanization of the drainage area, the basin must have additional capacity to control the excess runoff. To provide for the capacity increase without a direct charge to developers, the expanded excavation cost was not included in the drainage fee structure. Instead, each developer is required to excavate and export 1,000 cy of material for each residential acre of development. The District has an on-going program to issue permits to remove material from the basin. This may result in an opportunity to reduce the obligation for Basin "BX" excavation. It may also be feasible to defer this obligation if the developer can provide guarantees for future removal, subject to adequate assurances to the District. If and when the District can reduce the excavation obligation, the District will notify the developer of the lesser excavation obligation.

Development No. Tract 6239



Fresno Metropolitan Flood Control District
Capturing Stormwater since 1956

File 210.434
210.45 "6239"
310. "BX"
400.11

October 29, 2019

Ms. Lily Cha, Assistant
City of Clovis
Department of Planning & Development Services
1033 Fifth Street
Clovis, CA 93612

Dear Ms. Cha,

Rezone Application No. R2019-006
General Plan Amendment GPA 2019-004
Drainage Area "BX"

The proposed rezone and general plan amendment lie within the District's Drainage Area "BX". Based on information submitted at this time, the District's system can accommodate the proposed rezone. The existing Master Plan system has been designed for runoff from a Medium Density Residential land use at this location. Lot coverage must be provided to the District prior to submittal of improvement plans for this project. Should the density of the project be commensurate with a density higher than the system design, mitigation may be required.

Please contact us if you need further information at (559) 456-3292.

Very truly yours,

Mikel Meneses
Engineer I

MM/lrl

k:\letters\rezone letters\clovis\2019\2019-006.gpa 2019-004(bx)(mpm).docx

CORRESPONDENCE FROM PUBLIC

Date: October 8, 2019

To: Clovis Planning Commission, 1033 5th Street Clovis, CA 93612

From: Property owners/residents along Loyola Ave between N De Wolf Ave and N Locan Ave

Subject: Concerns and proposals regarding notice of rezoning TM6239

We, the property owners and residents along Loyola Ave, are submitting comments in response to the Notice of Public Hearing regarding the development of 42.39 acres proposed off Loyola Ave, within the area bounded by Teague Ave on the south and Powers Ave to the north, between Temperance and DeWolf Avenues.

Our primary concern is the safety and integrity of our neighborhoods. Opening Loyola as a direct through-street from Locan to DeWolf and adding the large amount of houses there, most of which will attend Bud Rank Elementary School, will pose a **concerning increase in traffic**. In addition to Loyola, there will likely be a significant impact at the intersection of DeWolf and Harlan Ranch Boulevard, where there is already an awkward u-turn situation for those of us exiting east on Loyola and heading to Shepherd and Bud Rank. It is currently the only “crosswalked” intersection our kids are able to use to walk to school. We request that before any decisions be made, a traffic study be conducted, specifically taking into account the projected numbers of residents who will be using that road to **access the freeway and the school area**.

Our proposals to solve this issue are listed below:

- 1) Rezoning to Low Density housing be strongly considered.
- 2) **Loyola NOT be a straight through-street**. Require developers to change the road structure so that it is less enticing and less convenient to traffic from Locan straight through to DeWolf, possibly even ending the road in the middle where it is currently closed by a fire gate and building homes there. We would love for it NOT to be a through street! This was done effectively by Wathen-Castanos between Loyola and Cook Roads west of DeWolf and bears serious reflection.
- 3) A traffic study be taken to assess the potential negative impact the 170 families squeezed into 37 acres will certainly bring.
- 4) Speed humps be installed along Loyola. (See further details regarding this proposal attached).

Already, there have been multiple near-hits of along Loyola Ave with speeding vehicles vs. children playing/pedestrians. The traffic signs, safety cones, and other control devices residents have placed at the entrance of cul de sacs along Loyola Ave go unnoticed and will not solve this roadway safety issue. **The main concern is the safety of our children and the integrity of our neighborhoods.**

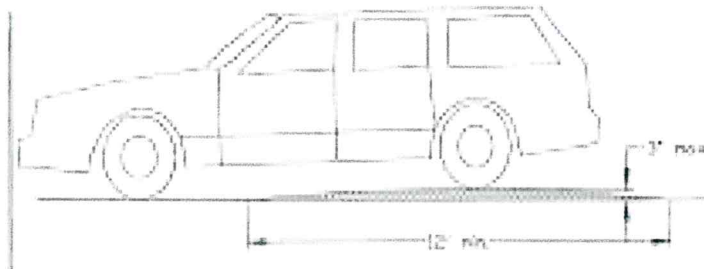
Respectfully Submitted,

Property Owners and Residents along Loyola Ave

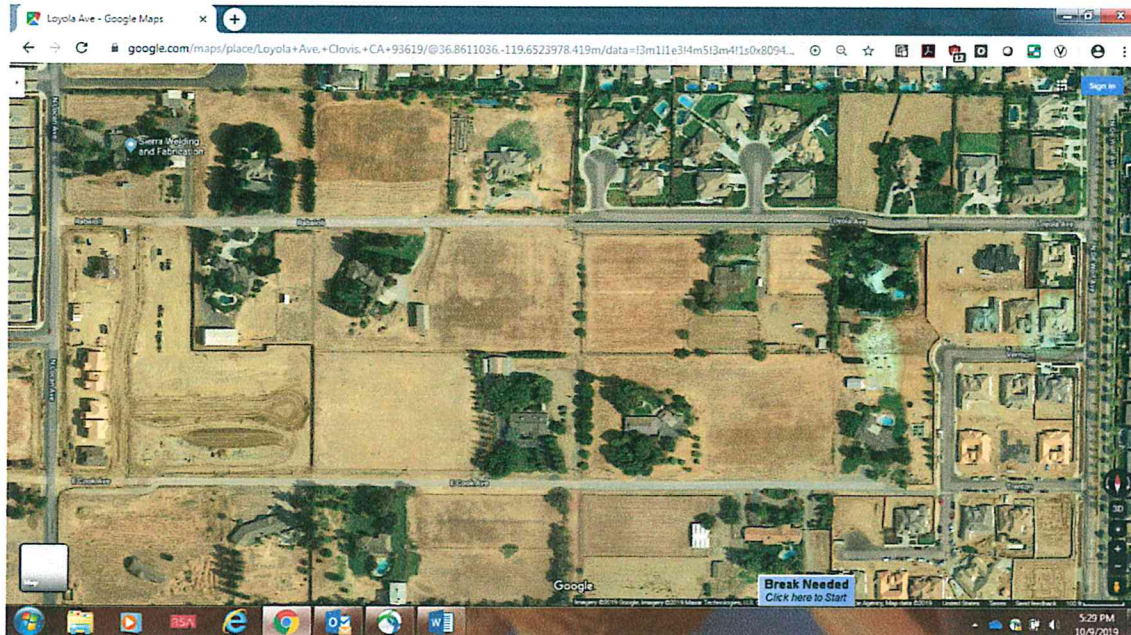
Supplemental Exhibit Regarding Speed Humps

Speed humps have been increasingly recognized by engineers as a suitable geometric design technique for controlling traffic speeds under appropriate roadway circumstances. Speed Humps is a roadway geometric design feature consisting of raised pavement extending transversally across (or partially across) a roadway for the primary purpose of reducing the speed of vehicles traveling thereon. In a speed hump, the raised pavement area normally rises and returns to the prevailing grade of the surrounding pavement over a distance of at least 12 feet in the direction of travel, with a maximum rise of 2.5 to 4 inches. Most speed humps are parabolic in cross-section. Flat-topped sections and elongated forms to 22 feet in the direction of travel are also recognized.

Speed Hump Illustration



Map



Recommendation

Property owners and residents along Loyola Ave request the Planning Division to discuss and consider a speed limit up to 25 mph and speed humps on Loyola Ave, between N De Wolf Ave and N Locan Ave. With the addition of 170+ new homes proposed to be built along Loyola Ave, current residents see an urgent need for improvement of roadway safety on Loyola Ave. To enhance safety and reduce speeding, an appropriate traffic calming device for this residential street is recommended to encourage responsible driving, safety of children and pedestrians, and promoting people-friendly streets, is to install devices such as speed humps with speed limit up to 25 mph. Studies show that speed humps have a dramatic effect on speeding, especially distracted drivers and aggressive speeding in residential areas and school zones. Therefore, it is the intent of property owners and residents along Loyola Ave to raise these concerns with the proposed addition of new residential developments in addition to Loyola Ave being open to N Locan Ave.

Currently, parts of Loyola Ave (directional east and west) is classified as a local road and sections are private, not a primary emergency route/bus route/commercial truck route, and relatively flat. Up to 25 mph speed limit and speed humps may be the solution to decrease speed, stopping distance, and all-around children/pedestrian safety.

Clovis City Council and Planning Commission,

This letter is to show support for the Granville home building project in the area around my home at : 1641 N Locan Ave, Clovis Ca 93619. This support is with the understanding that the road on Cook Avenue will not go through my property from Locan to DeWolf Ave.

Sincerely,



Joe and Johnna Christl

10/22/19

October 11, 2019

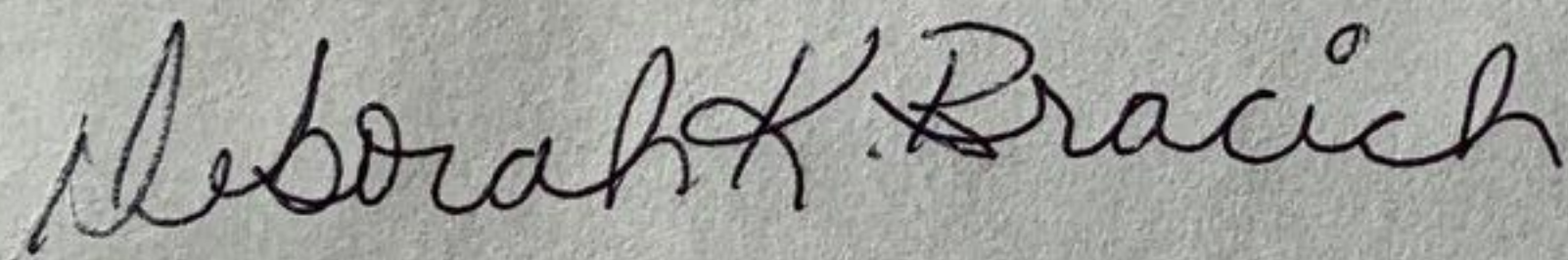
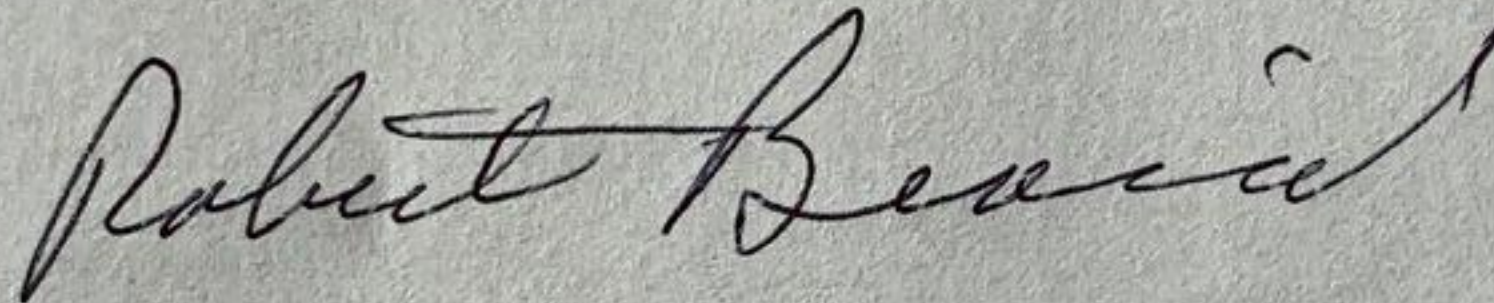
City of Clovis Planning Commission
1033 Fifth St.
Clovis, CA 93612

Chair and members of the Clovis Planning Commission,

I am writing to you regarding the application filed by Valley Coastal Development for a General Plan Amendment and Rezone, along with a Tentative Map, for the project known as Tract 6239.

As a former owner and resident of a portion of the territory included in Tract 6239, I would like to express my **SUPPORT** for the project as proposed.

Sincerely,



James L. McKoane
6338 N. Blackstone
Fresno, CA 93710

October 11, 2019

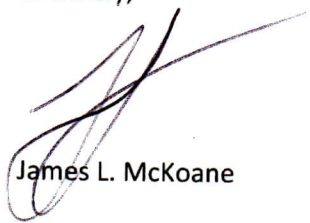
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Sincerely,



James L. McKoane

October 11, 2019

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1033 Fifth St.
Clovis, CA 93612

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As a former owner and resident of a portion of the territory included in Tract 6239, I would like to express my **SUPPORT** for the project as proposed.

Sincerely,

A handwritten signature in blue ink that reads "Delores L. Whitford". The signature is written in a cursive style with a large initial 'D'.

October 11, 2019

City of Clovis Planning Commission
1033 Fifth St.
Clovis, CA 93612

Chair and members of the Clovis Planning Commission,

I am writing to you regarding the application filed by Valley Coastal Development for a General Plan Amendment and Rezone, along with a Tentative Map, for the project known as Tract 6239.

As a former owner and resident of a portion of the territory included in Tract 6239, I would like to express my **SUPPORT** for the project as proposed.

Sincerely,



VINCENT P. GENCO
1787 N. LOCAN
CLOVIS, CA 93619

From: Drew Phelps <dphelps@gvhomes.com>
Sent: Friday, October 18, 2019 3:41 PM
To: 'garoxys@sbcglobal.net'
Subject: RE: 6239 Support letter

Hi Gary,

Ah, I'm sorry to hear it didn't work – I hadn't used it before but was hoping it could do the job. Will you be back from your vacation before next Thursday? If possible, I'd be happy to come by and pick up a hard copy or simply bring one by to be signed.

Please let me know if that works when you have a chance.

Thanks; hope you have a nice weekend!

Drew

From: Deacon Gary, & Roxanna Stevens
Sent: Thursday, October 17, 2019 4:42 PM
To: Drew Phelps
Subject: RE: 6239 Support letter

Drew, seems as though the digital signature field didn't work. I wasn't able to sign the letter.

Is there another way to accomplish it?

[Sent from Yahoo Mail on Android](#)

On Tue, Oct 15, 2019 at 9:38 AM, Drew Phelps <dphelps@gvhomes.com> wrote:

Hi Gary,

Thanks for letting me know (I hope you're enjoying the vacation!) I've added a digital signature field to this version, but please let me know if it's too complicated and we can try something else.

Thanks!

Drew

From: Deacon Gary, & Roxanna Stevens <garoxys@sbcglobal.net>
Sent: Monday, October 14, 2019 5:19 PM

To: Drew Phelps <dphelps@gvhomes.com>

Subject: Re: 6239 Support letter

AGENDA ITEM NO. 9.

Hi Drew,

I would be happy to sign the letter, but I am on vacation w/o access to a printer. Is there 2 way to sign letter electronically?

[Sent from Yahoo Mail on Android](#)

On Mon, Oct 14, 2019 at 3:51 PM, Drew Phelps

<dphelps@gvhomes.com> wrote:

Hi Gary,

I hope you're doing well. My name is Drew Phelps and I'm a project manager with Granville Homes.

I just called, but was unable to leave a voicemail, so I wanted to follow up with an email. The map that includes your former property will be heard by the planning commission at the end of this month and, even though we don't expect opposition, we always like to have as much support as possible, so I'm requesting your signature on the attached letter. As you can see, it's very basic and pertains strictly to this project and application. If you would be so kind as to sign the letter and return the signed copy, it would be very much appreciated.

If you have any questions or concerns, please feel free to reach out with a return email or with a call.

Thanks!

Drew Phelps

Granville Homes | gvhomes.com

P: 559-440-8321



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**INITIAL STUDY
MITIGATED NEGATIVE DECLARATION**

**GENERAL PLAN AMENDMENT GPA2019-004
REZONES R2019-005 & 006
TENTATIVE TRACT MAPS TM6239 & 6264**
Initial Study and Mitigated Negative Declaration

CITY OF CLOVIS

October 2019

PREPARED BY:

Lily Cha
Assistant Planner
Planning & Development Services
559-324-2335
lilyc@cityofclovis.com



INITIAL STUDY

This Initial Study was prepared pursuant to the California Environmental Quality Act (CEQA) Public Resources Code Sections 21000 *et seq.*, CEQA Guidelines Title 14, Section 15000 *et seq.* of the California Code of Regulations.

- PROJECT TITLE:** Valley Coastal Development Single Family Residential Subdivisions
- LEAD AGENCY NAME AND ADDRESS:** City of Clovis
Planning & Development Services
1033 Fifth Street
Clovis, CA 93612
- CONTACT PERSON AND PHONE NUMBER:** Lily Cha, Assistant Planner
(559) 324-2335
lilyc@cityofclovis.com
- PROJECT LOCATION:** North of Teague Avenue between Temperance and DeWolf Avenues.
Clovis, CA
APN(s): 558-020-80, 20, 09, 10, 12, 11, 06, 13, 05, 558-090-06, 559-051-14
- PROJECT SPONSOR'S NAME AND ADDRESS:** Drew Phelps, Project Manger
Valley Coastal Development
1396 W. Herndon Ave, Suite 101
Fresno, CA 93711
- LAND USE DESIGNATION:** Very Low Density Residential
- ZONING DESIGNATION:** See page 6 of this Initial Study
- PROJECT DESCRIPTION** See page 7 of this Initial Study.
- SURROUNDING LAND USES AND SETTING:** See page 6 of this Initial Study.
- REQUIRED APPROVALS:** See page 9 of this Initial Study.
- HAVE CALIFORNIA NATIVE AMERICAN TRIBES REQUESTED CONSULTATION? IF SO, HAS CONSULTATION BEGUN?** Yes

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A. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, as indicated by the checklist and corresponding discussion in this Initial Study.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture & Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology & Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology & Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities & Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |

Determination

On the basis of this initial evaluation:

- I find that the proposed Project COULD NOT have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.
- I find that, although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponents. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) will be prepared.
- 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 analyzed 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.

Prepared By:



Lily Cha, Assistant Planner
City of Clovis Planning & Development Services

10-7-2019
Date

Approved By:



Dwight Kroll, AICP, Director
City of Clovis Planning & Development Services

10.10.19
Date

B. PROJECT OVERVIEW

Valley Coastal Development proposes the construction of two separate single-family residential subdivisions, T6239 and T6264. The subject properties are comprised of approximately 42.39 acres of mostly undeveloped parcels and parcels with single-family rural residential type homes. T6239 proposes a 170 lot single-family residential subdivision on approximately 37.39 acres of properties and T6264 proposes a 36 lot single-family residential subdivision on approximately 5 acres of property. The tracts are located within the City of Clovis, California, herein referred to throughout the document as “proposed Project” and/or “Project.”

C. PROJECT LOCATION

The Project location is bounded by Teague Avenue to the south, Powers Avenue to the north between, Temperance and DeWolf Avenues as shown in Figure 1 below. The Project area consists of 11 existing parcels totaling 42.39 acres.

D. EXISTING SETTING

This section describes the existing conditions, surrounding conditions, as well as the General Plan land use and zoning designations.

1. EXISTING CONDITIONS

Figure 2 show the existing project site. The Project site consists of mostly 2 to 5 acre rural residential type properties with single-family residential homes and vacant properties. The properties include large homes and expansive pastures, gardens, some swimming with swimming pools, barns, and other out buildings. The properties within the project area are fairly flat with little changes in elevation. The Project parcels are the few remaining rural residential parcels within the immediate area.

2. SURROUNDING CONDITIONS

As shown reference in Table 1 below, and shown on Figure 2 below, the Project site is surrounded by existing development consisting of residential uses. In general, there are existing single-family homes to the north, south, east and west of the Project area.

Table 1: Surrounding Land Uses

	Land Use Designation	Zoning*	Existing Land Use
North	Low Density Residential	R-1-7500	Single Family Residential
East	Very Low Density Residential	R-1-B	Single Family Residential
South	Medium & Low Density Residential	R-1/ R-1-PRD	Single Family Residential
West	Low Density Residential	R-1	Single Family Residential
*R-1-7500 (Single-Family Residential – 7,500 square feet) R-1-B (Single-Family Residential Low Density) R-1 (Single-Family Residential – 6,000 square feet) R-1-PRD (Planned Residential Development)			

3. LAND USE DESIGNATION

As shown on Figure 3, the Project site has an existing General Plan Land Use designation Very Low Density Residential, which allows for a density range of 0.6 to 2.0 dwelling units per acre (DU/Ac). According to the 2014 Clovis General Plan, this Land Use Designation is intended for large lot single family residences and appurtenant structures within an identifiable residential neighborhood.¹

¹ 2014 City of Clovis General Plan, Land Use Element, Table LU-2, Land Use Designations, page LU-10. August 2014.

4. ZONING DESIGNATION

As shown on Figure 4, the Project site is within the R-1-AH (Single-Family Residential – 18,000 square feet) Zone District. As described below, the Project proposes a rezone of the R-1-AH zoned parcels to R-1-PRDs. According to Section 9.10.010(B)(6) of the Clovis Municipal Code (CMC), the R-1-PRD Zone District is intended for single-family small lot uses, including attached and detached single-family structures on small lots. The allowable density range is 4.1 to 15.0 DU/Ac, thus, consistent with the Medium Density Residential Land Use Designation of the General Plan.

E. PROJECT DESCRIPTION

This section describes the components of the proposed Project in more detail, including site preparation, proposed structures, and on- and off-site improvements.

1. PROJECT CONSTRUCTION

The nature of subdivisions limit construction to after approval of all entitlements required and final recordation of the subdivision map as well as all required grading and improvements. Construction of model homes will kick-off development of the Project.

2. SITE PREPARATION

Site preparation would include typical grading activities to ensure a flat surface. Part of the preparation would include the removal of any vegetation, such as grasses, shrubs, weeds and trees. Other site preparation activities would include minor excavation for the installation of utility infrastructure, for conveyance of water, sewer, stormwater, and irrigation. The existing residences and various out buildings will also be demolished.

3. PROJECT COMPONENTS

This section describes the overall components of the Project, such as the proposed buildings, landscape, vehicle and pedestrian circulation, and utilities.

DEMOLITION

As mentioned above, under the “Site Preparation” section, the existing residential homes and out buildings will be demolished. There are a total of nine existing residential structures and various out buildings to be demolished. Other site preparations include grading and clearing of vegetation.

BUILDINGS AND SITE LAYOUT

As shown in Figure 5, the Project proposes two separate subdivision tracts inclusive of Tract 6239, a 170-lot planned residential subdivision on approximately 37.39 acres and Tract 6264, a 36-lot planned residential subdivision on approximately 5 acres. The subdivisions will provide for single-family residential homes, subject to the developmental standards requested and approved for each of the respective planned residential development. Planned residential developments provides for smaller than standard lot sizes. A total of 206 single-family residential homes will be developed for this Project.

Tract 6239 is proposed east of Locan Avenue between Teague Avenue alignment and Powers Avenue, east of Locan Avenue. There are three points of access into the subdivision. Access into the subdivision will be provided from Locan Avenue onto Loyola Avenue, Locan Avenue onto Trenton Avenue, and from DeWolf Avenue onto Loyola Avenue through an existing, separate subdivision. All streets within the subdivision will be public streets meeting the minimum local street standards of the City’s development code. Tract 6264 is proposed west of Locan Avenue, between Moody and Teague Avenues. The subdivision is accessible from Locan Avenue by gated entry and is served by private interior streets. Parking requirements for both tracts are satisfied with the garages to be provided for each single-family home.

Table 2a and 2b below show the proposed development standards for each respective tracts under the planned residential development zoning in comparison to the typical single family residential development standard of the R-1 (Single-family residential) Zone District. Chapter 9.66, Planned Development Permits, of the Clovis Municipal Code (CMC or Code) provides a method whereby land may be designed and developed taking advantage of modern site planning techniques resulting in a more efficient use of land and better living environment than otherwise possible through strict application of the development standards. In general, this section of the Code provides a mechanism to afford some relief to typical development standards.

Tables 2a and 2b reflects the development standards that Project proposes such as reduced standards for the individual lots to the minimum parcel size, front, rear, and side yard setbacks.

Table 2a: Planned Residential Development Standards (TM6239)

	R-1 Zone District Standards	Proposed Standards	Difference
Min. Parcel Size	6,000 sq. ft.	5,167 sq. ft.	Reduction of 833 sq. ft.
Height	35 ft. / 2 stories	35 ft. / 2 stories	No change
Min. Front Setback	20 ft.	10 ft.	Reduction of 10 ft.
Min. Rear Setback	20 ft.	7 ft.	Reduction of 13 ft.
Min. Side Setback	5 ft.	4 ft.	Reduction of 1 ft.
Min. Reverse Corner Setback	15 ft.	10 ft.	Reduction of 5 ft.
Min. Street Side Setback	10 ft.	8 ft.	Reduction of 2 ft.
Lot Coverage	40% (max.)	60% (max.)	Increase of 20%

Table 2b: Planned Residential Development Standards (TM6264)

	R-1 Zone District Standards	Proposed Standards	Difference
Min. Parcel Size	6,000 sq. ft.	2,470 sq. ft.	Reduction of 3,530 sq. ft.
Height	35 ft. / 2 stories	35 ft. / 2 stories	No change
Min. Front Setback	20 ft.	6 ft.	Reduction of 14 ft.
Min. Rear Setback	20 ft.	8 ft.	Reduction of 12 ft.
Min. Side Setback	5 ft.	3 ft.	Reduction of 2 ft.
Mins. Side Setback (Garage side)	5 ft.	4 ft.	Reduction of 1 ft.
Min. Reverse Corner Setback	15 ft.	3 ft./ 4 ft. (Garage side)	Reduction of 11-12 ft.
Min. Street Side Setback	10 ft.	3 ft.	
Lot Coverage	40% (max.)	60% (max.)	Increase of 20%

SITE CIRCULATION AND PARKING

There are three points of access into Tract 6239. Access into the subdivision will be provided from Locan Avenue onto Loyola Avenue, Locan Avenue onto Trenton Avenue, and from DeWolf Avenue onto Loyola Avenue through an existing, separate subdivision. All streets within the subdivision will be public streets meeting the minimum local street standards of the City’s development code. Sidewalks are proposed on both sides of the interior streets with the addition of a trail system along Trenton and Backwood Avenues. Parking requirements for the tract is satisfied with the garages to be provided for each single-family home.

Tract 6264 is proposed west of Locan Avenue, between Moody and Teague Avenues. The subdivision is accessible from Locan Avenue by gated entry and is served by minimum 36 foot wide (curb to curb) private interior streets. A pedestrian path of travel is provided on one side along the outer perimeter of the private streets. Parking requirements for the tract is satisfied with the garages to be provided for each single-family home.

PROJECT DESIGN

Conceptual layout of the subdivisions are shown in Figure 5. The overall footprint, height limit, and placement of the homes will adhere to standards described above. The color palette and design details are subject to review through the Residential Site Plan Review Process (RSPR), which typically occurs later on in the entitlement process.

LANDSCAPE

The Project would include landscaping throughout the Subdivision. Landscaped areas would generally be located along the perimeter of the site, along trails and within parks where a variety of ornamental shrubs, plants, and trees would be planted. Landscape plans are typically provide during the Residential Site Plan Review Process (RSPR) for review of design and layout. Landscaping would be reviewed for compliance with the City's water efficient landscape regulations and guidelines during Civil Plan review.

UTILITIES

Utilities for the site would consist of water, sewer, electric, cable, gas, and stormwater infrastructure. Minor trenching and digging activities would be required for the installation of necessary pipelines typical of residential development. All utility plans would be required to be reviewed and approved by the appropriate agency, and/or department to ensure that installation occurs to pertinent codes and regulations. Other infrastructure would include new fire hydrants as required by the City of Clovis Fire Department.

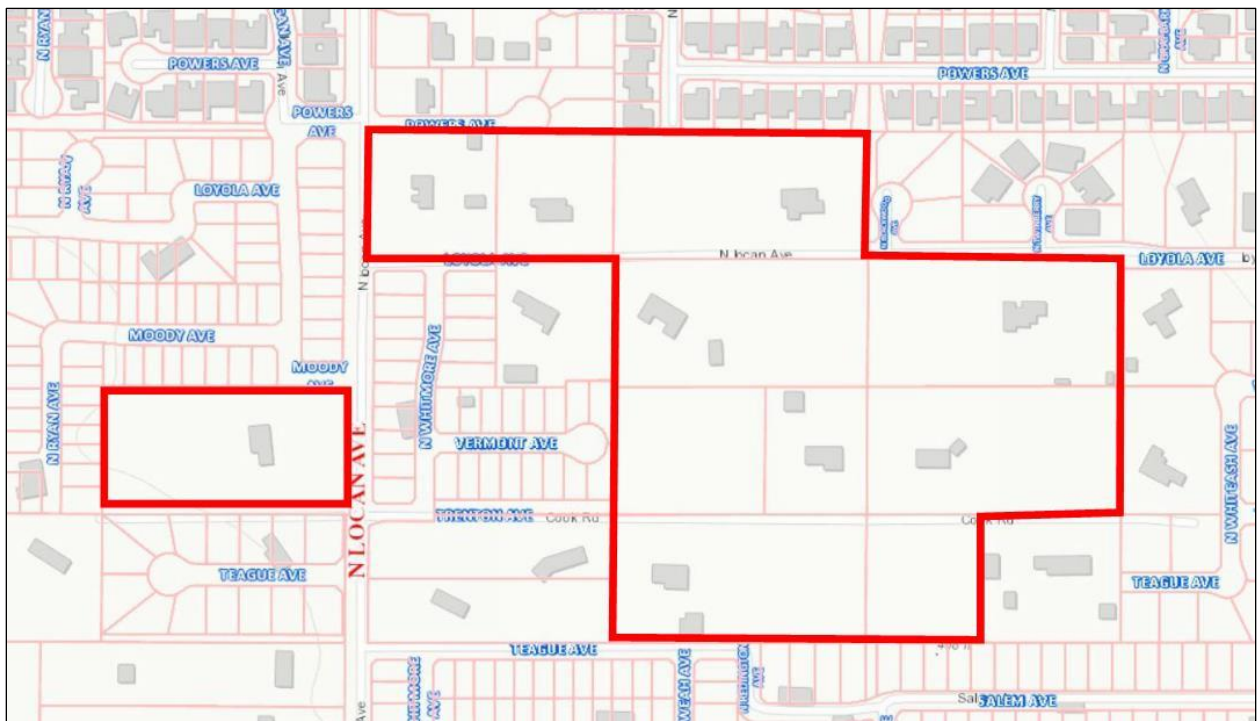
Utilities are provided by and managed from a combination of agencies, including FID which provides the City's water supply, Fresno Metropolitan Flood Control District (FMFCD) which has responsibility for storm water management, and the City's public utilities department which provides for solid waste collection, and sewer collection services. Pacific Gas & Electric (PG&E) provides electricity and natural gas within the City of Clovis.

F. REQUIRED PROJECT APPROVALS

The City of Clovis requires the following review, permits, and/or approvals for the proposed Project; however, other approvals not listed below may be required as identified throughout the entitlement process:

- General Plan Amendment
- Vesting Tentative Tract Maps
- Rezone (Planned Residential Development)
- Residential Site Plan Reviews
- Grading Permit
- Building Permit
- Sign Permit
- San Joaquin Unified Air Pollution Control District
- Fresno Metropolitan Flood Control District

Figure 1: Project Location




 = Project Site



Figure 2: Aerial of Project Site



= Project Site



Figure 3: Land Use Designations

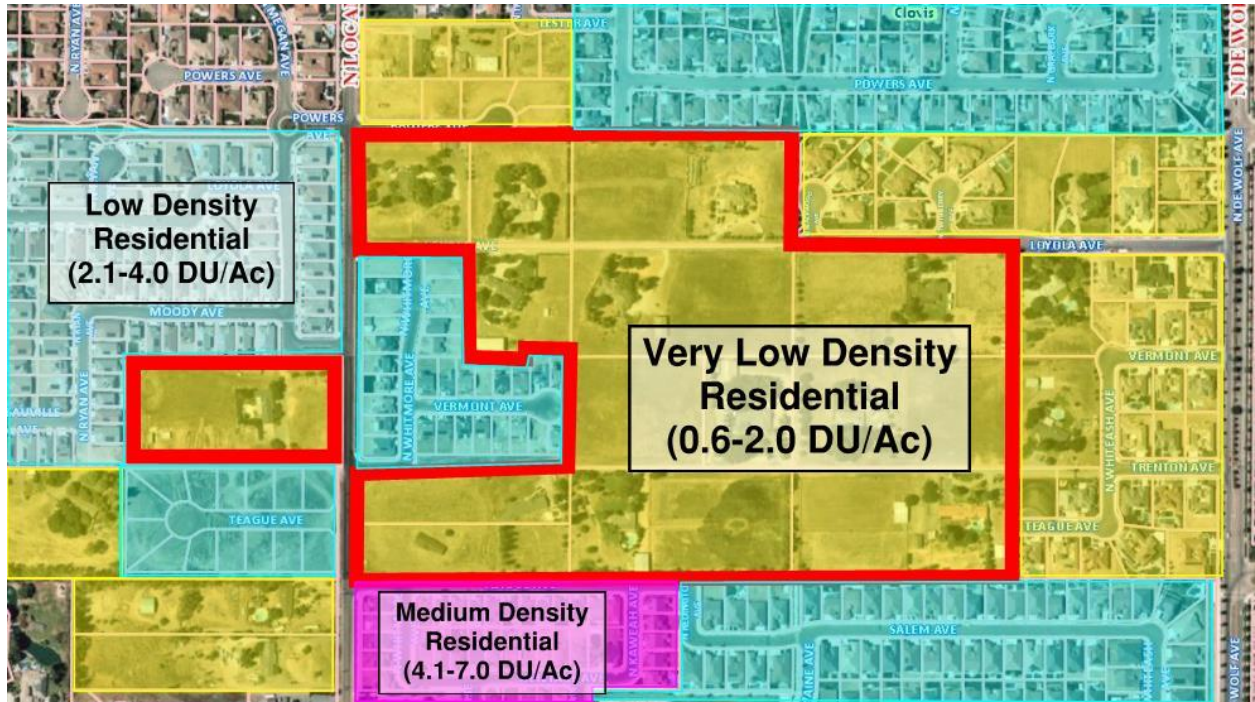
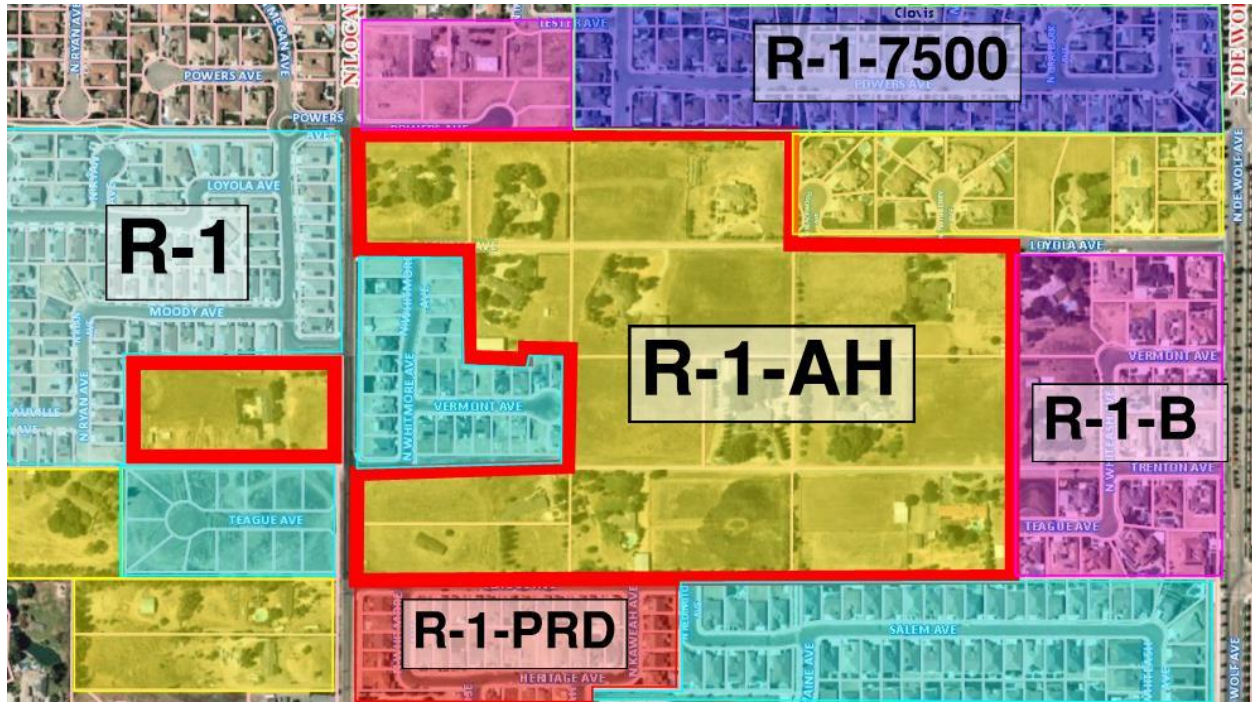


Figure 4: Zoning Districts




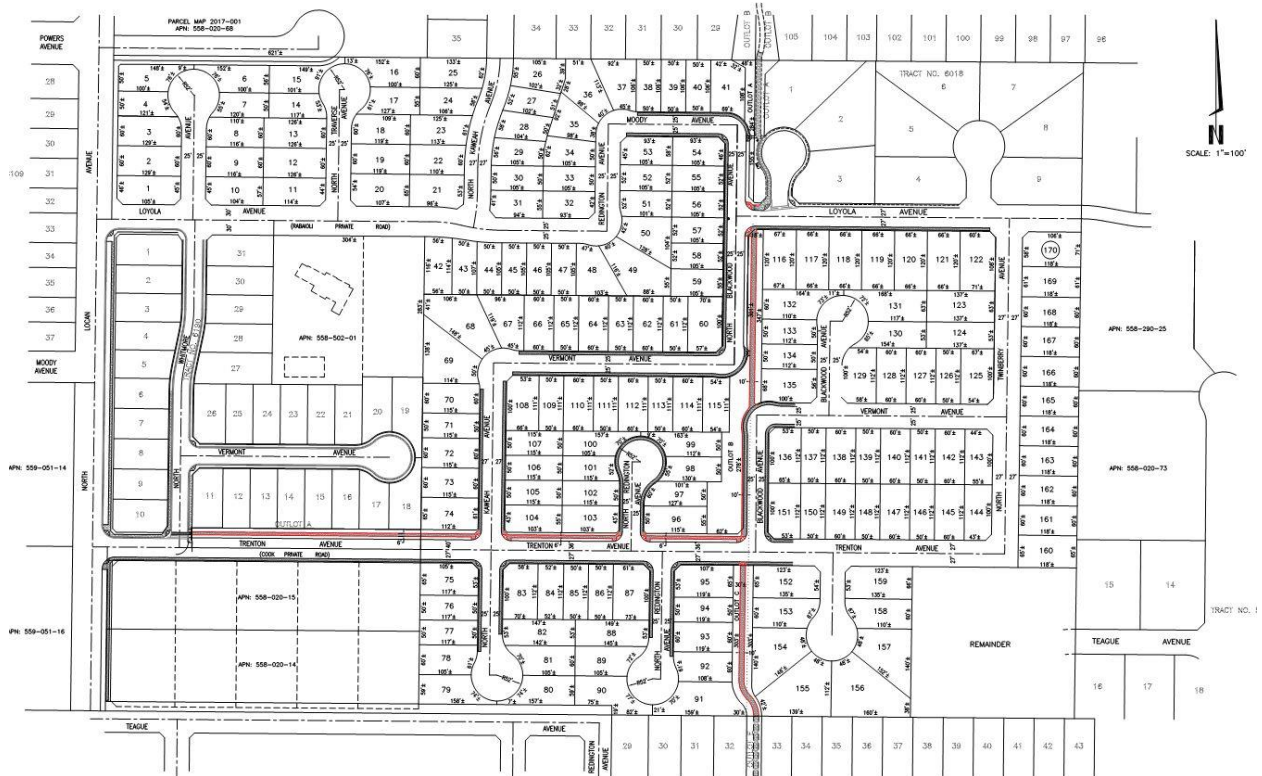
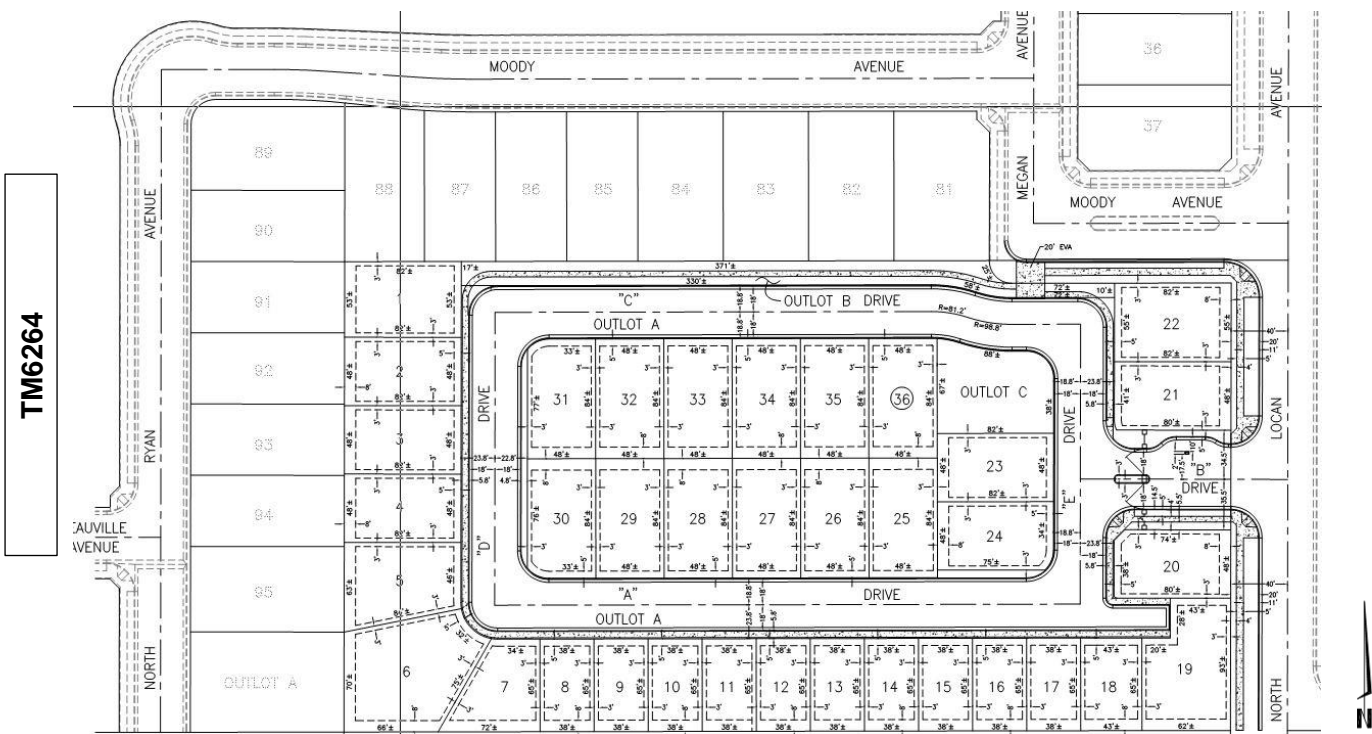
 = Project Site



Figure 5: Proposed Tract Maps



TM6239



TM6264

G. ENVIRONMENTAL CHECKLIST

This section provides an evaluation of the potential environmental impacts of the proposed project and are based on CEQA Guidelines Appendix G. For each issue area, one of four conclusions is made:

- **No Impact:** No project-related impact to the environment would occur with project development.
- **Less Than Significant Impact:** The proposed project would not result in a substantial and adverse change in the environment. This impact level does not require mitigation measures.
- **Less Than Significant with Mitigation Incorporated:** The proposed project would result in an environmental impact or effect that is potentially significant, but the incorporation of mitigation measure(s) would reduce the project-related impact to a less than significant level.
- **Potentially Significant Impact:** The proposed project would result in an environmental impact or effect that is potentially significant, and no mitigation can be identified that would reduce the impact to a less than significant level.

1. AESTHETICS

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

ENVIRONMENTAL SETTING

The City of Clovis is located within the San Joaquin Valley. Thus, much of the City and its surrounding areas are predominately flat. As a result, on clear days, the Sierra Nevada Mountains are visible to the east depending on your location.

Aside from Sierra Nevada, there are no officially designated focal points or viewsheds within the City. However, Policy 2.3, Visual Resources, of the Open Space Element of the 2014 Clovis General Plan, requires maintaining public views of open spaces, parks, and natural features and to preserve Clovis' viewshed of the surrounding foothills.

As mentioned above in the Project Description, the site is located within area bounded by by Teague Avenue to the south, Powers Avenue to the north, between Temperance and DeWolf Avenues. In general, the Project site is within an urbanized area of the City surrounded by existing residential subdivisions to the north, east, south, and west. As a result, the area is characterized primarily by single-family residential subdivision as well as typical infrastructure, such as roadways, street lights, parking lot lights, and ambient light sources typical of residential development.

DISCUSSION

- a) *Would the project have a substantial effect on a scenic vista?*

Less-Than-Significant Impact. As mentioned above, there are no officially designated scenic vistas or focal points in the City of Clovis. While the Sierra Nevada Mountains can be viewed on clear days, the Project requests R-1-PRD developments which limits the height of the main structure at 35 feet or 2.5 stories (whichever is less). This would be consistent with the height limits of the immediately surrounding area. Further, General Plan Policy 2.3 requires that public views of open spaces, parks, and natural features be maintained; however, the Project site is not within the immediate vicinity of these features. Therefore, because the Project would be constructed at a maximum height consistent with the area, as well as with the R-1-PRD Zone District development standards previously planned for in the General Plan, a **less-than-significant impact** would occur with regards to the project having a substantial effect on a scenic vista. As a result, no mitigation measures are required.

- 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. As stated in the 2014 Clovis General Plan Environmental Impact Report (EIR), there are no Caltrans-designated scenic highways within the City of Clovis.² Further, there are no existing historical structures or rock outcroppings located on or within the immediate vicinity of the site, Therefore, the Project would result in **no impact** with regards to substantially damaging scenic resources within a State scenic highway, and no mitigation measures are required.

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

Less-Than-Significant Impact. As mentioned previously, the existing site is within an urbanized area surrounded by primarily residential developments. Thus, the area is characterized by single-family residential subdivisions. Further, the site has been designated and zoned single-family residential uses. Therefore, the Project would complement and enhance the visual character of the area, as it will provide for trail sections within T6239 and a neighborhood pocket park in T6264.

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

² 2014 Clovis General Plan EIR, June 2014, Page 5.1-1.

Less-Than-Significant Impact. The Project consists of two separate tract maps, T6369 is a proposed 170-lot single-family residential subdivision, and T6264 is a proposed 36-lot single-family residential subdivision. As a result of the existing site being vacant and undeveloped, the Project would result in new sources of light and glare. Light and glare from the Project would be typical of residential development, including but not limited to, sources such as exterior lighting for safety, light and glare from vehicles or from light reflecting off of surfaces such as windshields. Other sources of light would be the interior lighting of the residential homes at night. These sources of light and glare are not typically associated with causing significant effects on the environment. Further, the site is already surrounded by existing single-family residential subdivisions. This existing development has contributed to the urbanization of the area, therefore, lighting and glare are already being emitted in the vicinity. Sources of existing light and glare are comprised of streetlights, lighting emitted from residential homes, light and glare from vehicles going to and from adjacent residential developments.

Although the Project would introduce new sources of light and glare, the RSPR process would ensure that the design and placement of lighting is appropriate to minimize potential light and glare impacts to surrounding properties. Further, the Project would be required to comply with Section 9.22.050, Exterior Light and Glare, of the Clovis Municipal Code (CMC or Development Code), which requires light sources to be shielded and that lighting does not spillover to adjacent properties.

Overall, through the City’s design review process and compliance with Section 9.22.050 of the Development Code, the Project would result in a **less-than-significant impact** with regard to lighting adversely affecting day or nighttime views in the area. No mitigation measures are required.

2. AGRICULTURE AND FORESTRY RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.			X	
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220 (g)) or timberland (as defined in Public Resources Code section 4526)?				X

d. Result in the loss of forest land or conversion of forest land to non-forest use?				X
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?			X	

ENVIRONMENTAL SETTING

As mentioned above in the Project Description, the site is located within area bounded by Teague Avenue to the south, Powers Avenue to the north, between Temperance and DeWolf Avenues. In general, the Project site is within an urbanized area of the City surrounded by existing residential subdivisions to the north, east, south, and west

DISCUSSION

- 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. According to the 2016 Farmland Monitoring and Mapping Program (FMMP) maps from the California Department of Conservation,³ the Project site is considered urban and built-up land which are lands that are occupied by structures with a building density of at least 1 unit to 1.5 acres or 6 structures to a 10-acre parcel. Such development as residential, industrial and commercial are common in these areas.

The Project site is an in-fill site within an urbanized area of Clovis and is not zoned or designated for farming-related activities. Consequently, because the site is not considered Prime, Unique, or Farmland of Statewide Importance, a **less-than-significant** impact would occur, and no mitigation measures are required.

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

No Impact. As shown on Figure 5.2-2 of the Agricultural Resources Chapter of the 2014 Clovis General Plan EIR, the Project site is not under a Williamson Act Contract. Further, as mentioned above, the site is within the R-1-AH Zone District, therefore, is not currently zoned or designated for agricultural use. As a result, the Project would have **no impact** with regards to conflicting with existing zoning for agricultural use or a Williamson Act Contract. No mitigation measures are required.

- c) *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220 (g)) or timberland (as defined in Public Resources Code section 4526)?*

No Impact. The Project site is mostly vacant and undeveloped, thus, does not contain forest land. Further, the site is not zoned for forestry or other forestry related uses. As a result, **no impact** would

occur with regards to conflicts with existing zoning for, or cause rezoning of, forest land. No mitigation measures are required.

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

No Impact. See discussion under Section 2c.

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?*

Less-Than-Significant Impact. The site is not zoned for or designated for agricultural uses. The site is considered an in-fill site and the 2014 Clovis General Plan designates the site for residential uses. Additionally, see discussion under Section 2.C related to forest land. Overall, the project would have a **less-than-significant** impact with regards to this topic and no mitigation measure are required.

3. AIR QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?			X	
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
c. Expose sensitive receptors to substantial pollutant concentrations?			X	
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

ENVIRONMENTAL SETTING

An Air Quality and Greenhouse Gas Analysis Report (AQ/GHG Report) was prepared by Santec on July 2019 (see Appendix A). Information in this AQ/GHG Report is used for the analysis included in both the Air Quality and Greenhouse Gas Emissions section of this Initial Study.

San Joaquin Valley Air Basin

The City of Clovis (City) is in the central portion of the San Joaquin Valley Air Basin (SJVAB). SJVAB consists of eight counties: Fresno, Kern (western and central), Kings, Tulare, Madera, Merced, San Joaquin, and Stanislaus. Air pollution from significant activities in the SJVAB includes a variety of industrial-based sources as well as on- and off-road mobile sources. These sources, coupled with geographical and meteorological conditions unique to the area, stimulate the formation of unhealthy air.

The SJVAB is approximately 250 miles long and an average of 35 miles wide. It is bordered by the Sierra Nevada in the east, the Coast Ranges in the west, and the Tehachapi mountains in the south. There is a slight downward elevation gradient from Bakersfield in the southeast end (elevation 408 feet) to sea level at the northwest end where the valley opens to the San Francisco Bay at the Carquinez Straits. At its northern end is the Sacramento Valley, which comprises the northern half of California's Central Valley. The bowl-shaped topography inhibits movement of pollutants out of the valley (SJVAPCD 2012a).

Topography⁴

The topography of a region is important for air quality because mountains can block airflow that would help disperse pollutants, and can channel air from upwind areas that transports pollutants to downwind areas. The San Joaquin Valley Air Pollution Control District (SJVAPCD) covers the entirety of the SJVAB. The SJVAB is generally shaped like a bowl. It is open in the north and is surrounded by mountain ranges on all other sides. The Sierra Nevada mountains are along the eastern boundary (8,000 to 14,000 feet in elevation), the Coast Ranges are along the western boundary (3,000 feet in elevation), and the Tehachapi Mountains are along the southern boundary (6,000 to 8,000 feet in elevation).

Climate

The SJVAB is in a Mediterranean climate zone and is influenced by a subtropical high-pressure cell most of the year. Mediterranean climates are characterized by sparse rainfall, which occurs mainly in winter. Summers are hot and dry. Summertime maximum temperatures often exceed 100°F in the valley.

The subtropical high-pressure cell is strongest during spring, summer, and fall and produces subsiding air, which can result in temperature inversions in the valley. A temperature inversion can act like a lid, inhibiting vertical mixing of the air mass at the surface.

Any emissions of pollutants can be trapped below the inversion. Most of the surrounding mountains are above the normal height of summer inversions (1,500–3,000 feet).

Winter-time high pressure events can often last many weeks, with surface temperatures often lowering into the 30°F. During these events, fog can be present and inversions are extremely strong. These wintertime inversions can inhibit vertical mixing of pollutants to a few hundred feet (SJVAPCD 2012a).

Ambient Air Quality Standards

The Clean Air Act (CAA) was passed in 1963 by the US Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The CAA allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act (CCAA), signed into law in 1988,

requires all areas of the state to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS, based on even greater health and welfare concerns.

These National and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect “sensitive receptors,” those most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both California and the federal government have established health-based AAQS for seven air pollutants. As shown in Table 4, Ambient Air Quality Standards for Criteria Pollutants, these pollutants are ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), and lead (Pb). In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

In addition to the criteria pollutants, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated despite the absence of criteria documents. The identification, regulation and monitoring of TACs is relatively recent compared to that for criteria pollutants. Unlike criteria pollutants, TACs are regulated on the basis of risk rather than specification of safe levels of contamination.

Table 4: Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standard	State Standard
Ozone	1-Hour	--	0.09 ppm
	8-Hour	0.07 ppm	0.07 ppm
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.053 ppm	0.03 ppm
	1-Hour	0.100 ppm	0.18 ppm
Sulfur Dioxide	Annual	0.03 ppm	--
	24-Hour	0.14 ppm	0.04 ppm
	3-Hour	0.5 ppm	
	1-Hour	0.075 ppm	0.25 ppm
PM ₁₀	Annual	--	20 ug/m ³
	24-Hour	150 ug/m ³	50 ug/m ³
PM _{2.5}	Annual	12 ug/m ³	12 ug/m ³
	24-Hour	35 ug/m ³	--
Lead	30-Day Avg.	--	1.5 ug/m ³
	3-Month Avg.	1.5 ug/m ³	--

Notes: ppm = parts per million; ug/m³ = micrograms per cubic meter.
Source: California Air Resources Board, 2008. Ambient Air Quality Standards (4/01/08), <http://www.arb.ca.gov/aqs/aaqs2.pdf>.

Attainment Status

The air quality management plans prepared by SJVAPCD provide the framework for SJVAB to achieve attainment of the state and federal AAQS through the SIP. Areas are classified as attainment or nonattainment areas for particular pollutants, depending on whether they meet the ambient air quality

standards. Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme.

At the federal level, the SJVAPCD is designated as extreme nonattainment for the 8-hour ozone standard, attainment for PM₁₀ and CO, and nonattainment for PM_{2.5}. At the state level, the SJVAB is designated nonattainment for the 8-hour ozone, PM₁₀, and PM_{2.5} standards. The SJVAB has not attained the federal 1-hour ozone, although this standard was revoked in 2005.

DISCUSSION

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

Less-Than-Significant Impact. Although the CEQA Guidelines indicate that a significant impact would occur if the Project were to conflict with or obstruct implementation of the applicable air quality plan, the SJVAPCDs 2015 Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI) does not provide specific guidance on analyzing conformity with the plan. Thus, for purposes of analyzing this potential impact, the AQ/GHG Report considered impacts based on: (1) whether the Project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards; and (2) whether the Project will comply with applicable control measures in the air quality plan, primarily compliance with Regulation VIII – Fugitive PM₁₀ Prohibitions and Rule 9510 – Indirect Source Review.

In general, regional air quality impacts and attainment of standards are the result of the cumulative impacts of all emission sources within the air basin. Thus, individual projects are generally not large enough to contribute measurably to an existing violation or air quality standards alone. Therefore, in order to analyze this threshold, and because the of the region's existing nonattainment status for several pollutants, the Project would be considered to cause significant impacts if it were to generate emissions that would exceed the SJVAPCDs significance thresholds. Based on the AQ/GHG Report, the Project would not exceed these thresholds from construction and operation of the townhomes.⁵

Consequently, a **less-than-significant** impact would occur and no mitigation measures are required.

- 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. See discussion under Section 3a above.

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

Less-Than-Significant Impact. Sensitive receptors are generally considered to include children, the elderly, and persons with pre-existing respiratory and cardiovascular illness. The SJVAPCD considers a sensitive receptor a location that houses or attracts children, the elderly, or people with illnesses. Examples of these receptors are considered to be hospitals, residences, schools and school facilities, and convalescent facilities. The nearest sensitive receptors to the Project site would be the existing residences adjacent to the site to the north, south, and east. Based the AQ/GHG Report, the Project would not exceed emission thresholds that would result in a significant impact⁶ based on compliance with

SJVAPCD regulations and standards for construction and operation of this type of development. Therefore, a **less-than-significant** impact would occur.

- 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. Generally, sources considered to emit odors are associated with wastewater treatment facilities, sanitary landfills, petroleum refineries, chemical manufacturing, and other industrial/manufacturing related uses. The Project is a residential use, thus, the odors associated with such use would be similar to that of the surrounding area which includes residential uses. Overall, because the Project is a residential use, similar to existing residential uses, the types of odor that could result from the Project would not be considered an objectionable odor source. Thus, a **less-than-significant** impact would occur.

4. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			X	

c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

ENVIRONMENTAL SETTING

A biological resources report (Biological Report) was prepared by Argonaut Ecological Consulting, Inc. in August 2019 (see Appendix B). This Biological Report included an evaluation for the presence and potential for special-status biological resources of the site. As part of the Biological Report, a reconnaissance site visit and database review were completed by Argonaut Ecological Consulting, Inc. Biologists.

The existing Project site has been developed has rural residential since at least 1998 with single-family homes and various outbuildings however the project area is surrounding by single-family residential subdivision tracts at densities much higher than the existing rural residential properties. According to the Biological report, there are no sensitive natural communities or aquatic resources; however, one special status species, burrowing owl, was determined to have potential to occur on site.

The following analysis is based in part on information provided by the Biological Report prepared by Argonaut Ecological Consulting, Inc.

DISCUSSION

- 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. The Biological report observed the Project area for the likelihood of special status species to be present within the area. It was determined that the Project area does not provide any critical habitat for any listed species within or near the Project area. The nearest records, identified the large California tiger salamander (CTS) boundary and Greene's tuctoria, roughly 1 mile away from the site. Other species records located near the site include the western pond turtle and succulent owl's-clover. The project area does not support any aquatic habitat to support the CTS.

Field observations determined that the site does not support any wetland habitats or waters of the State or U.S. The Project area's potential to support any species of concern is extremely low because of the lack of habitat diversity. However, the large trees present could provide suitable nesting habitat for raptors, and burrowing owls could take up residence within the project area given the present of ground squirrels.

Nevertheless, burrowing owls, which are considered special-status species, were determined to have the potential to be present, although none were observed during the field visit nor were there any diagnostic signs of burrowing owls observed on site. Further, there were no other nesting birds observed on site at the time of the field visit. It is recommended that sites that support trees or shrubs that could provide nesting habitat for raptors or migratory birds be removed prior to or after the nesting season which runs from roughly February 1 through August 31.

Overall, due to the lack of presence of special-status plant and animal species, as well as the site being surrounded by existing urban development, it is not likely that the Project would have a substantial adverse effect to habitat supporting these special status species. Nevertheless, implementation of mitigation measures BIO-1 through BIO-3 would ensure that a **less-than-significant impact with mitigation** occurs.

Mitigation Measure BIO-1: Pre-Activity Surveys for Burrowing Owl. A pre-activity survey should be conducted by a qualified biologist knowledgeable in the identification of burrowing owls in the northern portion of the project area of proposed TM6239 to confirm no burrowing owls have taken up residence either overwintering or nesting in the spring/ summer.

Mitigation Measure BIO-2: Avoidance and Minimization Measures for Burrowing Owls. If burrowing owls are detected on-site a no-work Environmentally Sensitive Area (ESA) buffer around the occupied burrow should be established in consultation with a qualified biologist

Mitigation Measure BIO-3: Pre-activity Nesting Bird Surveys. A pre-activity survey for migratory birds and birds should be conducted prior to tree removal, unless tree removal occurs outside the nesting period. Tree removal should occur between February and August.

- 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, or regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?*

Less-Than-Significant Impact. As mentioned previously, the Project site is characterized by rural residential development. There were no riparian habitat or sensitive natural community identified at the site, nor are any identified in local or regional plans. Therefore, the Project would not result in a substantial adverse effect with respect to this threshold, and a **less-than-significant** impact would occur. No mitigation measures are required.

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

No Impact. According to the Biological Report, no wetland or water features were identified at the site; therefore, **no impact** would occur.

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

No Impact. According to the Biological Report, the site does not intersect any regional or local wildlife movement corridors, nor does it support an important wildlife nursery site or fishery resources. Thus, **no impact** would occur and no mitigation measures are required.

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

Less-Than-Significant Impact. Although the Project would include development of existing rural residential type properties, the Project area does not indicate the presence of any sensitive habitat or wildlife features that would be significantly impacted. Although Policy 2.6 of the Open Space and Conservation Element of the General Plan calls for the protection of biological resources, the Biological Report did not identify any such resources at the site due to its location and being surrounded by urban development. Further, the Clovis Development Code does include tree protection standards and if any existing trees of significance are removed, the compliance with the tree protection standards of the Clovis Municipal Code would require the replacement of trees and/or payment of in-lieu fees. Consequently, due to the lack of any identified sensitive species, the impact would be **less-than-significant** as the Project would not conflict with local policies or ordinances for protection 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. The Project site is not located within an adopted or approved Habitat Conservation Plan (HCP) or other conservation plan. However, the site is within the PG&E San Joaquin Valley Operation and Maintenance HCP, although the PG&E HCP applies only to PG&E construction and maintenance activities and does not apply to the site. Overall, **no impact** would occur and no mitigation measures are required.

5. CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				

a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				X
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		X		
c. Disturb any human remains, including those interred outside of formal cemeteries?		X		

ENVIRONMENTAL SETTING

The Project site is made up of rural residential properties that include several large homes with expansive pastures, gardens, swimming pools, barns and other out buildings. Some grazing lands exists for primarily for goats, horses, and similar bovine type animals.

A cultural resources memorandum was prepared by professional archeologists from the Cultural Resources Department at Table Mountain Rancheria, on July 2019 (see Appendix C). This memorandum was based on a pedestrian archeological survey of the subject property.

In addition, the Project area is not identified as one with historical resources in the California Office of Historic Preservation registry. This information was verified in October 2019.

DISCUSSION

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

No Impact. As previously mentioned, the site is developed as rural residential and the site is not within immediate proximity to any known historical resource. Further, the cultural resources memorandum prepared for the Project did not identify any historical resources. Further, compliance with Policy 2.9 of the General Plan, which calls for the preservation of historical sites and buildings of state or national significance, would ensure that if there were historical resources present, they would be protected. Therefore, **no impact** would occur with regard to the Project causing a substantial adverse change in the significance of a historical resource and no mitigation measures are required.

- 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. The site is developed as rural residential that include several large homes with expansive pastures, gardens, swimming pools, barns and other out buildings and is surrounded by existing urban development. The cultural resources memorandum prepared for the Project concluded that the lack of historical or archaeological resources, as a result of studies from other projects, would make it unlikely that the Project would encounter such resources during construction.

Nevertheless, the potential remains that archeological resources could be inadvertently or accidentally uncovered during ground-disturbing activities such as trenching, digging, and the installation of utilities and other infrastructure.

Because there is the slight possibility for the accidental or inadvertent uncovering of archaeological resources during construction, Mitigation Measure CULT-1 would serve to reduce those potential impacts by requiring the stopping of any work until any found artifacts can be properly removed and inventoried by a qualified archaeologist. Therefore, the Project would result in a **less-than-significant impact with mitigation**.

Mitigation Measure CULT-1: If prehistoric or historic-era cultural or archaeological materials are encountered during construction activities, all work in the immediate vicinity of the find shall halt until a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, can evaluate the significance of the find and make recommendations. Cultural resource materials may include prehistoric resources such as flaked and ground stone tools and debris, shell, bone, ceramics, and fire-affected rock as well as historic resources such as glass, metal, wood, brick, or structural remnants.

If the qualified professional archaeologist determines that the discovery represents a potentially significant cultural resource, additional investigations may be required to mitigate adverse impacts from project implementation. These additional studies may include avoidance, testing, and evaluation or data recovery excavation.

If a potentially-eligible resource is encountered, then the qualified professional archaeologist, the Lead Agency, and the project proponent shall arrange for either 1) total avoidance of the resource or 2) test excavations to evaluate eligibility and, if eligible, total data recovery. The determination shall be formally documented in writing and submitted to the Lead Agency as verification that the provisions for managing unanticipated discoveries have been met.

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

Less-Than-Significant Impact With Mitigation. The potential remains that human remains could be inadvertently or accidentally uncovered during ground-disturbing activities such as trenching, digging, and the installation of utilities and other infrastructure.

Because there is the slight possibility for the accidental or inadvertent uncovering of human remains during construction, Mitigation Measure CULT-2 would serve to reduce those potential impacts by requiring the stopping of any work until any found human remains can be properly removed by the County coroner and/or tribes. Therefore, the Project would result in a **less-than-significant impact with mitigation**.

Mitigation Measure CULT-2: If human remains are discovered during construction or operational activities, further excavation or disturbance shall be prohibited pursuant to Section 7050.5 of the California Health and Safety Code. The specific protocol, guidelines, and channels of communication outlined by the Native American Heritage Commission, in accordance with Section 7050.5 of the Health and Safety Code, Section 5097.98 of the Public Resources Code (Chapter 1492, Statutes of 1982, Senate Bill 297), and Senate Bill 447 (Chapter 44, Statutes of 1987), shall be followed. Section 7050.5(c) shall guide the potential Native American involvement, in the event of discovery of human remains, at the direction of the County coroner.

All reports, correspondence, and determinations regarding the discovery of human remains on the project site shall be submitted to the Lead Agency.

6. ENERGY

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

ENVIRONMENTAL SETTING

The Project is area is nearly the last remaining rural residential properties within the immediate area surrounded by single-family residential subdivisions.

DISCUSSION

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

Less-Than-Significant Impact. The Project proposes the construction of 206 single-family residential homes on approximately 42.39 acres, along with associated landscape, hardscape, and infrastructure (i.e. drive aisles, utilities, etc.). The Project would include construction activities typical of residential development, thus, is not generally considered the type of use or intensity that would result in the unnecessary consumption of energy. The units themselves would comply with Title 24 Green Building Standards for energy efficiency, as well as be required to comply with the latest water efficient landscape policy regulations. Further, the Project would be required to comply with Clovis General Plan Policy 3.4, and 3.7 of the Open Space and Conservation, which call for the use of water conserving and drought tolerant landscape, as well as energy efficient buildings. Consequently, compliance with these measures would ensure that the Project does not result in a significant impact due to the unnecessary consumption of energy and **less-than-significant** impact would occur.

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

Less-Than-Significant Impact. See discussion under Section 6a above.

7. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:			X	
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?			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b. Result in substantial soil erosion or the loss of topsoil?			X	
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				X
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste disposal systems where sewers are not available for the disposal of wastewater?				X

f. Directly or indirectly destroy a unique paleontological resource or unique geologic feature?		X		
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ENVIRONMENTAL SETTING

The 2014 Clovis General Plan EIR identified no geologic hazards or unstable soil conditions known to exist on the Project site. Although Figure 5.6-2 of the Geology and Soils Chapter of the General Plan EIR does show a fault, the fault is located several miles east of the Project site.

DISCUSSION

- a) *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?; ii) Strong seismic ground shaking?; iii) Seismic-related ground failure, including liquefaction?; iv) Landslides?*

Less-Than-Significant Impact. Although the Project site does not have any known faults on the site, the potential remains that seismic ground-shaking could occur from the fault located east of the Project. However, adherence to the most current California Building Codes would ensure that the structures are constructed safely and in compliance with the appropriate Building Codes. With regards to liquefaction, the 2014 General Plan EIR states that the soil types in the area are not considered conducive to liquefaction due to their high clay content or from being too coarse.⁷ Further, the site is generally flat and therefore landslides would not occur at the Project site. Overall, due to the location away from a known fault, adherence to the most recent California Building Codes, and the flat topography, a **less-than-significant impact** would occur with regards to potential impacts from seismic activity.

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

Less-Than-Significant Impact. Although the site is relatively flat, grading activities would be required to ensure a flat and graded surface prior to construction, which may result in the soil erosion and loss of topsoil. However, as part of the Project, grading plans are required to be submitted and approved by the City Engineer Division to ensure appropriate grading of the site. Thus, this review and approval process would ensure that a **less-than-significant** impact occur and no mitigation measures are required.

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

Less-Than-Significant Impact. See discussion under Section 7a.

- d) *Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating direct or indirect substantial risks to life or property?*

No Impact. According to the 2014 Clovis General Plan EIR, expansive soils are mostly present in areas along the northern edge of the non-Sphere of Influence (SOI) and the easternmost part of the Clovis non-SOI plan area. Because the Project is not within the vicinity of these areas, there would be no potential

⁷ 2014 Clovis General Plan EIR, Chapter 5: Geology and Soils, page 5.6-3.

for creating direct or indirect substantial risks to life or property with regards to expansive soils. As a result, **no impact** would occur and no mitigation measures are required.

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

No Impact. The Project does not propose the use of septic tanks, therefore, **no impact** would occur.

- f) *Would the project directly or indirectly destroy a unique paleontological resource or unique geologic feature?*

Less-Than-Significant Impact With Mitigation. The Project site has been previously disturbed, as well as the immediately surrounding areas with no known occurrences of the discovery of paleontological resources. In addition, the cultural resources memorandum concluded that the potential for uncovering of archaeological or subsurface historical deposits (i.e. paleontological resources) is unlikely. Nevertheless, the possibility remains that the inadvertent or accidental discovery could occur during ground disturbing construction activities. However, Mitigation Measure GEO-1, below, would serve to protect the accidental discovery of paleontological resources. As such, a **less-than-significant with mitigation** impact would occur.

Mitigation Measure GEO-1: If prehistoric or historic-era cultural materials are encountered during construction activities, all work in the immediate vicinity of the find shall halt until a qualified professional archaeologist and/or paleontologist, meeting the Secretary of the Interior’s Professional Qualification Standards for prehistoric and historic archaeologist, can evaluate the significance of the find and make recommendations. Cultural resource materials may include prehistoric resources such as flaked and ground stone tools and debris, shell, bone, ceramics, and fire-affected rock as well as historic resources such as glass, metal, wood, brick, or structural remnants.

If the qualified professional determines that the discovery represents a potentially significant cultural resource, additional investigations may be required to mitigate adverse impacts from project implementation. These additional studies may include avoidance, testing, and evaluation or data recovery excavation.

If a potentially-eligible resource is encountered, then the qualified professional archaeologist and/or paleontologist, the Lead Agency, and the project proponent shall arrange for either 1) total avoidance of the resource or 2) test excavations to evaluate eligibility and, if eligible, total data recovery. The determination shall be formally documented in writing and submitted to the Lead Agency as verification that the provisions for managing unanticipated discoveries have been met.

8. GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a			X	

significant impact on the environment?				
b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?			X	

ENVIRONMENTAL SETTING

Santec conducted a greenhouse gas impact analysis report for the proposed Project on June 2019.

Gases that trap heat in the atmosphere are referred to as greenhouse gases (GHGs) because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. The accumulation of GHG's has been implicated as a driving force for global climate change. Definitions of climate change vary between and across regulatory authorities and the scientific community, but in general can be described as the changing of the earth's climate caused by natural fluctuations and anthropogenic activities which alter the composition of the global atmosphere.

Individual Projects contribute to the cumulative effects of climate change by emitting GHGs during construction and operational phases. The principal GHGs are carbon dioxide, methane, nitrous oxide, ozone, and water vapor. While the presence of the primary GHGs in the atmosphere are naturally occurring, carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O) are largely emitted from human activities, accelerating the rate at which these compounds occur within earth's atmosphere. Carbon dioxide is the "reference gas" for climate change, meaning that emissions of GHGs are typically reported in "carbon dioxide-equivalent" measures. Emissions of carbon dioxide are largely by-products of fossil fuel combustion, whereas methane results from off-gassing associated with agricultural practices and landfills. Other GHGs, with much greater heat-absorption potential than carbon dioxide, include hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, and are generated in certain industrial processes.

There is international scientific consensus that human-caused increases in GHGs have and will continue to contribute to global warming, although there is uncertainty concerning the magnitude and rate of the warming. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity.

In 2005, in recognition of California's vulnerability to the effects of climate change, Governor Schwarzenegger established Executive Order S-3-05, which sets forth a series of target dates by which statewide emission of greenhouse gases (GHG) would be progressively reduced, as follows: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80 percent below 1990 levels. In 2006, California passed the California Global Warming Solutions Act of 2006 (AB 32), which requires the California Air Resources Board (CARB) to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions).

In April 2009, the California Office of Planning and Research published proposed revisions to the California Environmental Quality Act to address GHG emissions. The amendments to CEQA indicate the following:

- Climate action plans and other greenhouse gas reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.
- Local governments are encouraged to quantify the greenhouse gas emissions of proposed projects, noting that they have the freedom to select the models and methodologies that best meet their needs and circumstances. The section also recommends consideration of several qualitative factors that may be used in the determination of significance, such as the extent to which the given project complies with state, regional, or local GHG reduction plans and policies. OPR does not set or dictate specific thresholds of significance. Consistent with existing CEQA Guidelines, OPR encourages local governments to develop and publish their own thresholds of significance for GHG impacts assessment.
- When creating their own thresholds of significance, local governments may consider the thresholds of significance adopted or recommended by other public agencies, or recommended by experts.
- New amendments include guidelines for determining methods to mitigate the effects of greenhouse gas emissions in Appendix F of the CEQA Guidelines.
- OPR is clear to state that “to qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project; general compliance with a plan, by itself, is not mitigation.”
- OPR’s emphasizes the advantages of analyzing GHG impacts on an institutional, programmatic level. OPR therefore approves tiering of environmental analyses and highlights some benefits of such an approach.
- Environmental impact reports (EIRs) must specifically consider a project’s energy use and energy efficiency potential.

On December 30, 2009, the Natural Resources Agency adopted the proposed amendments to the CEQA Guidelines in the California Code of Regulations.

In December 2009, the San Joaquin Valley Air Pollution Control District (SJVAPCD) adopted guidance for addressing GHG impacts in its *Guidance for Valley Land Use Agencies in Addressing GHG Impacts for New Projects Under CEQA*. The guidance relies on performance-based standards, otherwise known as Best Performance Standards (BPS), to assess significance of project-specific GHG emissions on global climate change during the environmental review process.

Projects can reduce their GHG emission impacts to a less than significant level by implementing BPS. Projects can also demonstrate compliance with the requirements of AB 32 by demonstrating that their emissions achieve a 29% reduction below “business as usual” (BAU) levels. BAU is a projected GHG emissions inventory assuming no change in existing business practices and without considering implementation of any GHG emission reduction measures.

Significance Criteria

The SJVAPCDs *Guidance for Valley Land Use Agencies in Addressing GHG Impacts for New Projects Under CEQA* provides initial screening criteria for climate change analyses, as well as draft guidance for the determination of significance.

The effects of project-specific GHG emissions are cumulative, and therefore climate change impacts are addressed as a cumulative, rather than a direct, impact. The guidance for determining significance of impacts has been developed from the requirements of AB 32. The guideline addresses the potential cumulative impacts that a project's GHG emissions could have on climate change. Since climate change is a global phenomenon, no direct impact would be identified for an individual land development project. The following criteria are used to evaluate whether a project would result in a significant impact for climate change impacts:

- Does the project comply with an adopted statewide, regional, or local plan for reduction or mitigation of GHG emissions? If no, then
- Does the project achieve 29% GHG reductions by using approved Best Performance Standards? If no, then
- Does the project achieve AB 32 targeted 29% GHG emission reductions compared with BAU?

Projects that meet one of these guidelines would have less than significant impact on the global climate.

Because BPS have not yet been adopted and identified for specific development projects, and because neither the ARB nor the City of Clovis has not yet adopted a plan for reduction of GHG with which the Project can demonstrate compliance, the goal of 29% below BAU for emissions of GHG has been used as a threshold of significance for this analysis.

DISCUSSION

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

Less-Than-Significant Impact. The Project would include the construction and operation of 206 single-family residential homes. As such, GHG emissions would be produced through the construction and operational phases of the Project. However, the SJVAPCD includes regulations to reduce GHG emissions such as standards for medium and heavy duty engines and vehicles (i.e. tractors and construction equipment) that would apply to buildout of the Project. Further, compliance with Title 24 energy efficient building codes would apply, which also help to reduce GHG emissions during operation of the Project, by requiring minimum standards for insulation, energy efficiency, and window glazing, etc., which serve to maximize efficiency of new construction. Further, the Project would comply with the latest water efficient landscape standards which help to reduce energy usage. Overall, the AQ/GHG Report concluded that the Project, with implementation of required energy efficient standards, would reduce emissions versus business as usual scenarios and would exceed the minimum percentage reduction of emissions required by the State, SJVAPCD, and the Clovis General Plan EIR. Therefore, a **less-than-significant** impact would occur.

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

Less-Than-Significant Impact. Based on the AQ/GHG Report, the Project would include several features that would minimize GHG emissions, which are consistent with project-level strategies identified by the Air Resources Board Scoping Plan and the Clovis General Plan. As indicated in the discussion above under Section 8a, the Project would result in GHG reductions that meet or exceed minimum targets by complying with the latest energy efficient standards, and water conservation. Consequently, the AQ/GHG Report found this potential impact to be **less than significant**.

9. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
f. Impair implementation of or physically interfere with an			X	

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?			X	

ENVIRONMENTAL SETTING

For purposes of this chapter, the term “hazardous materials” refers to both hazardous substances and hazardous wastes. A “hazardous material” is defined in the Code of Federal Regulations (CFR) as “substance or material that is capable of posing an unreasonable risk to health, safety, and property when transported in commerce” (49 CFR 171.8). California Health and Safety Code Section 25501 defines a hazardous material as follows:

“Hazardous material” means any material that, because of its quantity, concentration, or physical, or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. “Hazardous materials” include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment. “Hazardous wastes” are defined in California Health and Safety Code Section 25141(b) as wastes that: ...because of their quantity, concentration, or physical, chemical, or infectious characteristics, [may either] cause or significantly contribute to an increase in mortality or an increase in serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

The nearest school to the Project site is Bud Rank Elementary, located approximately half (0.5) of a mile northeast of the site.

DISCUSSION

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

Less-Than-Significant Impact. The Project consists of the construction of 206 single-family residential homes on existing rural residential properties. The type of hazardous materials that would be associated with the Project are those typical of residential uses, such as the use of household cleaners, landscape maintenance products, soaps, and potential pesticides (for pest control). Overall, the Project would not routinely transport, use, or dispose of hazardous materials other than those typical of residential development, which are not generally considered of the type or quantity that would pose a significant hazard to the public when used as directed. During construction, typical equipment and materials would be used that are associated with residential construction; however, any chemicals or materials would be handled, stored, disposed of, and/or transported according to applicable laws. Consequently, because the Project is not of the type of use that would routinely transport, use, or dispose of hazardous materials a **less-than-significant** impact would occur.

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

Less-Than-Significant Impact. See discussion above under Section 9a.

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

Less-Than-Significant Impact. As mentioned above, the Project site is located approximately half (0.5) mile from the nearest school, which is Bud Rank Elementary. Further, the Project is not of the type of use typically associated with emitting hazardous emissions or handling the type or quantity of hazardous materials such that it would pose a risk or threat to the school, or surrounding area. Therefore, a **less-than-significant** impact would occur.

- 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. According the California Department of Toxic Substance Control EnviroStor Database, the Project site is not located on or within the immediate vicinity of a hazardous materials site.⁸ Therefore, **no impact** would occur.

- 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 within an airport land use plan nor is the site within two miles of a public airport. Therefore, **no impact** would occur.

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

Less-Than-Significant Impact. The Project is located at a site that is surrounded by existing development. Further, the road network is already in place from previous development. Although the Project could result in temporary traffic detouring or closures during buildout, these delays would be temporary and would be coordinated with the City engineering department and other departments to ensure safe access to and from the area is maintained. Further, the site itself would reviewed by City departments to ensure adequate site access and circulation is provided in the event of an emergency. Overall, a **less-than-significant** impact would occur.

- g) *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

Less-Than-Significant Impact. The site is an infill site surrounded by urban uses. Therefore, it is not in a location typically associated with wildfires. Although urban fires could occur, the Project would be constructed to the latest fire code standards, which would include fire sprinklers in each unit, as well as the installation of several fire hydrants throughout the site as required by the Clovis Fire Department. Further, other life safety features would be required such as smoke detectors, which would be reviewed

⁸ California Department of Toxic Substance Control, EnviroStor Database, https://www.envirostor.dtsc.ca.gov/public/map/?global_id=71003467, accessed on June 16, 2019.

and checked by the Fire Department to ensure proper operation prior to occupancy. Ultimately, a **less-than-significant** impact would occur.

10. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows?			X	
i) Result in substantial erosion or siltation on- or off-site?			X	
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?			X	
iii) Create or contribute runoff water which would exceed the capacity of existing or planned			X	

stormwater drainage systems or provide substantial additional sources of polluted runoff?				
iv) Impede or redirect flood flows?			X	
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

ENVIRONMENTAL SETTING

The Plan Area is within the drainages of three streams: Dry Creek, Dog Creek, and Redbank Slough. On the north, Dry Creek discharges into the Herndon Canal in the City of Fresno west of Clovis. South of Dry Creek, Dog Creek is a tributary of Redbank Slough, which discharges into Mill Ditch south of Clovis (USGS 2012). A network of storm drains in the City and the Plan Area discharges into 31 retention basins, most of which provide drainage for a one- to two-square-mile area. Most of the Plan Area east and northeast of the City is not in drainage areas served by retention basins. Those areas drain to streams that discharge into reservoirs, including Big Dry Creek Reservoir in the north-central part of the Plan Area and Redbank Creek Dam and Reservoir in the southeast part of the Plan Area. Fancher Creek Dam and Reservoir are near the east Plan Area boundary.

The Project is located within the Fresno Metropolitan Flood Control District (FMFCD) boundary, and subject to its standards and regulations. Detention and retention basins in the FMFCD’s flood control system are sized to accommodate stormwater from each basin’s drainage area in builtout condition. The current capacity standard for FMFCD basins is to contain runoff from six inches of rainfall during a ten-day period and to infiltrate about 75 to 80 percent of annual rainfall into the groundwater basin (Rourke 2014). Basins are highly effective at reducing average concentrations of a broad range of contaminants, including several polyaromatic hydrocarbons, total suspended solids, and most metals (FMFCD 2013). Pollutants are removed by filtration through soil, and thus don’t reach the groundwater aquifer (FMFCD 2014). Basins are built to design criteria exceeding statewide Standard Urban Stormwater Mitigation Plan (SUSMP) standards (FMFCD 2013). The urban flood control system provides treatment for all types of development—not just the specific categories of development defined in a SUSMP—thus providing greater water quality protection for surface water and groundwater than does a SUSMP.

In addition to their flood control and water quality functions, many FMFCD basins are used for groundwater recharge with imported surface water during the dry season through contracts with the Fresno Irrigation District (FID) and the cities of Fresno and Clovis; such recharge totaled 29,575 acre feet during calendar year 2012 (FMFCD 2013).

The pipeline collection system in the urban flood control system is designed to convey the peak flow rate from a two-year storm.

Most drainage areas in the urban flood control system do not discharge to other water bodies, and drain mostly through infiltration into groundwater. When necessary, FMFCD can move water from a basin in one such drainage area to a second such basin by pumping water into a street and letting water flow in

curb and gutter to a storm drain inlet in an adjoining drainage area (Rourke 2014). Two FMFCD drainage areas discharge directly to the San Joaquin River, and three to an irrigation canal, without storage in a basin. Six drainage areas containing basins discharge to the San Joaquin River, and another 39 basins discharge to canals (FMFCD 2013).

A proposed development that would construct more impervious area on its project site than the affected detention/retention basin is sized to accommodate is required to infiltrate some stormwater onsite, such as through an onsite detention basin or drainage swales (Rourke 2014).

The Big Dry Creek Reservoir has a total storage capacity of about 30 thousand acre-feet (taf) and controls up to 230-year flood flows. Fancher Creek Dam and Reservoir hold up to 9.7 taf and controls up to 200-year flood flows. Redbank Creek Dam and Reservoir hold up to 1 taf and controls up to 200-year flood flows.

Groundwater

Clovis is underlain by the Kings Groundwater Basin that spans 1,530 square miles of central Fresno County and small areas of northern Kings and Tulare counties. Figure 5.9-4, Kings Groundwater Basin, shows that the basin is bounded on the north by the San Joaquin River, on the west by the Delta-Mendota and Westside Subbasins, the south by the Kings River South Fork and the Empire West Side Irrigation District, and on the east by the Sierra Nevada foothills. Depth to groundwater in 2016 ranged from 196.5 feet at the northwest City boundary to 69.5 feet at the southeast City boundary (Clovis 2016), 25 feet at the southeast SOI boundary, and about 20 feet at the eastern Plan Area boundary (FID 2013). The Kings Subbasin has been identified as critically overdrafted (Provost & Pritchard 2011).

In the Plan Area, groundwater levels are monitored by the City of Clovis and FID. The overall area has not experienced land subsidence due to groundwater pumping since the early 1900s (FID 2006). Subsidence occurs when underground water or natural resources (e.g., oil) are pumped to the extent that the ground elevation lowers. No significant land subsidence is known to have occurred in the last 50 years as a result of land development, water resources development, groundwater pumping, or oil drilling (FID 2006). The City has identified a localized area of subsidence of 0.6 feet in the vicinity of Minnewawa and Herndon Avenues within the last 14 years (Clovis 2016). Regional ground subsidence in the Plan Area was mapped as less than one foot by the US Geological Survey in 1999 (Galloway and Riley 1999). Groundwater levels in the San Joaquin Valley are forecast to hit an all-time low in 2014 (UCCHM 2014).

New development in accordance with the General Plan Update would increase the amount of impervious surface in the Plan Area, potentially affecting the amount of surface water that filters into the groundwater supply. Groundwater levels are monitored in the Plan Area by the FID and the City of Clovis. As described in the 2015 City of Clovis Urban Water Management Plan (UWMP), groundwater recharge occurs both naturally and artificially throughout the City. The Kings Groundwater Basin area is recharged through a joint effort between the Cities of Clovis and Fresno and the FID (CDWR 2006). Approximately 8,400 acre-feet per year (afy) of water are intentionally recharged into the Kings Groundwater Basin by the City of Clovis, and approximately 7,700 afy of water naturally flow into groundwater in the City's boundaries (Clovis 2011).

The FMFCD urban stormwater drainage system would provide groundwater infiltration for runoff from developed land uses in detention basins in the drainage system service area.

Projects pursuant to the proposed General Plan Update and developed outside of the FMFCD urban stormwater drainage system would be required to meet the requirements of NPDES regulations, including the implementation of BMPs to improve water retention and vegetation on project sites.

DISCUSSION

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

Less-Than-Significant Impact. The Project is located on a site that was previously anticipated for the type of development that the Project proposes. As with any development, existing policies and standards are required to be complied with, which are assessed during review of the entitlements. As such, the engineering department, as well as outside agencies such as the Fresno Metropolitan Flood Control District (FMFCD) review all plans to ensure that none of the water quality standards are violated and that waste discharge requirements are adhered to during construction and operation of the Project. Consequently, this process of Project review and approval would ensure that a **less-than-significant** impact occur.

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

Less-Than-Significant Impact. The Project would not deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level due to the Project. The General Plan EIR identified a net decrease in ground water aquifer throughout the region, however, because the City's domestic water system is primarily served through surface water via existing water entitlements, the loss of aquifer is less than significant. The City has developed a surface water treatment plant (opened in June, 2004) that reduces the need for pumped groundwater, and has also expanded the municipal groundwater recharge facility. The Projects impacts to groundwater are **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, in a manner which would: (i) result in substantial erosion or siltation on- or off-site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows?*

Less-Than-Significant Impact. The Project site is located on an infill site that is generally flat and surrounded by existing urban uses. There are no streams or rivers on the site that would be altered as a result of the Project. Further, some of the infrastructure surrounding the site, such as stormdrains are already in place from existing development. The site is mostly pervious since it is currently undeveloped, and as a result, the Project would increase the amount of impervious surfaces by installing paving for roadways and sidewalks. However, the drainage pattern would be constructed per existing policies and regulations through review of the plans by the City engineering department and the FMFCD to ensure the site is properly and adequately drained such that the stormdrain system is maintained and so that no flooding occurs. Consequently, this review and approval by City engineers and FMFCD would mean that the Project result in a **less-than-significant** impact.

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

Less-Than-Significant Impact. The Project site is located on an infill site substantially surrounded by existing urban uses. Due to the Central Valley's location away from the ocean, an impact from a tsunami is unlikely. However, the western half of the Project site is designated as a Federal Emergency Management Agency (FEMA) Flood Zone "X" which is considered by FEMA as a non-special flood hazard

area and that the risk of a flood is low-risk. A Flood Zone X has a 0.2 percent-annual-chance of flood (or a 500-year flood). Consequently, this is a low-risk area and as a result a **less-than-significant** impact would occur.

- 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 City of Clovis is within the North Kings County Groundwater Sustainability Agency (GSA). Pursuant to the Sustainable Groundwater Management Act of 2014 (SGMA), certain regions in California are required to develop and implement a groundwater management plan that sustainably manages groundwater resources. As of the writing of this Initial Study, the North Kings County GSA did not yet have an adopted groundwater management plan, as the public review draft is anticipated for release in June 2019, according to the North Kings GSA website. As such, there is not yet an adopted plan. Nevertheless, the Project would derive its water from surface water sources and does not propose or include plans for groundwater use. With regards to water quality control, the Project would be required to adhere to appropriate storm drain conveyance and the protection of water resources which would include the installation of backflow preventers. Consequently, the Project would result in a **less-than-significant** impact.

11. LAND USE AND PLANNING

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

ENVIRONMENTAL SETTING

As described above in the Project Description, the Project site is considered an in-fill site in that the surrounding areas are urbanized. There are existing single-family residential uses surrounding the Project area.

As mentioned, the site is within the R-1-AH Zone District, and proposes to rezone to the R-1-PRD Zone District.

DISCUSSION

- a) *Would the project physically divide an existing community?*

Less-Than-Significant Impact. Although the site is currently developed as rural residential homes and is surrounded by single-family residential subdivisions. Typically, physically dividing existing communities

is associated with the construction of a new road intersecting an established area or introducing uses that are not necessarily in line with the existing uses and planned land uses of the area. The Project proposes single-family residential uses consistent with the existing surrounding uses. New roads within the project will provide porosity from adjacent neighborhood to the east to Loan Avenue. No new roads will divide existing communities. The project will also provide a portion of a north-south pedestrian pathway further connecting the existing subdivisions to the north and south. Therefore, a **less-than-significant** impact would occur and no mitigation measures are required.

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

Less-Than-Significant Impact. As mentioned, the Project site is in the R-1-AH Zone District, and proposes to rezone to the R-1-PRD Zone District. The Project also requests to re-designate the General Plan density from Low to Medium density, allowing for a higher density use of single-family residential homes. The R-1-PRD Zone District is consistent with the Medium Density Residential designation of the General Plan. Further, through the review and entitlement process, the Project is reviewed for compliance with applicable regulations, including those intended for avoiding or mitigation an environmental effect. For example, the Project would be required to comply applicable lighting, landscape, and noise standards, which are regulated through the Clovis Municipal Code to ensure minimal impacts to the environment as well as to neighboring properties.

As a result of the Project in complying with the proposed land use and zoning designation, as well as the review process ensuring General Plan and other applicable policies are adhered to, the Project would result in a **less-than-significant** impact with regards to conflicting with a land use plan.

12. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

ENVIRONMENTAL SETTING

The City of Clovis 2014 General Plan EIR defines minerals as any naturally occurring chemical elements or compounds formed from inorganic processes and organic substances.⁹ The 2014 General Plan EIR indicates that there are no active mines or inactive mines within the Plan Area of the City of Clovis.

⁹ 2014 Clovis General Plan EIR, Chapter 5: Mineral Resources, page 5.11-1.

DISCUSSION

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?*

No Impact. As stated above, the City of Clovis does not have any active mines or inactive mines. Further, the Project site is an infill site within the City and is not zoned, designated, or otherwise mapped for mineral resource extraction, or for having mineral resources of value to the region present on or below the surface of the site. Therefore, **no impact** would occur and no mitigation measures are required.

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?*

No Impact. Please refer to the discussion under Section 12.a.

13. NOISE

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b. Generation of excessive groundborne vibration or groundborne noise levels?			X	
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

ENVIRONMENTAL SETTING

The Project site is located on existing rural residential properties surrounded by existing development of single-family residential subdivisions. Further, the site is adjacent to existing roadway (Locan Avenue). As such, existing ambient noise levels are typical of noises of residential developments.

DISCUSSION

- 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 would include development on rural residential site within Clovis. Thus, the Project would result in a temporary and permanent increase in ambient noise levels as a result. However, as mentioned above, the Project site is infill and is already surrounded by existing single-family residential developments. Therefore, while the Project would introduce new ambient noise from the construction of and operation of the single-family homes, these noises would be typical of that of the surrounding area and would not represent the type of noise levels that would drastically differ from what already exists.

Further, the City of Clovis Municipal Code Section 9.22.080, Noise, sets forth noise standards for development which would need to be complied with. For example, construction would only be permitted between the hours of 7:00 a.m. and 7:00 p.m. on weekdays, and between 9 a.m. and 5:00 p.m. on weekends. However, between June 1 and September 15, construction may begin at 6 a.m. on weekdays. Thus, the potential for ambient noise levels to significantly increase would be unlikely. As mentioned above, existing ambient noise already exists from vehicles, and while new homes would add to the ambient noise, it would not significantly increase the ambient noise levels themselves.

Consequently, because the Project site is considered infill, already surrounded by similar uses, and because construction noise would be temporary in nature, the potential for a substantial increase in ambient or temporary noise increases is considered **less-than-significant** and no mitigation measures are required.

- b) *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

Less-Than Significant Impact. The Project includes development of 206 single-family residential homes within an area surrounded by existing single-family residential subdivisions. Therefore, construction equipment typical of the development of residential homes would be utilized temporary. This equipment could include the use of heavy tractors, trucks, and other equipment, however, this type of equipment isn't typically associated with excessive groundborne vibration. If any vibration were to occur, it's likely that it would be temporary in nature and not at levels that would significantly impact the surrounding area. Further, the Project would be required to comply with the provisions of Section 9.22.090 of the Clovis Municipal Code which requires that vibration not be perceptible along property lines and that it shall not interfere with operations or facilities on adjoining parcels. It's important to note also that temporary construction vibration and noise is exempt from these provisions due to the fact that construction is temporary. Overall, because the type of equipment likely to be used in the development of the Project is not considered to be of the type and intensity to result in substantial vibration or groundborne noise, the impact would be **less than significant** and no mitigation measures are required.

- 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 is not located within the vicinity of a private airstrip or within an airport land use plan nor is the site within two miles a public airport. Therefore, **no impact** would occur.

14. POPULATION AND HOUSING

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

ENVIRONMENTAL SETTING

The Project is located on an in-fill site that has previously planned for very low density residential use in the 2014 Clovis General Plan. As mentioned in the Project Description above, the site proposes a land use designation of Medium Density Residential which allows for 4.1 to 7.0 dwelling units per acre (DU/Ac). The Project site is approximately 42.39 acres and proposes 206 single-family residential homes for a density of 4.86 DU/Ac.

DISCUSSION

- 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. As mentioned, the Project would result in a density of 4.86 DU/Ac which is consistent with the proposed density range of the Medium Density land use designation under the 2014 Clovis General Plan. Further, unplanned population growth is typically associated with providing new services in remote areas of the City or other infrastructure that was not previously identified in the General Plan. The Project site itself is an in-fill site, thus, the infrastructure (i.e. road network, utilities, sidewalks, etc.) is already in place and would be able to serve the site, as planned for in the 2014 General Plan. Although the Project would result in new housing and population to the site, the City has the capacity to accommodate and service this growth. Thus, a **less-than-significant** impact would occur and no mitigation measures are required.

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

No Impact. The Project site is currently existing rural residential properties that the developer has properly acquired. The existing residential homes within the project area has been vacated. **No impact** would occur and no mitigation measure are required.

15. PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>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:</i>				
a. Fire protection?			X	
b. Police protection?			X	
c. Schools?			X	
d. Parks?			X	
e. Other public facilities?			X	

ENVIRONMENTAL SETTING

The Project is located on an in-fill site within the City, surrounded by existing residential uses. As mentioned above in the Population and Housing and Land Use and Planning sections, the Project can be accommodated by City services. The Project would be served by the Clovis Fire Department, Clovis Police Department, with mutual aid from the City of Fresno, when needed. The Project site would also be within the Clovis Unified School District.

DISCUSSION

- 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 fire protection services?*

Less-Than-Significant Impact. Although the Project would result in 206 new residential homes to the area, the site is located in an urbanized area of the City already able to be served by the Clovis Fire Department. As part of the entitlement process for the Project, the Clovis Fire Department will review the design and site layout to ensure adequate fire safety measures and site circulation are achieved. This would include placement of new fire hydrants in certain locations throughout the site, adequate street widths for fire truck and emergency vehicle access, and the appropriate application of fire codes, such as installation of sprinkler systems, fire alarms, and smoke detectors. Overall, with construction that would meet the latest fire code standards and review by the Clovis Fire Department, impacts related to effects on the performance of the Fire Department would be **less-than-significant** and no mitigation measures are required.

- b) *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 police protection services?

Less-Than-Significant Impact. Although the Project would result in 206 new residential units to the area, the site is located in an urbanized area of the City already able to be served by the Clovis Police Department. As part of the entitlement process for the Project, the Clovis Police Department will review the design and site layout to ensure adequate safety measures are achieved. The site is located in an already urbanized areas serviced by the Clovis Police Department, and thus access to and from the site would be similar to existing conditions when responding to calls for services. Consequently, a **less-than-significant** impact would occur and no mitigation measures are required.

- c) *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 schools?*

Less-Than-Significant Impact. Although the Project would result in 206 new residential units to the area, the site is located in an urbanized area of the City within the Clovis Unified School District (CUSD). As part of the review process, CUSD is provided the opportunity to comment and work closely with the City as development is proposed. As part of the process, the Project would be required to pay school fees which typically go towards the improvement and/or construction of new schools or expanding existing schools if and when needed, as determined by the CUSD. Although the project will increase the planned density of residential units in the area, the new residential homes will contribute appropriate school fees set by the CUSD, a **less-than-significant** impact would occur and no mitigation measures are required.

- d) *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 parks?*

Less-Than-Significant Impact. See discussion under Section 16, Recreation for the analysis related to parks.

- e) *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 other public facilities?*

Less-Than-Significant Impact. Potential impact of public facilities resulting from the Project has been reviewed by the City's Public Works Department as well as Development Review Unit. Through the entitlement process, the Project would undergo review by several departments and agencies for compliance with appropriate regulations and policies. This could result in various impact fees that are intended to maintain and enhance public facilities as appropriate. As such, payment of the typical development fees, as well as project review by the different department and agencies, would result in the Project having a **less-than-significant** impact to public facilities. No mitigation measures are required.

16. RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?			X	

ENVIRONMENTAL SETTING

The Project is located on an in-fill site surrounded by existing residential and commercial development. The nearest park to the site is linear park is located approximately 400 feet northeast of the Project site. The project will also contribute to the linear trail system connecting the linear park along the project site to the development to the south. The project will also be installing a neighborhood pocket park within its 36-lot tract, T6264.

DISCUSSION

- 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. Although 206 new single-family residential homes would be constructed, adding new population to the area that may utilize parks within the surrounding area, the project will contribute a linear trail system connecting development to the south through the Project site to the community linear park north of the Project site. The Project will also be installing a neighborhood pocket park within its 36-lot tract- T6264 -providing a recreational amenity for its residents. The Project would also be required to comply with General Plan Policy 2.2 of the Open Space and Conservation Element which encourages the incorporation of on-site natural resources.

Overall, the Project is not likely to increase the use of existing parks such that physical deterioration would occur. Therefore, the impact would be **less-than-significant** and no mitigation measures are required.

- b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?*

Less-Than-Significant Impact. The project will also contribute to the linear trail system connecting the linear park along the project site to the development to the south. The project will also be installing a neighborhood pocket park within its 36-lot tract, T6264. However, it is not likely that the Project's contribution to the construction or expansion of new recreational facilities would have an adverse physical effect on the environment as concluded in biological and cultural reports provided. As such, a **less-than-significant** impact would occur and no mitigation measures are required.

17. TRANSPORTATION

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?		X		
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			X	
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d. Result in inadequate emergency access?			X	

ENVIRONMENTAL SETTING

The Project is located in an area within a previously urbanized area in the City, as previously mentioned. The Project site includes two distinct areas- T6264 and T6369. T6264 is a 36-lot single-family residential subdivision located west of Locan between Teague and Moody Avenues. T6239 is a 170-lot single-family residential subdivision located east of Locan Avenue bounded between Teague and Powers Avenues. The Project site is bounded by existing single-family residential to the north, east, south, and west, across Locan Avenue. As an already urbanized area of the City, the circulation network serving the site and its vicinity is already in place.

According to the 2014 Clovis General Plan Circulation Diagram in the Circulation Element (Figure C-1 of the Circulation Element), Locan avenue is classified as a collector street. The Project will be installing local streets within T6239 and private streets within T6264. Collector streets are intended to provide for relatively short distance travel between and within neighborhoods. Local streets are intended to provide direct access to abutting land uses and serve short distance trips within neighborhoods.

A Traffic Impact Analysis (TIA) was prepared by JLB Traffic Engineering, Inc. on April 12, 2019 (included as Appendix D of this Initial Study). The information and analysis in the following sections is based in part on the results of the TIA as well as the City Engineer's professional discretion.

DISCUSSION

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

Less-Than-Significant Impact With Mitigation. The Project proposes the increase in density from the Very Low Density Residential designation to the Medium Density Residential designation. This will increase the number of traffic into the area, exceeding the planned traffic impact for development based on the density of the existing designation of the General Plan. A traffic impact analysis was performed studying the intersections that may potentially be impacted by the Project during the AM and PM peak hours. Those intersections include Locan and Shepherd avenues, DeWolf and Powers Avenues, DeWolf and Owens Mountain Parkway, and Locan and Nees Avenues. The studies scenarios included existing traffic conditions, existing plus project traffic conditions, near term plus project traffic conditions, cumulative year 2039 no project traffic conditions, and cumulative year 2039 plus project traffic conditions. The analysis evaluated the level of significance (LOS) of traffic conditions for each scenario in comparison to the acceptable LOS established in the City's 2035 General Plan. The study also considered the LOS established for the County of Fresno and Caltrans. According to the TIA, the Project would result in 147 trips in the am peak hours and 197 trips in the pm peak hours. The estimated maximum number of daily vehicle trips total to 1,878.

The TIA recommends the installation of a high visibility crosswalk be installed across DeWolf along the south side of Powers Avenue, however because there are existing safe to school routes, this requirement may not be necessary. The City Engineer may require additional studies to determine if the controlled intersection is warranted. The Project is anticipated to impact the LOS for the intersection at DeWolf and Owens Mountain Parkway. It is projected to exceed the LOS threshold during the AM peak period. With regard to this, the City Engineer has determined that as a nexus to this intersection, the intersection of Owens Mountain Parkway and State Route 168 be evaluated instead. The applicant's Engineer will work with the City's Engineer to perform further queuing study to determine whether additional mitigation will be required for the intersection of Owens Mountain Parkway and State Route 168, which may or may not require the installation of an additional free right turn lane at Owens Mountain Parkway and State Route 168. Mitigation Measure TRAF-1 would require that the Project proponent and/or applicant work with City staff to develop a solution for traffic control and pay a fair share costs for the installation of the traffic control device prior to the issuance of building permits.

The project would also help to facilitate improved circulation by adding pedestrian sidewalk along its Locan Avenue frontages, connecting to existing and future site developments. Further, as part of conditions of approval of the Project, the project will be required to implement and retain the Class II bicycle lane adjacent to its frontage along Locan Avenue to help facilitate safer bicycle circulation. The Project will also provide a pedestrian trail connecting the Linear Park to the north through the development to development to the south. Further, the Project is consistent with the overarching goals of the Circulation Element in the City's General Plan, which encourages a comprehensive well-maintained multimodal circulation system that provides for safe and efficient movement of people and goods. Overall, the Project will provide for internal circulation that will also complete existing networks of streets.

Mitigation Measure TRAF-1: The Project proponent and/or applicant shall work with City staff to develop a solution for traffic control and pay a fair share of costs for the installation of the traffic control devices prior to issuance of building permits.

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

Less-Than-Significant Impact. Under Senate Bill 743 (SB743), starting July 2020, projects will be required to assess traffic impacts based on Vehicle Miles Traveled (VMT), which is the amount and distance of automobile travel attributable to a project, as opposed to the existing Level of Service (LOS) method, which measures vehicle delays. As such, VMT is not required to be assessed until July 2020. Nevertheless, the Project is located on an infill site within the City that is surrounded by existing residential uses. Further, the Project is consistent with the overarching goals of the Circulation Element in the City’s General Plan, which encourages a comprehensive well-maintained multimodal circulation system that provides for safe and efficient movement of people and goods. Overall, the Project will provide for internal circulation that will also complete existing networks of streets, which would result in a **less-than-significant** impact.

- 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 would result in a significant impact if it would include features that would create a hazard such as a sharp curve in a new roadway, or create a blind corner or result in sight distance issues from entryways. Through the entitlement process, the Project would undergo review by multiple City departments, such as planning and engineering, to ensure that the site layout conforms to existing regulations, such as the City Development Code, and other applicable codes, such as the fire code and building code. During this review, the Project would need to make the necessary corrections to ensure that no hazardous design features would result from the Project. Therefore, because the Project would undergo site plan and design review to ensure consistency and adherence to applicable design and site layout guidelines, a **less-than-significant** impact would occur.

- d) *Would the project result in inadequate emergency access?*

Less-Than-Significant Impact. As part of the Project review, the Clovis Fire Department would review all plans to ensure adequate emergency access is provided. This review includes review for adequate roadway widths, turning radii, as well as adequate access to units and accessibility to water. Consequently, because the Project plans would be required by the Clovis Municipal Code to be reviewed and approved by Clovis Fire Department and Police Department prior to construction, this impact would be **less than significant** and no mitigation measures are required.

18. TRIBAL CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in				X

Public Resources Code section 5020.1(k)?				
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American Tribe?		X		

ENVIRONMENTAL SETTING

On September 25, 2014, Governor Jerry Brown signed Assembly Bill AB52, which intends to protect a new class of recourse under CEQA. This new class is Tribal Cultural Resources and provides an avenue to identify Tribal Cultural resources through a consultation process, similar to SB18. However, unlike SB18, where consultation is required for all General Plan and Specific Plan Amendments, AB52, applies to all projects where a Notice of Determination is filed. Furthermore, the consultation process is required to be complete prior to filing a Notice of Intent.

On May 20, 2019, consistent with AB52, invitations to consult on the Project were mailed to thirteen (13) tribes within the area. According to AB52, tribes have up to thirty (30) days to request consultation, at which time the City would set up a consultation. On June 19, 2019 the City consulted with the Table Mountain Rancheria tribe and are were able to agree upon a mitigation measure that would ensure the protection of accidental discovery of any cultural resources. This mitigation measures is included below.

A cultural resources memorandum was prepared by QK on April 25, 2019 (see Appendix C). This memorandum was based on information obtained at the Southern San Joaquin Valley Information Center, CSU Bakersfield, as well as a previously adopted Initial Study Mitigated Negative Declaration.

DISCUSSION

- a) *Would the project cause a substantial adverse change to a listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*

No Impact. As mentioned in the Project Description, the Project site is developed as rural residential properties. There are no existing structures or features on the site that are listed or eligible in the California Register of Historical Resources, or in a local register. As such, the Project would have **no impact** and no mitigation measures are required.

- b) *Would the project cause a substantial adverse change to 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 Section 5024.1 for the purposes of this*

paragraph, the lead agency shall consider the significance of the resource to a California Native American Tribe?

Less-Than-Significant Impact With Mitigation. As mentioned above, the City invited 3 Native American tribes to consult on the Project under AB52, and no tribes requested consultation within the 30-days afforded to respond under AB52. The Project site is currently developed as rural residential properties and would require trenching and ground-disturbing activities during construction for the installation of utility infrastructure needed to serve the Project. As described in the cultural resources memorandum prepared by Table Mountain Rancheria Cultural Resource Department, a pedestrian archeological survey of the Project site was conducted on July 15, 2019 site and indicated no presence of cultural resources. Nevertheless, the potential remains that cultural resources could be inadvertently discovered during ground-disturbing activities. However, implementation of Mitigation Measures TCR-1 and TCR-2 below would reduce potential significant impacts and ensure protection in the event of accidental discovery of any cultural resources. With Mitigation Measure TCR-1 and TCR-2, impacts would be **less-than-significant with mitigation**.

Mitigation Measure TCR-1: The applicant and/or their contractor, shall notify cultural resources staff at Table Mountain Rancheria to invite them to monitor the site during such ground-disturbance. At the time of this notification, the applicant shall also provide grading plans to Table Mountain Rancheria for review. If prehistoric or historic-era cultural materials are encountered during construction activities, all work in the immediate vicinity of the find shall halt until a qualified professional archaeologist/tribal representative, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, can evaluate the significance of the find and make recommendations. Cultural resource materials may include prehistoric resources such as flaked and ground stone tools and debris, shell, bone, ceramics, and fire-affected rock as well as historic resources such as glass, metal, wood, brick, or structural remnants.

If the qualified professional archaeologist/tribal representative determines that the discovery represents a potentially significant cultural resource, additional investigations may be required to mitigate adverse impacts from project implementation. These additional studies may include avoidance, testing, and evaluation or data recovery excavation.

If a potentially-eligible resource is encountered, then the qualified professional archaeologist, the Lead Agency, and the project proponent shall arrange for either 1) total avoidance of the resource or 2) test excavations to evaluate eligibility and, if eligible, total data recovery. The determination shall be formally documented in writing and submitted to the Lead Agency as verification that the provisions for managing unanticipated discoveries have been met.

Mitigation Measure TCR-2: If human remains are discovered during construction or operational activities, further excavation or disturbance shall be prohibited pursuant to Section 7050.5 of the California Health and Safety Code. The specific protocol, guidelines, and channels of communication outlined by the Native American Heritage Commission, in accordance with Section 7050.5 of the Health and Safety Code, Section 5097.98 of the Public Resources Code (Chapter 1492, Statutes of 1982, Senate Bill 297), and Senate Bill 447 (Chapter 44, Statutes of 1987), shall be followed. Section 7050.5(c) shall guide the potential Native American involvement, in the event of discovery of human remains, at the direction of the County coroner. All reports, correspondence, and determinations regarding the discovery of human remains on the project site shall be submitted to the Lead Agency.

19. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e. Comply with federal, state, and local management reduction statutes and regulations related to solid waste?			X	

ENVIRONMENTAL SETTING

Pacific Gas & Electric (PG&E) provides electricity and natural gas services in the City of Clovis. AT&T/SBC provides telephone service to the City.

The City's water supply sources include groundwater drawn from the Kings Sub-basin of the San Joaquin Valley Groundwater Basin and treated surface water from the Fresno Irrigation District (MID). Surface water is treated at the City of Clovis Surface Water Treatment Facility.

The City of Clovis provides sewer collection service to its residents and businesses. Treatment of wastewater occurs at the Fresno-Clovis Regional Wastewater Treatment Plant (RWTP). The Fresno-Clovis RWTP is operated and maintained by the City of Fresno and operates under a waste discharge requirement issued by the Central Valley Regional Water Quality Control Board. Additionally, the City of Clovis has completed a 2.8 mgd wastewater treatment/water reuse facility, which will service the City's new growth areas.

The Fresno Metropolitan Flood Control District (FMFCD) has the responsibility for storm water management within the Fresno-Clovis metropolitan area of the Project site. Stormwater runoff that is generated by land development is controlled through a system of pipelines and storm drainage detention basins.

DISCUSSION

- 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 includes construction of 206 single family homes on an infill site. As part of the review process for the Project, the wastewater impacts will be evaluated by the City Engineer to ensure compliance with the City's Waste Water Master Plan, as well as FMFCD, so that the Project would not exceed wastewater treatment requirements such that a new facility would be required nor would the existing treatment facility need to be expanded. Upon review and approval by the City Engineer, the Project would result in a **less-than-significant** impact.

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

Less-Than-Significant Impact. The Project is on an infill site surrounded with existing urban uses which are served adequately with City water. Therefore, the Project is anticipated to be adequately served by City water. Further, the Project would comply with current Green Building Codes, as well as the water efficient landscape policies with regards to water conserving features. Further, the Project would be required to comply several water conserving policies, such as Policy 3.4 and 3.5 of the Open Space and Conservation Element. Overall, a **less-than-significant** impact would occur.

- c) *Would the project result in a determination by the wastewater treatment provider that 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. The Project includes construction of 206 single family homes on an infill site. As part of the review process for the Project, the wastewater impacts will be evaluated by the City Engineer to ensure compliance with the City's Waste Water Master Plan, as well as FMFCD, so that the Project would not exceed wastewater treatment requirements such that a new facility would be required nor would the existing treatment facility need to be expanded. Upon review and approval by the City Engineer, the Project would result in a **less-than-significant** impact.

- 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. The Project would introduce new solid waste throughout construction and operation of the Project. However, the Project would be required to comply with Chapter 6.3.1, Recycling and Diversion of Construction and Demolition Debris, of the Clovis Municipal Code during construction.

This section of the Clovis Municipal Code requires that a minimum of fifty percent (50%) of waste tonnage from a project be diverted from disposal, and that all new residential (and commercial) construction within the City shall submit and obtain approval for a waste management plan prior to construction activities. Compliance with these measures would ensure that the Project does not result in a significant impact during the construction phase of the Project. Further, compliance with policies in the General Plan for the reduction and recycling of solid waste would serve to reduce impacts of solid waste by promoting and encouraging the recycling of materials. Lastly, according to the California Department of Resources Recycling and Recovery (CalRecycle, the City of Clovis has exceeded their target per resident disposal rate of 4.7 pounds per day per resident, meaning that Clovis residents are actually producing less solid waste than the target set by the State.¹⁰ Consequently, a **less-than-significant** impact would occur.

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

Less-Than-Significant. See discussion 19d above.

20. WILDFIRE

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

¹⁰ Calrecycle, City of Clovis, <https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionPost2006>, accessed June 17, 2019.

ENVIRONMENTAL SETTING

The Project site is located on an infill site surrounded by existing urban uses. The site's topography is generally flat and characterized primarily by low lying shrubs and grasses.

DISCUSSION

- a) *Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

Less-Than-Significant Impact. The Project is located at a site that is surrounded by existing development. Further, the road network is already in place from previous development. Although the Project could result in temporary traffic detouring or closures during buildout, these delays would be temporary and would be coordinated with the City engineering department and other departments to ensure safe access to and from the area is maintained. Further, the site itself would reviewed by City departments to ensure adequate site access and circulation is provided in the event of an emergency. Overall, a **less-than-significant** impact would occur.

- b) *Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

Less-Than-Significant Impact. The Project site is flat and undeveloped and located on an infill site surrounded by existing urban uses. The general vicinity of the site is flat, therefore, is not of the type of topography nor in a location likely to exacerbate wildfire risks. Further, the Project would be required to comply with the latest fire codes and would be required to include sprinklers on the interior of the single-family homes and require installation of several hydrants throughout the site. Lastly, the site plans would undergo review by the Clovis Fire Department to ensure that all fire safety regulations are met. Therefore, a **less-than-significant** impact would occur.

- c) *Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

Less-Than-Significant Impact. The site is located in an area previously developed with urban uses. As a new development, installation of a public and private roadways, water lines, and power lines would be required; however, these utilities and infrastructure are typical of residential development and would be constructed to standards of the respective agencies and departments which oversee them, as well as be required to comply all necessary plan review and permitting requirements of such departments and agencies. As such, a **less-than-significant** impact would occur.

- d) *Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

No Impact. The City of Clovis is generally flat topography, and the site itself is in an area that is not in close proximity to hillsides such that it would expose people or structures to significant risks associates with downstream flooding or landslides as a result of runoff or post-fire slope instability. As such, **no impact** would occur.

21. MANDATORY FINDINGS OF SIGNIFICANCE

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

ENVIRONMENTAL SETTING

The Project is located on an infill site within the City of Clovis, substantially surrounded by existing development consisting of residential uses.

DISCUSSION

- 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. As discussed above throughout the Initial Study, the Project would not result in any significant impacts with implementation of mitigation measures prescribed above. Therefore, the Project would have a **less-than-significant** impact as it would not substantially degrade the quality of the environment.

- 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. The Project includes mitigation measures in certain topic areas identified throughout this Initial Study which would reduce potential impacts to a less-than-significant level. None of these impacts would be cumulatively considerable since most are either temporary impacts from construction or site specific. With the exception of air quality that is generally considered measurable cumulatively, the Project was found to have a less-than-significant impact through compliance with existing regulations from the SJVPACD. As such, future Projects in Clovis would be required to comply with those same regulations, ensuring adequate mitigation as development occurs. Thus, a **less-than-significant** impact would occur.

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

Less-Than-Significant Impact. As discussed throughout the document, the Project would not result in a significant impact that could not be mitigated to a less-than-significant level. Therefore, a **less-than-significant** impact would occur.

H. Report Preparation

LEAD AGENCY

Lily Cha

Assistant Planner
City of Clovis
Planning & Development Services

TECHNICAL STUDIES

Air Quality and Greenhouse Gas Analysis Report

Valley Coastal Development- T6239 & T6264
Elena Nuno, Senior Air Quality Scientist
Santec Consulting Services, Inc.

Biological Analysis Report

Valley Coastal Development- T6239 & T6264
Kathy Kinsland, Senior Scientist
Argonaut Ecological Consulting, Inc.

Cultural Resources Technical Memorandum

Valley Coastal Development- T6239 & T6264
Robert Pennell, Cultural Resources Director
Table Mountain Rancheria Cultural Resources Department

Traffic Impact Study

Valley Coastal Development- T6239 & T6264
JLB Traffic Engineering, Inc.
Jose Luis Benavides

**City of Clovis Mitigation Monitoring and Reporting Program
 General Plan Amendment GPA2019-004, Rezone R2019-005, Rezone R2019-006,
 Tract Map TM6239, Tract Map TM6264
 Dated: October 7, 2019**

Introduction

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared pursuant to Section 21081.6 of the California Public Resources Code, which requires public agencies to “adopt a reporting and monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.” A MMRP is required for the proposed project because the Mitigated Negative Declaration has identified significant adverse impacts, and measures have been identified to mitigate those impacts.

The MMRP, as outlined in the following table, describes mitigation timing, monitoring responsibilities, and compliance verification responsibility for all mitigation measures identified in this Mitigated Negative Declaration.

The City of Clovis will be the primary agency, but not the only agency responsible for implementing the mitigation measures. The MMRP is presented in tabular form on the following pages. The components of the MMRP are described briefly below:

- **Mitigation Measures:** The mitigation measures are taken from the Mitigated Negative Declaration, in the same order that they appear in the Mitigated Negative Declaration.
- **Mitigation Timing:** Identifies at which stage of the project mitigation must be completed.
- **Monitoring Responsibility:** Identifies the department within the City responsible for mitigation monitoring.
- **Compliance Verification Responsibility:** Identifies the department of the City or other State agency responsible for verifying compliance with the mitigation. In some cases, verification will include contact with responsible state and federal agencies.

Mitigation Monitoring Program

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
4. Biological				
BIO-1	A pre-activity survey should be conducted by a qualified biologist knowledgeable in the identification of burrowing owls in the northern portion of the project area of proposed TM6239 to confirm no burrowing owls have taken up residence either	City of Clovis Planning	<i>Prior to Permits and During Construction</i>	

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	overwintering or nesting in the spring/ summer.			
4. Biological				
BIO-2	If burrowing owls are detected on-site a no-work Environmentally Sensitive Area (ESA) buffer around the occupied burrow should be established in consultation with a qualified biologist	City of Clovis Planning	<i>Prior to Permits and During Construction</i>	
BIO-3	A pre-activity survey for migratory birds and birds should be conducted prior to tree removal, unless tree removal occurs outside the nesting period. Tree removal should occur between February and August.	City of Clovis Planning	<i>Prior to Permits and During Construction</i>	
5. Cultural and 18. Tribal Cultural Resources				
CUL-1 TCR-1	If prehistoric or historic-era cultural or archaeological materials are encountered during construction activities, all work in the immediate vicinity of the find shall halt until a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, can evaluate the significance of the find and make recommendations.	City of Clovis Planning Table Mountain Rancheria	<i>Prior to Permits and During Construction</i>	

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	<p>Cultural resource materials may include prehistoric resources such as flaked and ground stone tools and debris, shell, bone, ceramics, and fire-affected rock as well as historic resources such as glass, metal, wood, brick, or structural remnants</p> <p>If the qualified professional archaeologist determines that the discovery represents a potentially significant cultural resource, additional investigations may be required to mitigate adverse impacts from project implementation. These additional studies may include avoidance, testing, and evaluation or data recovery excavation.</p> <p>If a potentially-eligible resource is encountered, then the qualified professional archaeologist, the Lead Agency, and the project proponent shall arrange for either 1) total avoidance of the resource or 2) test excavations to evaluate eligibility and, if eligible, total data recovery. The determination shall be formally documented in writing and submitted to the Lead Agency as verification that the provisions for managing unanticipated discoveries have been met.</p>			
<p>CUL-2 TCR-2</p>	<p>If human remains are discovered during construction or operational</p>	<p>City of Clovis Planning</p>	<p><i>Prior to Permits and During Construction</i></p>	

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	<p>activities, further excavation or disturbance shall be prohibited pursuant to Section 7050.5 of the California Health and Safety Code. The specific protocol, guidelines, and channels of communication outlined by the Native American Heritage Commission, in accordance with Section 7050.5 of the Health and Safety Code, Section 5097.98 of the Public Resources Code (Chapter 1492, Statutes of 1982, Senate Bill 297), and Senate Bill 447 (Chapter 44, Statutes of 1987), shall be followed. Section 7050.5(c) shall guide the potential Native American involvement, in the event of discovery of human remains, at the direction of the County coroner. All reports, correspondence, and determinations regarding the discovery of human remains on the project site shall be submitted to the Lead Agency.</p>	<p>Table Mountain rancheria</p>		
7. Geology and Soils				

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
GEO-1	<p>If prehistoric or historic-era cultural materials are encountered during construction activities, all work in the immediate vicinity of the find shall halt until a qualified professional archaeologist and/or paleontologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, can evaluate the significance of the find and make recommendations. Cultural resource materials may include prehistoric resources such as flaked and ground stone tools and debris, shell, bone, ceramics, and fire-affected rock as well as historic resources such as glass, metal, wood, brick, or structural remnants.</p> <p>If the qualified professional determines that the discovery represents a potentially significant cultural resource, additional investigations may be required to mitigate adverse impacts from project implementation. These additional studies may include avoidance, testing, and evaluation or data recovery excavation.</p>	City of Clovis Planning	<i>Prior to Permits and During Construction</i>	

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	<p>If a potentially-eligible resource is encountered, then the qualified professional archaeologist and/or paleontologist, the Lead Agency, and the project proponent shall arrange for either 1) total avoidance of the resource or 2) test excavations to evaluate eligibility and, if eligible, total data recovery. The determination shall be formally documented in writing and submitted to the Lead Agency as verification that the provisions for managing unanticipated discoveries have been met.</p>			
17. Transportation				
TRAF- 1	<p>The Project proponent and/or applicant shall work with City staff to develop a solution for traffic control and pay a fair share of costs for the installation of the traffic control devices prior to issuance of building permits.</p>	<p>City of Clovis Planning</p>	<p><i>Prior to Permits and During Construction</i></p>	



**Air Quality/Greenhouse Gas
Impact Analysis Report**

Locan 35 – Tracts 6264 and 6239

June 17, 2019

Prepared for:

Drew Phelps
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Stantec Consulting Services Inc.
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Elena Nuño, Senior Air Quality Scientist/Project Manager



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Abbreviations

$\mu\text{g}/\text{m}^3$	Micrograms Per Cubic Meter
AB	Assembly Bill
ACBMs	Asbestos-Containing Building Materials
ATCMs	Airborne Toxic Control Measures
AQGGP	Air Quality Guidelines for General Plans
AQI	Air Quality Index
AQP	Air Quality Plan
BACT	Best Available Control Technology
BAAQMD	Bay Area Air Quality Management District
BAU	Business-As-Usual
BPS	Best Performance Standards
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCAA	California Clean Air Act
CEQA	California Environmental Quality Act
CF_4	Perfluoromethane
CH_4	Methane
CO	Carbon Monoxide
CO_2	Carbon Dioxide
C_2F_6	Perfluoroethane
C_3F_8	Perfluoropropane
C_4F_{10}	Perfluorobutane
C_4F_8	Perfluorocyclobutane
C_5F_{12}	Perfluoropentane
C_6F_{14}	Perfluorohexane
DPM	Diesel Particulate Matter
DRRP	Diesel Risk Reduction Plan
EO	Executive Order
EPA	United States Environmental Protection Agency
FAR	Floor Area Ratio
FCAA	Federal Clean Air Act
GAMAQI	Guidance for Assessing and Mitigating Air Quality Impacts
GHG	Greenhouse Gases



GWP	Global Warming Potential
HAP	Hazardous Air Pollutants
HFC	Hydrofluorocarbons
H ₂ S	Hydrogen Sulfide
LCFS	Low Carbon Fuel Standard
LOS	Level of Service
MMT	Million Metric Tons
MMTCO _{2e}	Million Metric Tons of Carbon Dioxide Equivalents
MTCO _{2e}	Metric Tons of Carbon Dioxide Equivalents
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NF ₃	Nitrogen Trifluoride
N ₂ O	Nitrous Oxide
NOA	Naturally Occurring Asbestos
NO _x	Oxides of Nitrogen
NO ₂	Nitrogen Dioxide
O ₃	Ozone
OAL	Office of Administrative Law
Pb	Lead
PEIR	Program Environmental Impact Report
PERP	Portable Equipment Registration Program
PFCs	Perfluorocarbons
PG&E	Pacific Gas and Electric Company
PM	Particulate Matter
PM _{2.5}	Fine particulate matter; particulate matter 2.5 microns or smaller
PM ₁₀	Particulate matter; particulate matter 10 microns or smaller
ppb	parts per billion
ppm	parts per million
ROG	Reactive Organic Gases
RPS	Renewable Portfolio Standard
RTP	Regional Transportation Plan
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SF ₆	Sulfur Hexafluoride
SIL	Significant Impact Level
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SMAQMD	Sacramento Metropolitan Air Quality Management District



SO ₂	Sulfur Dioxide
SO ₄	Sulfates
SO _x	Sulfur Oxides
TAC	Toxic Air Contaminants
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds



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Executive Summary
June 17, 2019

Executive Summary

The following air quality and greenhouse gas impact analysis was prepared to evaluate whether the estimated criteria pollutant and greenhouse gas emissions generated from the construction and operation of the Locan 35 – Tracts 6264 and 6239 Project (Project) in the City of Clovis, California would cause significant impacts to air resources in the Project area. This assessment was conducted within the context of the California Environmental Quality Act (CEQA) (California Public Resources Code Sections 21000, et seq.).

Project Summary

The Project is located in the City of Clovis. The Project includes the development of two (2) distinct areas – Project (West- Tract 6264) and Project (East- Tract 6239). Project (West) is located on the northwest corner of Locan Avenue and Cook Avenue and proposes to develop up to 37 single-family detached housing units. Project (East) is located on the northeast quadrant of Locan Avenue and Teague Avenue and proposes to develop up to 171 single-family detached housing units. The Project will undergo a General Plan Amendment through the City of Clovis to modify the existing land use designation from Low Density Residential to Medium Density Residential.

Summary of Analysis Results

- Impact AIR-1:** The Project would not conflict with or obstruct implementation of the applicable air quality plan. **Less Than Significant Impact.**
- Impact AIR-2:** The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard. **Less Than Significant Impact.**
- Impact AIR-3:** The Project would not expose sensitive receptors to substantial pollutant concentrations. **Less Than Significant impact.**
- Impact AIR-4:** The Project would not result in other emissions (such as those leading to odors) affecting a substantial number of people. **Less Than Significant Impact.**
- Impact GHG-1:** The Project would not generate direct and indirect greenhouse gas emissions that would result in a significant impact on the environment. **Less Than Significant Impact.**
- Impact GHG-2:** The project would not conflict with any applicable plan, policy or regulation of an agency adopted to reduce the emissions of greenhouse gases. **Less Than Significant Impact.**



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Introduction
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1.0 INTRODUCTION

1.1 REPORT PURPOSE

The purpose of this Air Quality and Greenhouse Gas Impact Analysis Report (Report) is to analyze potential air quality and greenhouse gas (GHG) impacts that could occur with the construction and operation of the Locan 35 Project (Project or proposed Project) on the northwest corner of Locan Avenue and the northeast quadrant of Locan Avenue and Teague Avenue in the City of Clovis, California. This assessment was conducted within the context of the California Environmental Quality Act (CEQA).

1.2 PROJECT DESCRIPTION

The Project is located in the City of Clovis. The Project includes the development of two (2) distinct areas – Project (West- Tract 6264) and Project (East- Tract 6239). Project (West) is located on the northwest corner of Locan Avenue and Cook Avenue and proposes to develop up to 37 single-family detached housing units. Project (East) is located on the northeast quadrant of Locan Avenue and Teague Avenue and proposes to develop up to 171 single-family detached housing units. The Project will undergo a General Plan Amendment through the City of Clovis to modify the existing land use designation from Low Density Residential to Medium Density Residential.



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Air Quality
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2.0 AIR QUALITY

2.1 ENVIRONMENTAL SETTING

The proposed project is located within the San Joaquin Valley Air Basin (SJVAB). The San Joaquin Valley Air Pollution Control District (SJVAPCD) regulates air quality in eight counties including: Fresno, Kern, (western and central), Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare.

Air pollution in the SJVAB can be attributed to both human-related (anthropogenic) and natural (non-anthropogenic) activities that produce emissions. Air pollution from significant anthropogenic activities in the SJVAB includes a variety of industrial-based sources as well as on- and off-road mobile sources.

Activities that tend to increase mobile activity include increases in population, increases in general traffic activity (including automobiles, trucks, aircraft, and rail), urban sprawl (which will increase commuter driving distances), and general local land management practices as they pertain to modes of commuter transportation. These sources, coupled with geographical and meteorological conditions unique to the area, stimulate the formation of unhealthy air.

2.1.1 Climate and Topography

The following information is excerpted from the most recent version of the SJVAPCD Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI) adopted in March 2015 (SJVAPCD 2015).

The SJVAB has an “inland Mediterranean” climate and is characterized by long, hot, dry summers and short, foggy winters. Sunlight can be a catalyst in the formation of some air pollutants (such as ozone); the Basin averages over 260 sunny days per year. The SJVAB is generally shaped like a bowl. It is open in the north and is surrounded by mountain ranges on all other sides. The Sierra Nevada mountains are along the eastern boundary (8,000 to 14,000 feet in elevation), the Coast Ranges are along the western boundary (3,000 feet in elevation), and the Tehachapi Mountains are along the southern boundary (6,000 to 8,000 feet in elevation).

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution. The mountains surrounding the SJVAB form natural horizontal barriers to the dispersion of air contaminants. The wind generally flows south-southeast through the valley, through the Tehachapi Pass and into the Southeast Desert Air Basin portion of Kern County. As the wind moves through the Basin, it mixes with the air pollution generated locally, generally transporting air pollutants from the north to the south in the summer and in a reverse flow in the winter.

Generally, the temperature of air decreases with height, creating a gradient from warmer air near the ground to cooler air at elevation. This gradient of cooler air over warm air is known as the environmental lapse rate. Inversions occur when warm air sits over cooler air, trapping the cooler air near the ground. These inversions trap pollutants from dispersing vertically and the mountains surrounding the San Joaquin Valley trap the pollutants from dispersing horizontally. Strong temperature inversions occur



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throughout the SJVAB in the summer, fall, and winter. Daytime temperature inversions occur at elevations of 2,000 to 2,500 feet above the San Joaquin Valley floor during the summer and at 500 to 1,000 feet during the winter. The result is a relatively high concentration of air pollution in the valley during inversion episodes. These inversions cause haziness, which in addition to moisture may include suspended dust, a variety of chemical aerosols emitted from vehicles, particulates from wood stoves, and other pollutants. In the winter, these conditions can lead to carbon monoxide "hotspots" along heavily traveled roads and at busy intersections. During summer's longer daylight hours, stagnant air, high temperatures, and plentiful sunshine provide the conditions and energy for the photochemical reaction between reactive organic gases (ROG) and oxides of nitrogen (NOx), which results in the formation of ozone.

Because of the prevailing daytime winds and time-delayed nature of ozone, concentrations are highest in the southern portion of the Basin. Summers are often periods of hazy visibility and occasionally unhealthful air, while winter air quality impacts tend to be localized and can consist of (but are not exclusive to) odors from agricultural operations; soot or smoke around residential, agricultural, and hazard-reduction wood burning; or dust near mineral resource recovery operations.

2.1.2 Criteria Air Pollutants

For the protection of public health and welfare, the Federal Clean Air Act (FCAA) required that the United States Environmental Protection Agency (EPA) establish National Ambient Air Quality Standards (NAAQS) for various pollutants. These pollutants are referred to as "criteria" pollutants because the EPA publishes criteria documents to justify the choice of standards. These standards define the maximum amount of an air pollutant that can be present in ambient air. An ambient air quality standard is generally specified as a concentration averaged over a specific time period, such as one hour, eight hours, 24 hours, or one year. The different averaging times and concentrations are meant to protect against different exposure effects. Standards established for the protection of human health are referred to as primary standards; whereas, standards established for the prevention of environmental and property damage are called secondary standards. The FCAA allows states to adopt additional or more health-protective standards. The air quality regulatory framework and ambient air quality standards are discussed in greater detail later in this report.

The following provides a summary discussion of the primary and secondary criteria air pollutants of primary concern. In general, primary pollutants are directly emitted into the atmosphere, and secondary pollutants are formed by chemical reactions in the atmosphere.

2.1.2.1 Ozone

Ozone (O₃) is a reactive gas consisting of three atoms of oxygen. Ozone occurs in two layers of the atmosphere. The layer surrounding the earth's surface is the troposphere. The troposphere extends to a level about 10 miles up where it meets the second layer, the stratosphere. While Ozone in the upper atmosphere protects the earth from harmful ultraviolet radiation, high concentrations of ground-level O₃ can adversely affect the human respiratory system.



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Ozone, a colorless gas which is odorless at ambient levels, is the chief component of urban smog. Ozone is not directly emitted as a pollutant but is formed in the atmosphere when hydrocarbon and NO_x precursor emissions react in the presence of sunlight. Meteorology and terrain play major roles in ozone formation. Generally, low wind speeds or stagnant air coupled with warm temperatures and cloudless skies provide the optimum conditions for ozone formation. As a result, summer is generally the peak ozone season. Because of the reaction time involved, peak ozone concentrations often occur far downwind of the precursor emissions. Therefore, ozone is a regional pollutant that often impacts a large area (California Air Resources Board [CARB] 2001, 2010).

Sources of precursor gases number in the thousands and include common sources such as consumer products, gasoline vapors, chemical solvents, and combustion byproducts of various fuels. Emissions of the ozone precursors ROG and NO_x most commonly originate from motor vehicles, as well as commercial and industrial uses.

Many respiratory ailments, as well as cardiovascular disease, are aggravated by exposure to high ozone levels. High levels of ozone may negatively affect immune systems, making people more susceptible to respiratory illnesses, including bronchitis and pneumonia. Long-term exposure to ozone is linked to aggravation of asthma and is likely to be one of many causes of asthma development. Long-term exposures to higher concentrations of ozone may also be linked to permanent lung damage, such as abnormal lung development in children. People most at risk from breathing air containing ozone include people with asthma, children, older adults, and people who are active outdoors, especially outdoor workers. In addition, people with certain genetic characteristics, and people with reduced intake of certain nutrients, such as vitamins C and E, are at greater risk from ozone exposure (EPA 2019a).

2.1.2.2 Reactive Organic Gases and Volatile Organic Compounds

Hydrocarbons are organic gases that are formed solely of hydrogen and carbon. There are several subsets of organic gases, including Volatile Organic Compounds (VOCs) and ROG. ROG include all hydrocarbons except those exempted by CARB. Therefore, ROG are a set of organic gases based on state rules and regulations. VOCs are similar to ROG in that they include all organic gases except those exempted by federal law.

Both VOCs and ROG are emitted from incomplete combustion of hydrocarbons or other carbon-based fuels. Combustion engine exhaust, oil refineries, and oil-fueled power plants are the primary sources of hydrocarbons. Another source of hydrocarbons is evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

The primary health effects related to hydrocarbons stem from ozone (see discussion above). High levels of hydrocarbons in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. There are no separate national or California ambient air quality standards for ROG. Carcinogenic forms of ROG, such as benzene, are also considered toxic air contaminants (TACs).



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2.1.2.3 Nitrogen Dioxide and Nitrogen Oxides

Nitrogen dioxide (NO₂) is one of a group of highly reactive gases known as “oxides of nitrogen (NO_x).” NO₂ is the component of greatest interest and the indicator for the larger group of NO_x. It forms quickly from emissions from cars, trucks and buses, powerplants, and off-road equipment. NO_x is a strong oxidizing agent that reacts in the air to form corrosive nitric acid as well as toxic organic nitrates.

NO_x is emitted from solvents and combustion processes in which fuel is burned at high temperatures. Mobile sources (including on-road and off-road vehicles) and stationary sources such as electric utilities and industrial boilers, constitute a majority of the statewide NO_x emissions. To a lesser extent, area-wide sources, such as residential heaters, gas stoves, and managed burning and disposal, also contribute to total state-wide NO_x emissions (CARB 2010). NO_x is also linked to the formation of ground-level ozone and fine particle pollution (see discussion above for ozone and particulate pollution for additional discussion of health-related impacts).

Direct inhalation of NO_x can cause a wide range of health effects. NO_x can irritate the lungs, cause lung damage, and lower resistance to respiratory infections such as influenza. Short-term exposures (e.g., less than 3 hours) to low levels of NO₂ may lead to changes in airway responsiveness and lung function in individuals with pre-existing respiratory illnesses. These exposures may also increase respiratory illnesses in children. Long-term exposures to NO₂ may lead to increased susceptibility to respiratory infection and may cause irreversible lung damage. Other health effects are an increase in the incidence of chronic bronchitis and lung irritation. Chronic exposure may lead to eye and mucus membrane aggravation, along with pulmonary dysfunction. NO_x can cause fading of textile dyes and additives, deterioration of cotton and nylon, and corrosion of metals due to the production of particulate nitrates. Airborne NO_x can also impair visibility.

NO_x also contributes to a wide range of environmental effects both directly and indirectly when combined with other precursors in acid rain and ozone. Increased nitrogen inputs to terrestrial and wetland systems can lead to changes in plant species composition and diversity. Similarly, direct nitrogen inputs to aquatic ecosystems such as those found in estuarine and coastal waters can lead to eutrophication (a condition that promotes excessive algae growth, which can lead to a severe depletion of dissolved oxygen and increased levels of toxins that are harmful to aquatic life).

Nitrogen, alone or in acid rain, also can acidify soils and surface waters. Acidification of soils causes the loss of essential plant nutrients and increased levels of soluble aluminum, which is toxic to plants. Acidification of surface waters creates low pH conditions and levels of aluminum that are toxic to fish and other aquatic organisms. NO_x also contributes to haze and visibility impairment (EPA 2019a, CARB 2016a).

2.1.2.4 Particulate Matter

Particulate matter (PM) is a mixture of substances that includes elements such as carbon and metals; compounds such as nitrates, sulfates, and organic compounds; and complex mixtures such as diesel exhaust and soil. PM_{2.5} includes fine particles with a diameter of 2.5 microns or smaller and is a subset of



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PM₁₀. These particles come in many sizes and shapes and can be made up of hundreds of different chemicals. Some particles, known as primary particles are emitted directly from a source, such as construction sites, unpaved roads, fields, smokestacks or fires. Others form in complicated reactions in the atmosphere of chemicals such as sulfur dioxides and nitrogen oxides that are emitted from power plants, industries and automobiles. These particles, known as secondary particles, make up most of the fine particle pollution in the country (EPA 2019a, CARB 2016a).

Area-wide sources account for about 65 and 83% of the statewide emissions of directly emitted PM_{2.5} and PM₁₀, respectively. The major area-wide sources of PM_{2.5} and PM₁₀ are fugitive dust, especially dust from unpaved and paved roads, agricultural operations, and construction and demolition. Sources of PM₁₀ include crushing or grinding operations, and dust stirred up by vehicles traveling on roads. Sources of PM_{2.5} include all types of combustion, including motor vehicles, power plants, residential wood burning, forest fires, agricultural burning, and some industrial processes.

Exhaust emissions from mobile sources contribute only a very small portion of directly emitted PM_{2.5} and PM₁₀ emissions but are a major source of the VOC and NO_x that form secondary particles (CARB 2013).

PM_{2.5} and PM₁₀ particles are small enough to be inhaled and lodged in the deepest parts of the lung where they evade the respiratory system's natural defenses. Health problems begin as the body reacts to these foreign particles. Acute and chronic health effects associated with high particulate levels include the aggravation of chronic respiratory diseases; heart and lung disease; and coughing, bronchitis, and respiratory illnesses in children. Recent mortality studies have shown a statistically significant direct association between mortality and daily concentrations of particulate matter in the air. PM_{2.5} and PM₁₀ can aggravate respiratory disease and cause lung damage, cancer, and premature death.

Sensitive populations, including children, the elderly, exercising adults, and those suffering from chronic lung disease such as asthma or bronchitis are especially vulnerable to the effect of PM₁₀. Non-health-related effects include reduced visibility and soiling of buildings.

2.1.2.5 Carbon Monoxide

Carbon Monoxide (CO) is an odorless, colorless gas that is highly toxic. CO is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. CO is an odorless, colorless, poisonous gas that is highly reactive.

CO enters the bloodstream and binds more readily to hemoglobin, the oxygen-carrying protein in blood, than oxygen, thereby reducing the oxygen-carrying capacity of blood and reducing oxygen delivery to organs and tissues. The health threat from CO is most serious for those who suffer from cardiovascular disease. Healthy individuals are also affected but only at higher levels of exposure. Exposure to CO can cause chest pain in heart patients, headaches, and reduced mental alertness. At high concentrations, CO can cause heart difficulties in people with chronic diseases and can impair mental abilities. Exposure to elevated CO levels is associated with visual impairment, reduced work capacity, reduced manual dexterity, poor learning ability, difficulty performing complex tasks, and, with prolonged enclosed exposure, death.



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Very high levels of CO are not likely to occur outdoors. However, when CO levels are elevated outdoors, they can be of particular concern for people with some types of heart disease. These people already have a reduced ability for getting oxygenated blood to their hearts in situations where the heart needs more oxygen than usual. They are especially vulnerable to the effects of CO when exercising or under increased stress. In these situations, short-term exposure to elevated CO may result in reduced oxygen to the heart accompanied by chest pain also known as angina (EPA 2019a).

2.1.2.6 Sulfur Dioxide

Sulfur Dioxide (SO₂) is one of a group of highly reactive gases known as “oxides of sulfur (SO_x).” It is a colorless, irritating gas with a “rotten egg” smell that is formed primarily by the combustion of sulfur-containing fossil fuels. The largest source of SO₂ in the atmosphere is the burning of fossil fuels by power plants and other industrial facilities. Smaller sources of SO₂ emissions include: industrial processes such as extracting metal from ore; natural sources such as volcanoes; and locomotives, ships and other vehicles and heavy equipment that burn fuel with a high sulfur content. State and national ambient air quality standards for SO₂ are designed to protect against exposure to the entire group of sulfur oxides (SO_x). SO₂ is the component of greatest concern and is used as the indicator for the larger group of gaseous sulfur oxides.

High concentrations of SO₂ can result in temporary breathing impairment for asthmatic children and adults who are active outdoors. Short-term exposures of asthmatic individuals to elevated SO₂ levels during moderate activity may result in breathing difficulties that can be accompanied by symptoms such as wheezing, chest tightness, or shortness of breath. Other effects that have been associated with longer term exposures to high concentrations of SO₂ in conjunction with high levels of particulate matter include aggravation of existing cardiovascular disease, respiratory illness, and alterations in the lungs’ defenses. The subgroups of the population that may be affected under these conditions include individuals with heart or lung disease, as well as the elderly and children.

Together, SO₂ and NO_x are the major precursors to acidic deposition (acid rain), which is associated with the acidification of soils, lakes, and streams and accelerated corrosion of buildings and monuments. SO₂ also is a major precursor to PM_{2.5}, which is a significant health concern, and a main contributor to poor visibility.

2.1.2.7 Lead

Lead (Pb) is a naturally occurring bluish-gray metal found in small amounts in the earth's crust. Lead can be found in all parts of our environment. Much of it comes from human activities including burning fossil fuels, mining, and manufacturing. Lead has many different uses. It is used in the production of batteries, ammunition, metal products (solder and pipes), and devices to shield X-rays. Because of health concerns, lead from paints and ceramic products, caulking, and pipe solder has been dramatically reduced in recent years. The use of lead as an additive to gasoline was banned in 1996 in the United States.



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Exposure to lead occurs mainly through inhalation of air and ingestion of lead in food, water, soil, or dust. The effects of lead are the same regardless of the path of exposure. Lead can affect almost every organ and system in your body. The main target for lead toxicity is the nervous system, both in adults and children. Long-term exposure of adults can result in decreased performance in some tests that measure functions of the nervous system. It may also cause weakness in fingers, wrists, or ankles.

Lead exposure also causes small increases in blood pressure, particularly in middle-aged and older people and can cause anemia. Exposure to high lead levels can severely damage the brain and kidneys in adults or children and ultimately cause death. In pregnant women, high levels of exposure to lead may cause miscarriage. High level exposure in men can damage the organs responsible for sperm production.

Exposure to lead is more dangerous for young and unborn children. Unborn children can be exposed to lead through their mothers. Harmful effects include premature births, smaller babies, decreased mental ability in the infant, learning difficulties, and reduced growth in young children. These effects are more common if the mother or baby was exposed to high levels of lead. Some of these effects may persist beyond childhood (Agency for Toxic Substances & Disease Registry [ATSDR] 2007a).

2.1.2.8 Hydrogen Sulfide

Hydrogen Sulfide (H₂S) is a colorless gas with the odor of rotten eggs. H₂S occurs naturally and is also produced by human activities. H₂S occurs naturally in crude petroleum, natural gas, volcanic gases, and hot springs. It can also result during bacterial decomposition of sulfur-containing organic substances. Emissions of H₂S associated with human activities including various industrial activities, such as oil and gas production, refining, sewage treatment plants, food processing, and confined animal feeding operations.

Studies in humans suggest that the respiratory tract and nervous system are the most sensitive targets of H₂S toxicity. Exposure to low concentrations of H₂S may cause irritation to the eyes, nose, or throat. It may also cause difficulty in breathing for some asthmatics. Respiratory distress or arrest has been observed in people exposed to very high concentrations of H₂S. Exposure to low concentrations of H₂S may cause headaches, poor memory, tiredness, and balance problems. Brief exposures to high concentrations of H₂S can cause loss of consciousness. In most cases, the person appears to regain consciousness without any other effects. However, in some individuals, there may be permanent or long-term effects such as headaches, poor attention span, poor memory, and poor motor function. H₂S is extremely hazardous in high concentrations; especially in enclosed spaces. In some instances, exposure to high concentrations can cause death (ATSDR 2007b)

2.1.2.9 Other Pollutants

The State of California has established air quality standards for some pollutants not addressed by Federal standards. The CARB has established State standards for hydrogen sulfide, sulfates, vinyl chloride, and visibility reducing particles. Below is a summary of these pollutants and a description of the pollutants' physical properties, health and other effects, sources, and the extent of the problems.



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Sulfates

Sulfates (SO_4) are the fully oxidized ionic form of sulfur. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to SO_2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features.

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

Visibility Reducing Particles

Visibility Reducing Particles are a mixture of suspended particulate matter consisting of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. The standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

Vinyl Chloride

Vinyl Chloride is a colorless gas that does not occur naturally. It is formed when other substances such as trichloroethane, trichloroethylene, and tetrachloro-ethylene are broken down. Vinyl chloride is used to make polyvinyl chloride which is used to make a variety of plastic products, including pipes, wire and cable coatings, and packaging materials.

2.1.3 Odors

Typically, odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from the psychological (i.e. irritation, anger, or anxiety) to the physiological, including circulatory and respiratory effects, nausea, vomiting, and headache.

The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell very minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor and in fact an odor that is offensive to one person may be perfectly acceptable to another (e.g., fast food restaurant). It is important to also note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.



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Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word strong to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

Neither the state nor the federal governments have adopted rules or regulations for the control of odor sources. The SJVAPCD does not have an individual rule or regulation that specifically addresses odors; however, odors would be subject to SJVAPCD Rule 4102, Nuisance. Any actions related to odors would be based on citizen complaints to local governments and the SJVAPCD.

2.1.4 Toxic Air Contaminants

TACs are air pollutants that may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air, but due to their high toxicity, they may pose a threat to public health even at very low concentrations. Because there is no threshold level below which adverse health impacts are not expected to occur, TACs differ from criteria pollutants for which acceptable levels of exposure can be determined and for which state and federal governments have set ambient air quality standards. TACs, therefore, are not considered "criteria pollutants" under either the FCAA or the California Clean Air Act (CCAA) and are thus not subject to National or California ambient air quality standards (NAAQS and CAAQS, respectively). Instead, the EPA and the CARB regulate Hazardous Air Pollutants (HAPs) and TACs, respectively, through statutes and regulations that generally require the use of the maximum or best available control technology (BACT) to limit emissions. In conjunction with District rules, these federal and state statutes and regulations establish the regulatory framework for TACs. At the national levels, the EPA has established National Emission Standards for HAPs (NESHAPs), in accordance with the requirements of the FCAA and subsequent amendments. These are technology-based source-specific regulations that limit allowable emissions of HAPs.

Within California, TACs are regulated primarily through the Tanner Air Toxics Act (Assembly Bill [AB] 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for CARB to designate substances as TACs. The following provides a summary of the primary TACs of concern within the State of California and related health effects:

2.1.4.1 Diesel Particulate Matter

Diesel Particulate Matter (DPM) was identified as a TAC by the CARB in August 1998. DPM is emitted from both mobile and stationary sources. In California, on-road diesel-fueled vehicles contribute approximately 42% of the statewide total, with an additional 55% attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and transport refrigeration units. Stationary



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sources, contributing about 3% of emissions, include shipyards, warehouses, heavy equipment repair yards, and oil and gas production operations. Emissions from these sources are from diesel-fueled internal combustion engines. Stationary sources that report DPM emissions also include heavy construction, manufacturers of asphalt paving materials and blocks, and diesel-fueled electrical generation facilities (CARB 2013).

In October 2000, the CARB issued a report entitled: Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles, which is commonly referred to as the Diesel Risk Reduction Plan (DRRP). The DRRP provides a mechanism for combating the DPM problem. The goal of the DRRP is to reduce concentrations of DPM by 85% by the year 2020, in comparison to year 2000 baseline emissions. The key elements of the DRRP are to clean up existing engines through engine retrofit emission control devices, to adopt stringent standards for new diesel engines, and to lower the sulfur content of diesel fuel to protect new, and very effective, advanced technology emission control devices on diesel engines. When fully implemented, the DRRP will significantly reduce emissions from both old and new diesel fueled motor vehicles and from stationary sources that burn diesel fuel. In addition to these strategies, the CARB continues to promote the use of alternative fuels and electrification. As a result of these actions, DPM concentrations and associated health risks in future years are projected to decline (CARB 2013). In comparison to year 2010 inventory of statewide DPM emissions, CARB estimates that emissions of DPM in 2035 will be reduced by more than 50%.

DPM is typically composed of carbon particles ("soot", also called black carbon) and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of these chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene. Diesel exhaust also contains gaseous pollutants, including volatile organic compounds and NO_x. NO_x emissions from diesel engines are important because they can undergo chemical reactions in the atmosphere leading to formation of PM_{2.5} and ozone.

In California, diesel exhaust particles have been identified as a carcinogen accounting for an estimated 70% of the total known cancer risks in California. DPM is estimated to increase statewide cancer risk by 520 cancers per million residents exposed over an estimated 70-year lifetime. Non-cancer health effects associated with exposure to DPM include premature death, exacerbated chronic heart and lung disease, including asthma, and decreased lung function in children. Short-term exposure to diesel exhaust can also have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks (CARB 2016b).

Individuals most vulnerable to non-cancer health effects of DPM are children whose lungs are still developing and the elderly who often have chronic health problems. The elderly and people with emphysema, asthma, and chronic heart and lung disease are especially sensitive to DPM (CARB 2016b). In addition to its health effects, DPM significantly contributes to haze and reduced visibility.



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2.1.4.2 Asbestos

Asbestos is the name given to a number of naturally occurring fibrous silicate minerals that have been mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite. Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States. Exposure to asbestos is a health threat; exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease that causes scarring of the lungs). Exposure to asbestos can occur during demolition or remodeling of buildings constructed prior to its ban for use in buildings in 1977. Exposure to naturally occurring asbestos can occur during soil disturbing activities in areas with deposits present.

2.1.4.3 Valley Fever

Valley Fever is an infection caused by a fungus that lives in the soil. About 10,000 U.S. cases are reported each year, mostly from Arizona and California. Valley fever can be misdiagnosed because its symptoms are similar to those of other illnesses.

The fungus that causes Valley fever, *Coccidioides*, is found in the southwestern United States, parts of Mexico and Central America, and parts of South America. The fungus grows naturally and is endemic in many areas along the western region of Fresno County. People can get this infection by breathing in fungal spores from the air, especially when the wind blows the soil with the fungal spores into the air or the dirt is moved by human activity. About 40% of the people who come into contact with the fungal spores will develop symptoms that may require medical treatment and the symptoms will not go away on their own. Some people may develop a more severe infection, especially those with compromised immune systems (Centers for Disease Control and Prevention [CDC] 2018).

2.1.5 Attainment Status

The United States EPA and CARB designate air basins where ambient air quality standards are exceeded as “nonattainment” areas. If standards are met, the area is designated as an “attainment” area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered “unclassified.” National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards.

Each standard has a different definition, or “form” of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual standard for PM_{2.5} is met if the 3-year average of the annual average PM_{2.5} concentration is less than or equal to the standard.

The current attainment designations for the SJVAB are shown in Table 1. The SJVAB is designated as nonattainment for ozone, PM₁₀, and PM_{2.5}.



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Table 1 San Joaquin Valley Air Basin Attainment Status

Pollutant	Designation/Classification	
	Federal Standards ^a	State Standards ^b
Ozone – One hour	No Federal Standard ^f	Nonattainment/Severe
Ozone – Eight Hour	Nonattainment/Extreme ^e	Nonattainment
PM ₁₀	Attainment ^c	Nonattainment
PM _{2.5}	Nonattainment ^d	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment
Notes: a See 40 CFR Part 81 b See CCR Title 17 Sections 60200-60210 c On September 25, 2008, EPA redesignated the San Joaquin Valley to attainment for the PM ₁₀ National Ambient Air Quality Standard (NAAQS) and approved the PM ₁₀ Maintenance Plan. d The Valley is designated nonattainment for the 1997 PM _{2.5} NAAQS. EPA designated the Valley as nonattainment for the 2006 PM _{2.5} NAAQS on November 13, 2009 (effective December 14, 2009). e Though the Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010). f Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the SJVAB as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB. Source: SJVAPCD 2019		

2.1.6 Ambient Air Quality

The local air quality can be evaluated by reviewing relevant air pollution concentrations near the project. Table 2 summarizes published monitoring data from 2015 through 2017, the most recent 3-year period available for the nearest monitoring station is in Clovis (at 908 N. Villa Avenue), located approximately 1.85 miles northeast from the project site. The data shows that during the past few years, the SJVAB has exceeded the ozone, PM₁₀, and PM_{2.5} standards.



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Table 2 Ambient Air Quality Summary

Air Pollutant	Averaging Time	Item	2015	2016	2017
Ozone	1 Hour ^a	Max 1 Hour (ppm)	0.116	0.113	0.138
		Days > State Standard (0.09 ppm)	18	26	13
	8 Hour	Max 8 Hour (ppm)	0.099	0.096	0.101
		Days > State Standard (0.070 ppm)	51	63	50
		Days > National Standard (0.070 ppm)	50	62	47
		Days > National Standard (0.075 ppm)	28	46	23
Carbon Monoxide	8 Hour	Max 8 Hour (ppm)	xx	xx	xx
		Days > State Standard (9.0 ppm)	xx	xx	xx
		Days > National Standard (9.0 ppm)	xx	xx	xx
Nitrogen dioxide	Annual	Annual Average (ppm)	xx	xx	xx
	1 Hour	Max 1 Hour (ppm)	xx	xx	xx
		Days > State Standard (0.18 ppm)	xx	xx	xx
Sulfur dioxide	Annual	Annual Average (ppm)	xx	xx	xx
	24 Hour	Max 24 Hour (ppm)	xx	xx	xx
		Days > State Standard (0.04 ppm)	xx	xx	xx
Inhalable coarse particles (PM ₁₀)	Annual (National)	Annual Average (µg/m ³)	33.9	32.8	36.2
	Annual (State)	Annual Average (µg/m ³)	33.7	32.7	ID
	24 hour	24 Hour (µg/m ³)	105.3	76.2	103.2
		Days > State Standard (50 µg/m ³)	50.3	61.3	ID
		Days > National Standard (150 µg/m ³)	0	0	0
Fine particulate matter (PM _{2.5})	Annual (National)	Annual Average (µg/m ³)	14.9	12.5	13.2
	Annual (State)	Annual Average (µg/m ³)	12.9	11.5	13.5
	24 Hour	24 Hour (µg/m ³)	80.7	50.4	69.5
		Days > National Standard (35 µg/m ³)	80.7	50.4	69.5

Notes:
 > = exceed
 ppm = parts per million
 g/m³ = micrograms per cubic meter
 a = The Federal 1 hour Ozone Standard was revoked in June 2005; California retained a 1 hour Ozone Standard
 ID = insufficient data
 max = maximum
 Bold = exceedance



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State Standard = CAAQS
National Standard = NAAQS
Sulfur dioxide is reported on a statewide basis as it is no longer monitored locally
Sources: CARB 2018a

The health impacts of the various air pollutants of concern can be presented in a number of ways. The clearest in comparison is to the state and federal ozone standards. If concentrations are below the standard, it is safe to say that no health impact would occur to anyone. When concentrations exceed the standard, impacts will vary based on the amount the standard is exceeded. The EPA developed the Air Quality Index (AQI) as an easy to understand measure of health impact compared to concentrations in the air. Table 3 provides a description of the health impacts ozone at different concentrations.

Table 3 Air Quality Index and Health Effects

Air Quality Index/ 8-hour Ozone Concentration	Health Effects Description
AQI – 51-100 – Moderate Concentration 12.1-35.4 µg/m ³	Unusually sensitive people: Consider reducing prolonged or heavy exertion. Watch for symptoms such as coughing or shortness of breath. These are signs to take it easier.
	Everyone else: It's a good day to be active outside.
AQI – 101-150 – Unhealthy for Sensitive Groups Concentration 35.5-55.4 µg/m ³	Sensitive groups: Reduce prolonged or heavy exertion. It's OK to be active outside but take more breaks and do less intense activities. Watch for symptoms such as coughing or shortness of breath.
	People with asthma: Should follow their asthma action plans and keep quick relief medicine handy.
	If you have heart disease: Symptoms such as palpitations, shortness of breath, or unusual fatigue may indicate a serious problem. If you have any of these, contact your health care provider.
AQI – 151-200 – Unhealthy Concentration 55.5-150.4 µg/m ³	Sensitive groups: Avoid prolonged or heavy exertion. Move activities indoors or reschedule to a time when the air quality is better.
	Everyone else: Reduce prolonged or heavy exertion. Take more breaks during all outdoor activities.
AQI – 201-300 – Very Unhealthy Concentration 150.5-250.4 µg/m ³	Sensitive groups: Avoid all physical activity outdoors. Move activities indoors or reschedule to a time when air quality is better.
	Everyone else: Avoid prolonged or heavy exertion. Consider activities indoors or rescheduling to a time when air quality is better.
AQI – 301-500 – Hazardous	Everyone: Avoid all physical activity outdoors.
	Sensitive groups: Remain indoors and keep activity levels low. Follow tips for keeping particle levels low indoors.
Source: EPA 2017	



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Based on the AQI scale for the 8-hour ozone standard, Clovis experienced no days in the last 3 years that would be categorized as unhealthy (AQI 200), and as many as 56 days that were unhealthy for sensitive groups (AQI 150) or moderate (AQI 100) as measured at the Clovis monitoring station. The highest reading was 95 parts per billion (ppb) in 2014 compared with the 95-ppb cutoff point for unhealthy for sensitive groups (AQI 150), but lower than the 115-ppb cutoff point for unhealthy (AQI 200).

The other nonattainment pollutant of concern is PM_{2.5}. An AQI of 100 or lower is considered moderate and would be triggered by a 24-hour average concentration of 35.4 µg/m³, which is considered an exceedance of the federal PM_{2.5} standard. The monitoring station nearest the project exceeded the standard on 40 days in 2014. People with respiratory or heart disease, the elderly and children are the groups most at risk. Unusually sensitive people should consider reducing prolonged or heavy exertion. Unusually sensitive people should consider reducing prolonged or heavy exertion. The AQI of 150 or less is classified as unhealthy for sensitive groups with a PM_{2.5} concentration of 55.4 µg/m³. At this concentration, there is increasing likelihood of respiratory symptoms in sensitive individuals, aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease, and in the elderly. People with respiratory or heart disease, the elderly, and children should limit prolonged exertion. AQI 151-200—unhealthy with a concentration of 55.5-150.4 µg/m³—was also exceeded on at least 13 days in the last 3 years. The highest concentration recorded in Clovis was 80.7 µg/m³ in 2015. At this concentration, increased aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly and increased respiratory effects in general population would occur. People with respiratory or heart disease, the elderly, and children should avoid prolonged exertion; everyone else should limit prolonged exertion when the AQI exceeds this level.

2.1.7 Local Sources of Air Pollution

The Project's site is located in a predominately residential setting, where the main sources of air pollution are mobile sources traveling along the nearby roadways that surround the Project site. Nearby sources of air pollution include emissions from vehicles on Locan Avenue and Teague Avenue.

2.1.8 Sensitive Receptors

Those who are sensitive to air pollution include children, the elderly, and persons with pre-existing respiratory or cardiovascular illness. For purposes of CEQA, the SJVAPCD considers a sensitive receptor a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools.

The following sensitive receptors have been identified (all distances are approximate):

- **Residences** (north of the Project West- Tract 6264): 50 feet north of the project site, 871 feet south of the Project site, and 2,475 east of the Project site
- **Schools:**
 - Bud Rank Elementary: 2,700 feet east of the Project East- Tract 6239



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2.2 REGULATORY SETTING

Air quality within the project area is regulated by several jurisdictions including the EPA, ARB, and the SJVAPCD. Each of these jurisdictions develops rules, regulations, and policies to attain the goals or directives imposed upon them through legislation. Although EPA regulations may not be superseded, both state and local regulations may be more stringent.

2.2.1 Federal

2.2.1.1 U.S. Environmental Protection Agency

At the federal level, the EPA has been charged with implementing national air quality programs. The EPA's air quality mandates are drawn primarily from the FCAA, which was signed into law in 1970. Congress substantially amended the FCAA in 1977 and again in 1990.

Federal Clean Air Act

The FCAA required the EPA to establish NAAQS, and also set deadlines for their attainment. Two types of NAAQS have been established: primary standards, which protect public health, and secondary standards, which protect public welfare from non-health-related adverse effects, such as visibility restrictions. NAAQS are summarized in Table 4.

National Emission Standards for Hazardous Air Pollutants

Pursuant to the FCAA of 1970, the EPA established the NESHAPs. These are technology-based source-specific regulations that limit allowable emissions of HAPs. Among these sources include asbestos-containing building materials (ACBMs). NESHAPs include requirements pertaining to the inspection, notification, handling, and disposal of ACBMs associated with the demolition and renovation of structures.

2.2.2 State

2.2.2.1 California Air Resources Board

The CARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the CCAA of 1988. Other CARB duties include monitoring air quality (in conjunction with air monitoring networks maintained by air pollution control districts and air quality management districts), establishing California Ambient Air Quality Standards (CAAQS), which in many cases are more stringent than the NAAQS, and setting emissions standards for new motor vehicles. The emission standards established for motor vehicles differ depending on various factors including the model year, and the type of vehicle, fuel and engine used. The CAAQS are summarized in Table 4.



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Table 4 National and State Ambient Air Quality Standards

Pollutant	Averaging Time	CAAQS	NAAQS
Ozone	1 hour	0.09 ppm	-
	8 hours	0.070 ppm	0.070 ppm
CO	1 hour	20 ppm	35 ppm
	8 hours	9.0 ppm	9 ppm
NO₂	1 hour	0.18 ppm	0.100 ppm
	Annual Arithmetic Mean	0.030 ppm	0.053 ppm
SO₂	1 hour	0.25 ppm	0.075 ppm
	3 hours	-	-
	24 hours	0.040 ppm	0.014 ppm
	Annual Arithmetic Mean	-	0.030 ppm
PM₁₀	24 hours	50 µg/m ³	150 µg/m ³
	Annual Arithmetic Mean	20 µg/m ³	-
PM_{2.5}	24 hours	-	35 µg/m ³
	Annual Arithmetic Mean	12 µg/m ³	12 µg/m ³
Lead	30-day Average	1.5 µg/m ³	-
	Calendar Quarter	-	1.5 µg/m ³
	Rolling 3-month Average	-	0.15 µg/m ³
Visibility reducing particles (VRP)	8 hours	-	-
Sulfates	24 hours	25 µg/m ³	-
H₂S	1 hour	0.03 ppm (42 µg/m ³)	-
Vinyl chloride	24 hours	0.01 ppm	-
		0.02 (26 µg/m ³)	-
Notes: ppm = parts per million (concentration) µg/m ³ = micrograms per cubic meter Annual = Annual Arithmetic Mean 30-day = 30-day average Quarter = Calendar quarter Source: CARB 2016c			

California Clean Air Act

The CCAA requires that all air districts in the state endeavor to achieve and maintain CAAQS for O₃, CO, SO₂, and NO₂ by the earliest practical date. The CCAA specifies that districts focus attention on reducing the emissions from transportation and area-wide emission sources, and the act provides districts with authority to regulate indirect sources. Each district plan is required to either (1) achieve a 5% annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each non-attainment



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pollutant or its precursors, or (2) to provide for implementation of all feasible measures to reduce emissions. Any planning effort for air quality attainment would thus need to consider both state and federal planning requirements.

Assembly Bills 1807 & 2588 - Toxic Air Contaminants

Within California, TACs are regulated primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics Hot Spots Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB designates a substance as a TAC.

Existing sources of TACs that are subject to the Air Toxics Hot Spots Information and Assessment Act are required to: (1) prepare a toxic emissions inventory; (2) prepare a risk assessment if emissions are significant; (3) notify the public of significant risk levels; and (4) prepare and implement risk reduction measures.

Assembly Bill 617

In response to AB 617 (C. Garcia, Chapter 136, Statutes of 2017), the CARB established the Community Air Protection Program. The Community Air Protection Program includes community air monitoring and community emissions reduction program's focus is to reduce exposure in communities most impacted by air pollution. The Legislature has appropriated funding to support early actions to address localized air pollution through targeted incentive funding to deploy cleaner technologies in these communities, as well as grants to support community participation in the AB 617 process. AB 617 also includes new requirements for accelerated retrofit of pollution controls on industrial sources, increased penalty fees, and greater transparency and availability of air quality and emissions data, which will help advance air pollution control efforts throughout the State.

Portable Equipment Registration Program

Owners or operators of portable engines and certain other types of equipment can register their units under the CARB's Statewide Portable Equipment Registration Program (PERP). PERP allows registered equipment to be operated throughout California without having to obtain individual permits from local air districts. To qualify, equipment must meet eligibility requirements, including applicable emissions standards.

Naturally-Occurring Asbestos Regulations

CARB has adopted two Airborne Toxic Control Measures (ATCMs) which regulates the control of Naturally Occurring Asbestos (NOA) associated with construction, surfacing, grading, mining, and quarrying activities. The NCUAQMD is responsible for enforcing Asbestos ATCMs. There are no known likely areas of NOA in the Project area (USGS 2011).



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Regulatory Attainment Designations

Under the CCAA, 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 O₃, CO, and NO₂ as “does not meet the primary standards,” “cannot be classified,” or “better than national standards.” For SO₂, 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, 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 PM₁₀ based on the likelihood that they would violate national PM₁₀ standards. All other areas are designated “unclassified.”

As discussed previously, the SJVAB is designated as nonattainment for the federal ozone and PM_{2.5} standards. The SJVAB is nonattainment for State ozone, PM₁₀, and PM_{2.5} standards.

2.2.3 San Joaquin Valley Air Pollution Control District

The SJVAPCD is the agency primarily responsible for ensuring that NAAQS and CAAQS are not exceeded and that air quality conditions are maintained in the SJVAB, within which the proposed project is located. Responsibilities of the SJVAPCD include, but are not limited to, preparing plans for the attainment of ambient air quality standards, adopting and enforcing rules and regulations concerning sources of air pollution, issuing permits for stationary sources of air pollution, inspecting stationary sources of air pollution and responding to citizen complaints, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by the FCAA and the CCAA.

2.2.3.1 SJVAPCD Rules and Regulations

The SJVAPCD rules and regulations that may apply to projects that will occur during buildout of the project include but are not limited to the following:

Rule 4102 – Nuisance. The purpose of this rule is to protect the health and safety of the public and applies to any source operation that emits or may emit air contaminants or other materials.



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Rule 4601 – Architectural Coatings. The purpose of this rule is to limit Volatile Organic Compounds (VOC) emissions from architectural coatings. Emissions are reduced by limits on VOC content and providing requirements on coatings storage, cleanup, and labeling.

Rule 4641 – Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations. The purpose of this rule is to limit VOC emissions from asphalt paving and maintenance operations. If asphalt paving will be used, then the paving operations will be subject to Rule 4641.

Rule 4901 – Wood burning Fireplaces and Wood burning Heaters. The purpose of this rule is to limit emissions of carbon monoxide and particulate matter from wood burning fireplaces, wood burning heaters, and outdoor wood burning devices.

Regulation VIII – Fugitive PM10 Prohibitions. Rule 8011-8081 are designed to reduce PM10 emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and trackout, etc. All development projects that involve soil disturbance are subject to at least one provision of the Regulation VIII series of rules.

Rule 9510 – Indirect Source Review. This rule reduces the impact of NOx and PM10 emissions from growth on the Air Basin. The rule places application and emission reduction requirements on development projects meeting applicability criteria in order to reduce emissions through onsite mitigation, offsite District-administered projects, or a combination of the two. This project must comply with Rule 9510 because it would develop more than 50 residential units.

2.2.3.2 CEQA

The SJVAPCD has three roles under CEQA:

Lead Agency: responsible for preparing environmental analyses for its own projects (adoption of rules, regulations, or plans) or permit projects filed with the District where the District has primary approval authority over the project.

Responsible Agency: The discretionary authority of a Responsible Agency is more limited than a Lead Agency; having responsibility for mitigating or avoiding only the environmental effects of those parts of the project which it decides to approve, carry out, or finance. The District defers to the Lead Agency for preparation of environmental documents for land use projects that also have discretionary air quality permits unless no document is prepared by the Lead Agency and potentially significant impacts related to the permit are possible. The District comments on documents prepared by Lead Agencies to ensure that District concerns are addressed.

Commenting Agency: The District reviews and comments on air quality analyses prepared by other public agencies (such as the project).



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The SJVAPCD also provides guidance and thresholds for CEQA air quality and GHG analyses. The result of this guidance as well as state regulations to control air pollution is an overall improvement in the Air Basin. In particular, the SJVAPCD's 2015 GAMAQI states the following:

1. The District's Air Quality Attainment Plans include measures to promote air quality elements in county and city general plans as one of the primary indirect source programs. The general plan is the primary long-range planning document used by cities and counties to direct development. Since air districts have no authority over land use decisions, it is up to cities and counties to ensure that their general plans help achieve air quality goals. Section 65302.1 of the California Government Code requires cities and counties in the San Joaquin Valley to amend appropriate elements of their general plans to include data, analysis, comprehensive goals, policies, and feasible implementation strategies to improve air quality in their next housing element revisions.
2. The Air Quality Guidelines for General Plans (AQGGP), adopted by the District in 1994 and amended in 2005, is a guidance document containing goals and policy examples that cities and counties may want to incorporate into their General Plans to satisfy Section 65302.1. When adopted in a general plan and implemented, the suggestions in the AQGGP can reduce vehicle trips and miles traveled and improve air quality. The specific suggestions in the AQGGP are voluntary. The District strongly encourages cities and counties to use their land use and transportation planning authority to help achieve air quality goals by adopting the suggested policies and programs.

2.2.4 City of Clovis

The City of Clovis adopted its 2014 General Plan on August 25, 2014 (City of Clovis 2014). The City's applicable air quality goals and policies from the Air Quality Element and Circulation Element are listed below.

Air Quality Element

- **Goal 1:** A local environment that is protected from air pollution and emissions.
- **Policy 1.1: Land use and transportation.** Reduce greenhouse gas and other local pollutant emissions through mixed use and transit-oriented development and well-designed transit, pedestrian, and bicycle systems.
- **Policy 1.2: Sensitive land uses.** Prohibit the future siting of sensitive land uses within the distances of emission sources as defined by the California Air Resources Board, without sufficient mitigation.
- **Policy 1.3: Construction activities.** Encourage the use of best management practices during construction activities to reduce emissions of criteria pollutants as outlined by the San Joaquin Valley Air Pollution Control District (SJVAPCD).
- **Goal 2:** A region with healthy air quality and lower greenhouse gas emissions.



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- **Policy 2.1: Regional coordination.** Support regional efforts to reduce air pollution (criteria air pollutants and greenhouse gas emissions) and collaborate with other agencies to improve air quality at the emission source and reduce vehicle miles traveled.
- **Policy 2.2: Cross-jurisdictional issues.** Collaborate with regional agencies and surrounding jurisdictions to address cross-jurisdictional transportation and air quality issues.
- **Policy 2.6: Innovative mitigation.** Encourage innovative mitigation measures to reduce air quality impacts by coordinating with the SJVAPCD, project applicants, and other interested parties.

Circulation Element

- **Goal 1:** A context-sensitive and “complete streets” transportation network that prioritizes effective connectivity and accommodates a comprehensive range of mobility needs.
- **Policy 1.1: Multimodal network.** The City shall plan, design, and maintain the transportation network to promote safe and convenient travel for all users: pedestrian, bicyclists, transit riders, freight, and motorists.
- **Policy 1.2: Transportation decisions.** Decisions should balance the comfort, convenience, and safety of pedestrian, bicyclists, and motorists.
- **Policy 1.4: Jobs and housing.** Encourage infill development that would provide jobs and services closer to housing, and vice versa, to reduce citywide vehicle miles traveled and effectively utilize the existing transportation infrastructure.
- **Policy 1.5: Neighborhood connectivity.** The transportation network shall provide multimodal access between neighborhoods and neighborhood-serving uses (educational, recreational, or neighborhood commercial uses).
- **Goal 3:** A multimodal transportation network that is safe and comfortable in the context of adjacent neighborhoods.
- **Policy 3.11: Right-of-way design.** Design landscaped parkways, medians, and right-of-ways as aesthetic buffers to improve the community’s appearance and encourage non-motorized transportation.
- **Goal 5:** A complete system of trails and pathways accessible to all residents.
- **Policy 5.1: Complete street amenities.** Upgrade existing streets and design new streets to include complete street amenities, prioritizing improvements to bicycle and pedestrian connectivity or safety (consistent with the Bicycle Transportation Master Plan and other master plans).
- **Policy 5.3: Pathways.** Encourage pathways and other pedestrian amenities in Urban Centers and new development 10 acres or larger.



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- **Policy 5.5: Pedestrian access.** Require sidewalks, paths, and crosswalks to provide access to schools, parks, and other activity centers to provide general pedestrian connectivity throughout the city.



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3.0 GREENHOUSE GASES

3.1 ENVIRONMENTAL SETTING

To fully understand global climate change, it is important to recognize the naturally occurring “greenhouse effect” and to define the GHGs that contribute to this phenomenon. Various gases in the earth’s atmosphere, classified as atmospheric GHGs, play a critical role in determining the earth’s surface temperature. Solar radiation enters the earth’s atmosphere from space and a portion of the radiation is absorbed by the earth’s surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect.

3.1.1 Greenhouse Gases

Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide, methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Primary GHGs attributed to global climate change, are discussed in the following subsections.

3.1.1.1 Carbon Dioxide

Carbon dioxide (CO₂) is a colorless, odorless gas. CO₂ is emitted in a number of ways, both naturally and through human activities. The largest source of CO₂ emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO₂ emissions. The atmospheric lifetime of CO₂ is variable because it is so readily exchanged in the atmosphere (EPA 2019b).

3.1.1.2 Methane

CH₄ is a colorless, odorless gas that is not flammable under most circumstances. CH₄ is the major component of natural gas, about 87% by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. CH₄ is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (enteric fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of methane to the atmosphere. Natural sources of methane include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH₄ is about 12 years (EPA 2019b).



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3.1.1.3 Nitrous Oxide

N₂O is a clear, colorless gas with a slightly sweet odor. N₂O is produced by both natural and human-related sources. Primary human-related sources of N₂O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N₂O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N₂O is approximately 120 years (EPA 2017b).

3.1.1.4 Hydrofluorocarbons

HFCs are man-made chemicals, many of which have been developed as alternatives to ozone-depleting substances for industrial, commercial, and consumer products. The only significant emissions of HFCs before 1990 were of the chemical HFC-23, which is generated as a byproduct of the production of HCFC-22 (or Freon 22, used in air conditioning applications). The atmospheric lifetime for HFCs varies from just over a year for HFC-152a to 260 years for HFC-23. Most of the commercially used HFCs have atmospheric lifetimes of less than 15 years (e.g., HFC-134a, which is used in automobile air conditioning and refrigeration, has an atmospheric life of 14 years) (EPA 2017b).

3.1.1.5 Perfluorocarbons

PFCs are colorless, highly dense, chemically inert, and nontoxic. There are seven PFC gases: perfluoromethane (CF₄), perfluoroethane (C₂F₆), perfluoropropane (C₃F₈), perfluorobutane (C₄F₁₀), perfluorocyclobutane (C₄F₈), perfluoropentane (C₅F₁₂), and perfluorohexane (C₆F₁₄). Natural geological emissions have been responsible for the PFCs that have accumulated in the atmosphere in the past; however, the largest current source is aluminum production, which releases CF₄ and C₂F₆ as byproducts. The estimated atmospheric lifetimes for CF₄ and C₂F₆ are 50,000 and 10,000 years, respectively (EPA 2017b).

3.1.1.6 Nitrogen Trifluoride

Nitrogen trifluoride (NF₃) is an inorganic, colorless, odorless, toxic, nonflammable gas used as an etchant in microelectronics. NF₃ is predominantly employed in the cleaning of the plasma-enhanced chemical vapor deposition chambers in the production of liquid crystal displays and silicon-based thin film solar cells. In 2009, NF₃ was listed by California as a potential GHG to be listed and regulated under AB 32 (Section 38505 Health and Safety Code).

3.1.1.7 Sulfur Hexafluoride

SF₆ is an inorganic compound that is colorless, odorless, nontoxic, and generally nonflammable. SF₆ is primarily used as an electrical insulator in high voltage equipment. The electric power industry uses roughly 80% of all SF₆ produced worldwide. Leaks of SF₆ occur from aging equipment and during equipment maintenance and servicing. SF₆ has an atmospheric life of 3,200 years (EPA 2017b).



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3.1.1.8 Black Carbon

Black carbon is the most strongly light-absorbing component of PM emitted from burning fuels such as coal, diesel, and biomass. Black carbon contributes to climate change both directly by absorbing sunlight and indirectly by depositing on snow and by interacting with clouds and affecting cloud formation. Black carbon is considered a short-lived species, which can vary spatially and, consequently, it is very difficult to quantify associated global-warming potentials. The main sources of black carbon in California are wildfires, off-road vehicles (locomotives, marine vessels, tractors, excavators, dozers, etc.), on-road vehicles (cars, trucks, and buses), fireplaces, agricultural waste burning, and prescribed burning (planned burns of forest or wildlands). California has been an international leader in reducing emissions of black carbon, including programs that target reducing PM from diesel engines and burning activities (CARB 2013).

3.1.2 Global Warming Potential

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO₂e), which weight each gas by its global warming potential (GWP).

Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted. Based on a 100-year time horizon, Methane traps over 25 times more heat per molecule than CO₂, and N₂O absorbs roughly 298 times more heat per molecule than CO₂. Additional GHGs with high GWP include NF₃, SF₆, PFCs, and black carbon.

3.1.3 Sources of Greenhouse Gas Emissions

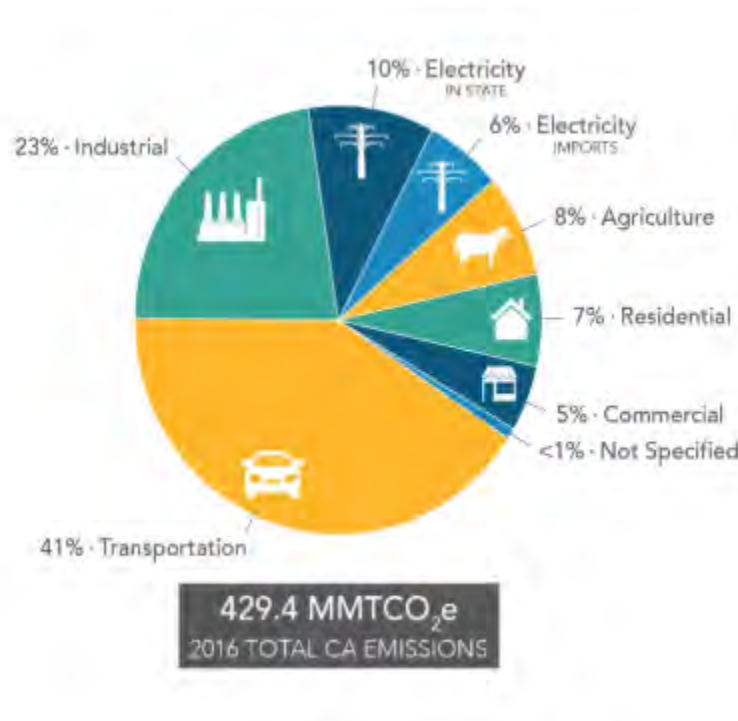
On a global scale, GHG emissions are predominantly associated with activities related to energy production; changes in land use, such as deforestation and land clearing; industrial sources; agricultural activities; transportation; waste and wastewater generation; and commercial and residential land uses. World-wide, energy production including the burning of coal, natural gas, and oil for electricity and heat is the largest single source of global GHG emissions.

California's GHG emissions inventory is depicted in Figure 1.



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Figure 1 GHG Emissions by Economic Sector



Source: CARB 2018b

In 2015, GHG emissions within California totaled 429.4 million metric tons (MMT) of CO₂e. Within California, the transportation sector is the largest contributor, accounting for approximately 41% of the total statewide GHG emissions. Emissions associated with industrial uses are the second largest contributor, totaling roughly 23%. Electricity generation totaled roughly 16% (CARB 2018b).

3.1.4 Effects of Global Climate Change

There are uncertainties as to exactly what the climate changes will be in various local areas of the earth. 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, increased air pollution episodes, and the consequence of these effects on the economy.

Within California, climate changes would likely alter the ecological characteristics of many ecosystems throughout the state. Such alterations would likely include increases in surface temperatures and changes in the form, timing, and intensity of precipitation. For instance, historical records are depicting an increasing trend toward earlier snowmelt in the Sierra Nevada. This snow pack is a principal supply of water for the state, providing roughly 50% of state’s annual runoff. If this trend continues, some areas of the state may experience an increased danger of floods during the winter months and possible



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exhaustion of the snowpack during spring and summer months. An earlier snowmelt would also impact the state's energy resources. An early exhaustion of the Sierra snowpack, may force electricity producers to switch to more costly or non-renewable forms of electricity generation during spring and summer months. A changing climate may also impact agricultural crop yields, coastal structures, and biodiversity. As a result, resultant changes in climate will likely have detrimental effects on some of California's largest industries, including agriculture, wine, tourism, skiing, recreational and commercial fishing, and forestry.

3.2 REGULATORY SETTING

3.2.1 Federal

3.2.1.1 U.S. Environmental Protection Agency "Endangerment" and "Cause or Contribute" Findings

The U.S. Supreme Court has held that the EPA must consider regulation of motor vehicle GHG emissions. In *Massachusetts v. Environmental Protection Agency et al.*, twelve states and cities, including California, together with several environmental organizations sued to require the EPA to regulate GHGs as pollutants under the FCAA (127 S. Ct. 1438 (2007)). The Supreme Court ruled that GHGs fit within the FCAA's definition of a pollutant and the EPA had the authority to regulate GHGs.

On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the FCAA:

- **Endangerment Finding:** The current and projected concentrations of the six key GHGs - CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆—in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The combined emissions of these GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution that threatens public health and welfare.

In collaboration with the National Highway Traffic Safety Administration, the EPA adopted GHG emission standards for light-duty vehicles in May 2010 and for heavy-duty vehicles in August of 2011. In 2012, the agencies jointly adopted more stringent Phase 2 standards for light duty cars and trucks, which would cover model years 2017 through 2025. In August of 2016, the agencies adopted more stringent Phase 2 standards for medium- and heavy-duty vehicles, which would cover model years 2018 through 2027 for certain trailers and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks.

President Obama and the EPA announced the Clean Power Plan in August of 2015. In 2030, the Clean Power Plan would cut carbon pollution from power plants by 32 percent below 2005 levels and increase renewable energy generation percent to nearly 20 percent of all power supplied. By comparison, in 2015, renewable energy accounted for about 13% of electricity generation. However, on February 9, 2016, the U.S. Supreme Court stayed implementation of the Clean Power Plan pending judicial review and on



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March 28, 2017, the Executive Order on Energy Independence (EO 13783) was signed and called for a review of the Clean Power Plan (USEPA 2018).

3.2.1.2 Mandatory Greenhouse Gas Reporting Rule

On September 22, 2009, the EPA released its final Greenhouse Gas Reporting Rule (Reporting Rule). The Reporting Rule is a response to the fiscal year 2008 Consolidated Appropriations Act (H.R. 2764; Public Law 110-161), that required the EPA to develop "...mandatory reporting of GHGs above appropriate thresholds in all sectors of the economy..." The Reporting Rule applies to most entities that emit 25,000 metric tons of CO₂e (MTCO₂e) or more per year. Since 2010, facility owners must submit an annual GHG emissions report with detailed calculations of facility GHG emissions. The Reporting Rule also mandates recordkeeping and administrative requirements in order for the EPA to verify annual GHG emissions reports.

3.2.2 State

3.2.2.1 Assembly Bill 1493 (Pavley)

AB 1493 (Pavley) of 2002 (Health and Safety Code Sections 42823 and 43018.5) requires the CARB to develop and adopt the nation's first GHG emission standards for automobiles. These standards are also known as Pavley Standards. The California Legislature declared in AB 1493 that global warming is a matter of increasing concern for public health and the environment. It cites several risks that California faces from climate change, including a reduction in the state's water supply, an increase in air pollution caused by higher temperatures, harm to agriculture, an increase in wildfires, damage to the coastline, and economic losses caused by higher food, water, energy, and insurance prices. The bill also states that technological solutions to reduce GHG emissions would stimulate California's economy and provide jobs. In 2004, the State of California submitted a request for a waiver from federal clean air regulations, as the state is authorized to do under the CCAA, to allow the state to require reduced tailpipe emissions of CO₂. In late 2007, the EPA denied California's waiver request and declined to promulgate adequate federal regulations limiting GHG emissions. In early 2008, the state brought suit against the EPA related to this denial.

In January 2009, President Obama instructed the EPA to reconsider the Bush Administration's denial of California's and 13 other states' requests to implement global warming pollution standards for cars and trucks. In June 2009, the EPA granted California's waiver request, enabling the state to enforce its GHG emissions standards for new motor vehicles beginning with the current model year.

3.2.2.2 Senate Bills 1078 and 107 and Executive Orders S-14-08 and S-21-09 (California Renewables Portfolio Standard)

Senate Bill (SB) 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20% of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010.



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In November 2008, then-Governor Schwarzenegger signed Executive Order (EO) S-14-08, which expanded the state's Renewable Portfolio Standard to 33% renewable power by 2020. In September 2009, then-Governor Schwarzenegger continued California's commitment to the Renewable Portfolio Standard by signing E.O. S-21-09, which directs the CARB under its AB 32 authority to enact regulations to help the state meet its Renewable Portfolio Standard goal of 33% renewable energy by 2020.

The 33% by 2020 goal was codified in April 2011 with SB X1-2, which was signed by Governor Edmund G. Brown, Jr. This new Renewable Portfolio Standard (RPS) preempts the CARB 33% Renewable Electricity Standard and applies to all electricity retailers in the state, including publicly owned utilities (POUs), investor-owned utilities, electricity service providers, and community choice aggregators. Consequently, Pacific Gas & Electric (PG&E), who would be the electricity provider for the proposed projects, must meet the 33% goal by 2020. All of these entities must adopt the new RPS goals of 20% of retail sales from renewables by the end of 2013 and 25% by the end of 2016, with the 33% requirement being met by the end of 2020.

3.2.2.3 Executive Order No. S-3-05

EO S-3-05 (State of California) proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, to the 1990 level by 2020, and to 80% below the 1990 level by 2050.

The EO directed the secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The secretary will also submit biannual reports to the governor and state legislature describing (1) progress made toward reaching the emission targets, (2) impacts of global warming on California's resources, and (3) mitigation and adaptation plans to combat these impacts. To comply with the EO, the secretary of CalEPA created a Climate Action Team made up of members from various state agencies and commissions. The Climate Action Team released its first report in March 2006 and continues to release periodic reports on progress. The report proposed to achieve the targets by building on voluntary actions of California businesses, local government and community actions, as well as through state incentive and regulatory programs.

3.2.2.4 Executive Order No. B-30-15

On April 29, 2015, Governor Edmund G. Brown Jr. issued an executive order to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's executive order aligns California's GHG reduction targets with those of leading international governments ahead of the United Nations Climate Change Conference in Paris late 2015. The executive order sets a new interim statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050 and directs the CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of MMTCO_{2e}. The executive order also requires the State's climate adaptation plan to be updated every three years and for the State to continue its climate change research program, among other



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provisions. As with Executive Order S-3-05, this executive order is not legally enforceable against local governments and the private sector. Legislation that would update AB 32 to provide post-2020 targets was signed by the Governor in 2016. SB 32 includes a 2030 mandate matching the requirements of the Executive Order.

3.2.2.5 Executive Order No. S-01-07

The governor signed Executive Order S 01-07 on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In particular, the executive order established a Low Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, the CARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. This analysis supporting development of the protocols was included in the State Implementation Plan for alternative fuels and was submitted to CARB for consideration as an "early action" item under AB 32. The CARB adopted the Low Carbon Fuel Standard on April 23, 2009.

The Low Carbon Fuel Standard was subject to legal challenge in 2011. Ultimately, ARB was required to bring a new LCFS regulation to the Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low-carbon fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. The Office of Administrative Law (OAL) approved the regulation on November 16, 2015 (CARB 2015).

3.2.2.6 Executive Order No. S-13-08

Executive Order S-13-08 states that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the order, the 2009 California Climate Adaptation Strategy (California Natural Resources Agency 2009) was adopted, which is the ". . . first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

3.2.2.7 Assembly Bill 32 - California Global Warming Solutions Act of 2006

AB 32 requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. The gases that are regulated by AB 32 include carbon dioxide, methane, N₂O, HFCs, perfluorocarbons, NF₃, and sulfur hexafluoride. The reduction to 1990 levels will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary



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sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires that CARB adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrives at the cap, institute a schedule to meet the emissions cap, and develop tracking, reporting, and enforcement mechanisms to ensure that the state achieves reductions in GHG emissions necessary to meet the cap. AB 32 also includes guidance to institute emissions reductions in an economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions (CARB 2017b).

3.2.2.8 Climate Change Scoping Plan

In October 2008, CARB published its Climate Change Proposed Scoping Plan, which is the state's plan to achieve GHG reductions in California required by AB 32. The Scoping Plan contains the main strategies California will implement to achieve reduction of 169 MTCO_{2e}, or approximately 30% from the state's projected 2020 emissions level of 596 MMTCO_{2e} (million metric tons of carbon dioxide equivalents) under a business-as-usual scenario (this is a reduction of 42 MMTCO_{2e}, or almost 10%, from 2002–2004 average emissions). The Scoping Plan also includes CARB-recommended GHG reductions for each emissions sector of the state's GHG inventory. The largest proposed GHG reduction recommendations are from improving emissions standards for light-duty vehicles (estimated reductions of 31.7 MMTCO_{2e}), implementation of the Low Carbon Fuel Standard (15.0 MMTCO_{2e}) program, energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMTCO_{2e}), and a renewable portfolio standard for electricity production (21.3 MMTCO_{2e}). The Scoping Plan identifies the local equivalent of AB 32 targets as a 15% reduction below baseline GHG emissions level, with baseline interpreted as GHG emissions levels between 2003 and 2008.

A key component of the Scoping Plan is the Renewable Portfolio Standard, which is intended to increase the percentage of renewables in California's electricity mix to 33% by year 2020, resulting in a reduction of 21.3 MMTCO_{2e}. Sources of renewable energy include, but are not limited to, biomass, wind, solar, geothermal, hydroelectric, and anaerobic digestion. Increasing the use of renewables will decrease California's reliance on fossil fuels, thus reducing GHG emissions.

The Scoping Plan states that land use planning and urban growth decisions will play important roles in the state's GHG reductions because local governments have primary authority to plan, zone, approve, and permit how land is developed to accommodate population growth and the changing needs of their jurisdictions. Meanwhile, CARB is also developing an additional protocol for community emissions. CARB further acknowledges that decisions on how land is used will have large impacts on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emissions sectors. The Scoping Plan states that the ultimate GHG reduction assignment to local government operations is to be determined. With regard to land use planning, the Scoping Plan expects approximately 5.0 MMTCO_{2e} will be achieved associated with implementation of Senate Bill 375,



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which is discussed further below. The Climate Change Proposed Scoping Plan was approved by CARB on December 11, 2008.

The First Update to the Climate Change Scoping Plan was approved by CARB on May 22, 2014. CARB adopted the 2017 Climate Change Scoping Plan Update in November 2017 to meet the GHG reduction requirement set forth in SB 32. On December 14, 2017, CARB approved the Second Update to the Climate Change Scoping Plan, the 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target.

3.2.2.9 Senate Bill 32

SB 32 was signed by Governor Brown on September 8, 2016. SB 32 effectively extends California's GHG emission-reduction goals from year 2020 to year 2030. This new emission-reduction target of 40% below 1990 levels by 2030 is intended to promote further GHG-reductions in support of the state's ultimate goal of reducing GHG emissions by 80% below 1990 levels by 2050. SB 32 also directs the CARB to update the Climate Change Scoping Plan to address this interim 2030 emission-reduction target.

3.2.2.10 Senate Bill 375 (Sustainable Communities and Climate Protection Act)

SB 375 supports the state's climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of developing more sustainable communities. Under SB 375, CARB sets regional targets for GHG emissions reductions associated with passenger vehicle use. Each of California's metropolitan planning organizations must prepare a "sustainable communities strategy" (SCS) as an integral part of its regional transportation plan (RTP). The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its GHG emission reduction targets. The Sustainable Communities Act also establishes incentives to encourage local governments and developers to implement the identified GHG- reduction strategies.

3.2.2.11 Cap-and-Trade Regulation

The cap-and-trade regulation is a key element in California's climate plan. It sets a statewide limit on sources responsible for 85 percent of California's greenhouse gas emissions and establishes a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy. The cap-and-trade rules came into effect on January 1, 2013 and apply to large electric power plants and large industrial plants. In 2015, they will extend to fuel distributors (including distributors of heating and transportation fuels). At that stage, the program will encompass around 360 businesses throughout California and nearly 85% of the state's total greenhouse gas emissions.

Under the cap-and-trade regulation, companies must hold enough emission allowances to cover their emissions and are free to buy and sell allowances on the open market. California held its first auction of greenhouse gas allowances on November 14, 2012. California's GHG cap-and-trade system will reduce GHG emissions from regulated entities by approximately 16 percent, or more, by 2020.



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3.2.2.12 Assembly Bill 398

The Governor signed AB 398 on July 25, 2017 to extend the Cap and Trade Program to 2030. The legislation includes provisions to ensure that offsets used by sources are limited to 4 percent of their compliance obligation from 2021 through 2025 and 6 percent from 2026 through 2030. AB 398 also prevents Air Districts from adopting or implementing emission reduction rules from stationary sources that are also subject to the Cap and Trade Program.

3.2.2.13 California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

Title 24. California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions.

Title 20. California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4, Sections 1601-1608: Appliance Efficiency Regulations regulates the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the state and those designed and sold exclusively for use in recreational vehicles or other mobile equipment.

California Green Building Standards Code is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings. It does not prevent a local jurisdiction from adopting a more stringent code as state law provides methods for local enhancements. The Code recognizes that many jurisdictions have developed existing construction and demolition ordinances and defers to them as the ruling guidance provided they provide a minimum 50-percent diversion requirement. The code also provides exemptions for areas not served by construction and demolition recycling infrastructure. State building code provides the minimum standard that buildings need to meet in order to be certified for occupancy. Enforcement is generally through the local building official.

3.2.3 San Joaquin Valley Air Pollution Control District

3.2.3.1 Climate Change Action Plan

On August 21, 2008, the SJVAPCD Governing Board approved a proposal, called the Climate Change Action Plan, to begin a public process to bring together stakeholders, land use agencies, environmental groups, and business groups, and to conduct public workshops to develop comprehensive policies for



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CEQA guidelines, a carbon exchange bank, and voluntary GHG emissions mitigation agreements for the Governing Board's consideration. The Climate Change Action Plan contained the following goals and actions:

Goals

1. Assist local land-use agencies with California Environmental Quality Act (CEQA) issues relative to projects with greenhouse gas emissions increases.
2. Assist Valley businesses in complying with mandates of AB 32 (Global Warming Solutions Act of 2006).
3. Ensure that climate protection measures do not cause increases in toxic or criteria pollutants that adversely impact public health or environmental justice communities.

Actions

1. Authorize the Air Pollution Control Officer to develop greenhouse gas significance threshold(s) or other mechanisms to address CEQA projects with greenhouse gas emissions increases. Begin the requisite public process, including public workshops, and develop recommendations for Governing Board consideration in the spring of 2009.
2. Authorize the Air Pollution Control Officer to develop necessary regulations and instruments for establishment and administration of the San Joaquin Valley Carbon Exchange Bank for voluntary greenhouse gas reductions created in the Valley. Begin the requisite public process, including public workshops, and develop recommendations for Governing Board consideration in spring 2009.
3. Authorize the Air Pollution Control Officer to enhance the District's existing criteria pollutant emissions inventory reporting system to allow businesses subject to AB 32 emission reporting requirements to submit simultaneous streamlined reports to the District and the state of California with minimal duplication.
4. Authorize the Air Pollution Control Officer to develop and administer voluntary greenhouse gas emission reduction agreements to mitigate proposed greenhouse gas increases from new projects.
5. Direct the Air Pollution Control Officer to support climate protection measures that reduce greenhouse gas emissions as well as toxic and criteria pollutants. Oppose measures that result in a significant increase in toxic or criteria pollutant emissions in already impacted areas.

3.2.3.2 SJVAPCD CEQA GHG Guidance

On December 17, 2009, the SJVAPCD Governing Board adopted: "Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA" and the policy: "District Policy – Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving



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as the Lead Agency.” The SJVAPCD concluded that the existing science is inadequate to support quantification of the impacts that project-specific GHG emissions have on global climatic change. The SJVAPCD found that the effects of project-specific emissions to be cumulative, and without mitigation, their incremental contribution to global climatic change could be considered cumulatively considerable. The SJVAPCD found that this cumulative impact is best addressed by requiring all projects to reduce their GHG emissions, whether through project design elements or mitigation.

The SJVAPCD’s approach is intended to streamline the process of determining if project-specific GHG emissions would have a significant effect. Projects exempt from the requirements of CEQA, and projects complying with an approved plan or mitigation program would be determined to have a less than significant cumulative impact. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources and have a certified Final CEQA document.

For non-exempt projects, those projects for which there is not applicable approved plan or program, or those projects not complying with an approved plan or program, the lead agency would evaluate the project against performance-based standards and would require the adoption of design elements, known as a Best Performance Standard, to reduce GHG emissions. The Best Performance Standards have not yet fully been established, though they must be designed to effect a 29-percent reduction when compared with the “business-as-usual” projections identified in ARB’s AB 32 Scoping Plan.

“Business-as-usual” is the emissions occurring in 2020 if the average baseline emissions during the 2002–2004 period were grown to 2020 levels, without control. These standards thus would carry with them pre-quantified emissions reductions, eliminating the need for project-specific quantification. Therefore, projects incorporating Best Performance Standards would not require specific quantification of GHG emissions, and automatically would be determined to have a less than significant cumulative impact for GHG emissions.

For stationary source permitting projects, Best Performance Standards means, “The most stringent of the identified alternatives for control of GHG emissions, including type of equipment, design of equipment and operational and maintenance practices, which are achieved-in-practice for the identified service, operation, or emissions unit class.” The SJVAPCD has identified Best Performance Standards for the following sources: boilers; dryers and dehydrators; oil and gas extraction, storage, transportation, and refining operations; cogeneration; gasoline dispensing facilities; volatile organic compound control technology; and steam generators.

3.2.4 City of Clovis

The City of Clovis does not currently have formal greenhouse gas emissions reduction plans or recommended emissions thresholds for determining significance associated with greenhouse gas emissions from development projects.

City of Clovis General Plan

The 2014 General Plan includes the following applicable goals and policies related to improving air quality that may also co-benefit climate change impacts (City of Clovis 2014) :



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Air Quality Element

- **Goal 1:** A local environment that is protected from air pollution and emissions.
- **Policy 1.1: Land use and transportation.** Reduce greenhouse gas and other local pollutant emissions through mixed use and transit-oriented development and well-designed transit, pedestrian, and bicycle systems.
- **Policy 1.3: Construction activities.** Encourage the use of best management practices during construction activities to reduce emissions of criteria pollutants as outlined by the San Joaquin Valley Air Pollution Control District (SJVAPCD).
- **Policy 1.8: Trees.** Maintain or plant trees where appropriate to provide shade, absorb carbon, improve oxygenation, slow stormwater runoff, and reduce the heat island effect.
- **Goal 2:** A region with healthy air quality and lower greenhouse gas emissions.
- **Policy 2.1: Regional coordination.** Support regional efforts to reduce air pollution (criteria air pollutants and greenhouse gas emissions) and collaborate with other agencies to improve air quality at the emission source and reduce vehicle miles traveled.
- **Policy 2.2: Cross-jurisdictional issues.** Collaborate with regional agencies and surrounding jurisdictions to address cross-jurisdictional transportation and air quality issues.
- **Policy 2.6: Innovative mitigation.** Encourage innovative mitigation measures to reduce air quality impacts by coordinating with the SJVAPCD, project applicants, and other interested parties.

Open Space and Conservation Element

- **Policy 3.5: Energy and water conservation.** Encourage new development and substantial rehabilitation projects to exceed energy and water conservation and reduction standards set in the California Building Code.
- **Policy 3.6: Renewable Energy.** Promote the use of renewable and sustainable energy sources to serve public and private sector development.
- **Policy 3.7: Construction and design.** Encourage new construction to incorporate energy efficient building and site design strategies.

Circulation Element

- **Goal 1:** A context-sensitive and “complete streets” transportation network that prioritizes effective connectivity and accommodates a comprehensive range of mobility needs.



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- **Policy 1.1: Multimodal network.** The City shall plan, design, and maintain the transportation network to promote safe and convenient travel for all users: pedestrian, bicyclists, transit riders, freight, and motorists.
- **Policy 1.2: Transportation decisions.** Decisions should balance the comfort, convenience, and safety of pedestrian, bicyclists, and motorists.
- **Policy 1.4: Jobs and housing.** Encourage infill development that would provide jobs and services closer to housing, and vice versa, to reduce citywide vehicle miles traveled and effectively utilize the existing transportation infrastructure.
- **Policy 1.5: Neighborhood connectivity.** The transportation network shall provide multimodal access between neighborhoods and neighborhood-serving uses (educational, recreational, or neighborhood commercial uses).
- **Goal 3:** A multimodal transportation network that is safe and comfortable in the context of adjacent neighborhoods.
- **Policy 3.11: Right-of-way design.** Design landscaped parkways, medians, and right-of-ways as aesthetic buffers to improve the community's appearance and encourage non-motorized transportation.
- **Goal 5:** A complete system of trails and pathways accessible to all residents.
- **Policy 5.1: Complete street amenities.** Upgrade existing streets and design new streets to include complete street amenities, prioritizing improvements to bicycle and pedestrian connectivity or safety (consistent with the Bicycle Transportation Master Plan and other master plans).
- **Policy 5.3: Pathways.** Encourage pathways and other pedestrian amenities in Urban Centers and new development 10 acres or larger.
- **Policy 5.5: Pedestrian access.** Require sidewalks, paths, and crosswalks to provide access to schools, parks, and other activity centers to provide general pedestrian connectivity throughout the city.



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4.0 MODELING PARAMETERS AND ASSUMPTIONS

4.1 MODEL SELECTION

The California Emissions Estimator Model (CalEEMod) is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. CalEEMod quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Further, CalEEMod identifies mitigation measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from measures chosen by the user.

CalEEMod was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California Air Districts. Default data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California Air Districts to account for local requirements and conditions.

CalEEMod is a comprehensive tool for quantifying air quality impacts from land use projects located throughout California. The model can be used for a variety of situations where an air quality analysis is necessary or desirable such as preparing CEQA or National Environmental Policy Act documents, conducting pre-project planning, and, verifying compliance with local air quality rules and regulations, etc.

CalEEMod version 2016.3.2 was used to estimate construction and operational impacts of the Project.

4.2 AIR POLLUTANTS AND GHGS ASSESSED

4.2.1 Criteria Air Pollutants Assessed

The following criteria air pollutants are assessed in this analysis: ROG, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}.

Note that the proposed Project would emit ozone precursors ROG and NO_x. However, the proposed Project would not directly emit ozone, since it is formed in the atmosphere during the photochemical reaction of ozone precursors.

4.2.2 GHGs Assessed

This analysis is restricted to GHGs identified by AB 32, which include CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, and NF₃. The proposed Project would generate a variety of GHGs, including several defined by AB 32 such as CO₂, CH₄ and N₂O.

Certain GHGs defined by AB 32 would not be emitted by the project. PFCs, SF₆, and NF₃ are typically used in industrial applications, none of which would be used by the proposed Project. Therefore, it is not anticipated that the proposed Project would emit those GHGs.



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GHG emissions associated with the proposed Project construction, and future operations were estimated using CO_{2e} emissions as a proxy for all GHG emissions. In order to obtain the CO_{2e}, an individual GHG is multiplied by its GWP. The GWP designates on a pound for pound basis the potency of the GHG compared to CO₂.

4.3 ASSUMPTIONS

4.3.1 Construction Modeling Assumptions

4.3.1.1 Construction Schedule

Phase 1 of Project East- Tract 6239 (68 dwelling units) would begin in September 2019 and be completed by March 2020. Phase 2 of Project East- Tract 6239 (94 dwelling units) would begin in April 2020 and be completed in March 2021. Project West- Tract 6264 would begin construction in June 2020 and be completed by January 2021. Table 5 provides the anticipated construction schedule and represents a “worst-case” analysis scenario. Construction occurring any time after September 2020 would result in decreased emissions since emission factors for construction equipment decrease as the analysis year is pushed out due to increasing regulation, such as the CARB In-Use Off-Road Diesel-Fueled Fleets regulation requiring the use of cleaner construction equipment fleets. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per CEQA guidelines.

Table 5 Construction Schedule

Project	Phase	Anticipated Phase Start Date	Anticipated Phase End Date	Total Number of Days
Project East – Phase 1 Tract 6239	Site Preparation	9/23/2019	10/4/2019	10
	Site Grading	10/5/2019	11/15/2019	30
	Building Construction	11/16/2019	2/28/2020	75
	Paving	2/29/2020	3/13/2020	10
	Architectural Coating	3/14/2020	3/27/2020	10
Project East – Phase 2 Tract 6239	Site Preparation	4/6/2020	5/1/2020	20
	Site Grading	5/2/2020	7/3/2020	45
	Building Construction	7/4/2020	12/11/2020	115
	Paving	12/12/2020	1/29/2021	35
	Architectural Coating	1/30/2021	3/19/2021	35
Project West –Tract 6264	Site Preparation	6/1/2020	6/5/2020	5
	Site Grading	6/6/2020	6/17/2020	8
	Building Construction	6/18/2020	11/25/2020	115



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	Paving	11/26/2020	12/21/2020	18
	Architectural Coating	12/22/2020	1/14/2021	18

Source: Granville Homes 2019, personal communication.

4.3.1.2 Construction Off-Road Equipment

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from on-site and off-site activities. On-site emissions principally consist of exhaust emissions from the activity levels of heavy-duty construction equipment, motor vehicle operation, and fugitive dust (mainly PM₁₀) from disturbed soil.

The CalEEMod default estimated equipment was used. The estimate is based on the proposed project size. The off-road construction equipment list is shown in Table 6. The activity for construction equipment is based on the horsepower and load factors of the equipment. In general, the horsepower is the power of an engine—the greater the horsepower, the greater the power. The load factor is the average power of a given piece of equipment while in operation compared with its maximum rated horsepower. A load factor of 1.0 indicates that a piece of equipment continually operates at its maximum operating capacity.

Table 6 Off-Road Construction Equipment

Project	Phase	Equipment	Unit Amount	Hours Per Day	Horsepower	Load Factor
Project East – Phase 1 Tract 6239	Site Preparation	Rubber Tired Dozers	3	8	247	0.40
		Tractors/Loaders/Backhoes	4	8	97	0.37
	Site Grading	Excavators	2	8	158	0.38
		Graders	1	8	187	0.41
		Rubber Tired Dozers	1	8	247	0.40
		Scrapers	2	8	367	0.48
		Tractors/Loaders/Backhoes	2	8	97	0.37
		Building Construction	Cranes	1	7	231
	Forklifts		12	8	89	0.20
	Generator Sets		1	8	84	0.74
	Tractors/Loaders/Backhoes		12	7	97	0.37
	Welders		4	8	46	0.45
	Paving	Pavers	4	8	130	0.42
		Paving Equipment	4	8	132	0.36
		Rollers	4	8	80	0.38
	Architectural Coating	Air Compressors	2	8	78	0.48
			Rubber Tired Dozers	3	8	247



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Project East – Phase 2 Tract 6239	Site Preparation	Tractors/Loaders/Backhoes	4	8	97	0.37
	Site Grading	Excavators	2	8	158	0.38
		Graders	1	8	187	0.41
		Rubber Tired Dozers	1	8	247	0.40
		Scrapers	2	8	367	0.48
		Tractors/Loaders/Backhoes	2	8	97	0.37
	Building Construction	Cranes	1	7	231	0.29
		Forklifts	12	8	89	0.20
		Generator Sets	1	8	84	0.74
		Tractors/Loaders/Backhoes	12	7	97	0.37
		Welders	4	8	46	0.45
	Paving	Pavers	2	8	130	0.42
		Paving Equipment	2	8	132	0.36
		Rollers	2	8	80	0.38
	Architectural Coating	Air Compressors	1	6	78	0.48
	Project West – Tract 6264	Site Preparation	Rubber Tired Dozers	3	8	247
Tractors/Loaders/Backhoes			4	8	97	0.37
Grading		Excavators	1	8	158	0.38
		Graders	1	8	187	0.41
		Rubber Tired Dozers	1	8	247	0.40
		Tractors/Loaders/Backhoes	3	8	97	0.37
Building Construction		Cranes	1	7	231	0.29
		Forklifts	6	8	89	0.20
		Generator Sets	1	8	84	0.74
		Tractors/Loaders/Backhoes	6	7	97	0.37
		Welders	2	8	46	0.45
Paving		Pavers	2	8	130	0.42
		Paving Equipment	2	8	132	0.36
		Rollers	2	8	80	0.38
Architectural Coating		Air Compressors	1	6	78	0.48

Source: Stantec Consulting Services Inc. CalEEMod 2016.3.2

4.3.1.3 On-Road Construction-Related Vehicle Trips

Off-site construction emissions are caused by motor vehicle exhaust from delivery vehicles, worker traffic, and road dust (PM₁₀ and PM_{2.5}). Table 7 provides a summary of the construction-related vehicle trips. CalEEMod default values were used to estimate the number of construction-related vehicle trips.



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CalEEMod quantifies the number of construction workers by multiplying 1.25 times the number of pieces of equipment for all phases (except Building Construction and Architectural Coating). For the Building Construction, the number of workers is derived from a study conducted by the Sacramento Metropolitan Air Quality Management District (SMAQMD) which determined the number of workers needed for various types of land uses and corresponding project size. The number of vendor trips during the Building Construction phase is also derived from a study conducted by the SMAQMD. The SMAQMD trip survey during construction counted cement and water trucks as vendor trips (instead of counting them as off-road vehicle trips) and these trip rates were incorporated into the calculations for the Building Construction phase. The default values for hauling trips are based on the assumption that a truck can haul 20 tons (or 16 cubic yards) of material per load. If one load of material is delivered, CalEEMod assumes that one haul truck importing material will also have a return trip with an empty truck (e.g., 2 one-way trips).

The fleet mix for worker trips is light-duty passenger vehicles to light-duty trucks. The vendor trips fleet mix is composed of a mixture of medium and heavy-duty diesel trucks. The hauling trips are assumed to be 100% heavy-duty diesel truck trips.

CalEEMod default trip lengths were used for the worker (10.8 miles), vendor (7.3 miles), and hauling trips (20 miles).

Table 7 Construction-Related Vehicle Trips

Project	Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length
Project East-Phase 1 Tract 6239	Site Preparation	18	0	0	10.8	7.3	20
	Grading	20	0	0	10.8	7.3	20
	Building Construction	24	7	0	10.8	7.3	20
	Paving	15	0	0	10.8	7.3	20
	Architectural Coating	5	0	0	10.8	7.3	20
Project East-Phase 2 Tract 6239	Site Preparation	18	0	0	10.8	7.3	20
	Grading	20	0	0	10.8	7.3	20
	Building Construction	34	10	0	10.8	7.3	20
	Paving	15	0	0	10.8	7.3	20
	Architectural Coating	7	0	0	10.8	7.3	20
Project West – Tract 6264	Site Preparation	18	0	0	10.8	7.3	20
	Grading	15	0	0	10.8	7.3	20



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	Building Construction	13	4	0	10.8	7.3	20
	Paving	15	0	0	10.8	7.3	20
	Architectural Coating	3	0	0	10.8	7.3	20

Source: Stantec Consulting Services Inc., CalEEMod 2016.3.2

4.3.2 Operational Modeling Assumptions

Operational emissions are those emissions that occur during operation of the proposed Project. The sources are summarized below.

4.3.2.1 Motor Vehicles

Motor vehicle emissions refer to exhaust and road dust emissions from the automobiles that would travel to and from the proposed project site. The trip generation rate from the Traffic Study was used for the project.

Table 8 Trip Generation Rates

Land Use Type	Size Dwelling Unit (du)	Weekday Rate/du	Saturday Rate/du	Sunday Rate/du
Single-Family Detached Housing (ITE 210)	199	9.44	9.54	8.55

Types of Vehicle Trips

Primary trips are trips specifically made to the Project site and represent new vehicle trips to the area. A pass-by trip accounts for vehicles already on the roadway network that stop at the Project site as they pass-by; the pass-by trips are existing vehicle trips in the community. Diverted trips represent new trips to the site and adjacent streets, but not to the area. CalEEMod default trip type percentages were used – 86 percent primary, 11 percent diverted, and 3 percent pass-by.

Trip Lengths

The CalEEMod default trip lengths for an urban setting in Fresno County were used in this analysis. Residential trip types are defined as home to work (H-W), home to shopping (H-S), and home to other (H-O). The CalEEMod default trip lengths of 10.8 miles for H-W, 7.3 for H-S, and 7.5 for H-O were used.

Vehicle Fleet Mix

The vehicle fleet mix is defined as the mix of motor vehicle classes active during the operation of the proposed Project. Emission factors are assigned to the expected vehicle mix as a function of vehicle class, speed, and fuel use (gasoline- and diesel-powered vehicles). The SJVAPCD default residential fleet mix for the operational years were used.



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Area Sources

Area sources consist of hearths, consumer products, area architectural coatings, and landscaping emissions.

Consumer Products

Consumer products are various solvents used in non-industrial applications that emit ROG emissions during their product use. These typically include cleaning supplies, kitchen aerosols, cosmetics and toiletries. The default CalEEMod value was used for this Project.

Architectural Coatings (Painting)

Paints release VOC emissions. The homes would be repainted on occasion. CalEEMod defaults were used for this purpose.

Landscaping Emissions

CalEEMod estimated a total of 180 days for which landscaping equipment would be used to estimate potential emissions for the proposed Project.

4.3.2.2 Energy Use

The emissions associated with the home electricity and natural gas usage are estimated based on the land use type and size. The electricity energy use is in units of kilowatt hours per size metric for each land use type. Natural gas use is in units of a thousand British Thermal Units per size metric for each land use type. CalEEMod default values for single family homes were used.

4.3.2.3 Water and Wastewater Use

Supplying and treating water for the homes generates GHG emissions. Depending on the specific water supply used or treatment method used these numbers can vary over a wide range. Supplying water is bringing the water from its primary source such as the ground, river, or snowpack to the treatment plant. Distributing the water is bringing the water from the treatment plant to the end users. The electricity intensity factors are multiplied by the utility GHG emissions intensity factors for the GHGs and are classified as indirect emissions.

Wastewater may also have direct emissions of GHGs. These depend on the type of wastewater treatment system (e.g., septic, aerobic or lagoons) used and therefore the wastewater treatment type percentages are variables.

4.3.2.4 CalEEMod default values for single family homes were used. Solid Waste

GHG emissions are associated with the disposal of solid waste generated by the proposed Project into landfills. The CalEEMod default value for single family homes was used.



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5.0 AIR QUALITY IMPACT ANALYSIS

This section calculates the expected emissions from construction and operation of the proposed project as a necessary requisite for assessing the regulatory significance of proposed Project emissions on a regional and localized level.

5.1 CEQA GUIDELINES

According to the CEQA Guidelines' Appendix G Environmental Checklist, the following questions are analyzed and evaluated to determine whether impacts to air quality are significant environmental effects.

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the Project:

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

5.1.1 Thresholds of Significance

While the final determination of whether a project is significant is within the purview of the Lead Agency pursuant to Section 15064(b) of the CEQA Guidelines, the SJVAPCD recommends that its quantitative air pollution thresholds (shown in Table 9) be used to determine the significance of project emissions. If the Lead Agency finds that the project has the potential to exceed these air pollution thresholds, the project should be considered to have significant air quality impacts.



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Table 9 SJVAPCD Significance Thresholds

Pollutant	Significance Threshold	
	Construction Emissions (tons/year)	Operational Emission (tons/year)
CO	100	100
NO _x	10	10
ROGs	10	10
SO _x	27	27
PM ₁₀	15	15
PM _{2.5}	15	15

Source: SJVAPCD 2015

5.2 AIR IMPACT ANALYSIS

Impact AIR-1 Conflict with or obstruct implementation of the applicable air quality plan?

Impact Analysis

The CEQA Guidelines indicate that a significant impact would occur if the Project would conflict with or obstruct implementation of the applicable air quality plan. The GAMAQI does not provide specific guidance on analyzing conformity with the Air Quality Plan (AQP). Therefore, this document proposes the following criteria for determining project consistency with the current AQPs:

1. Will the project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQPs? This measure is determined by comparison to the regional and localized thresholds identified by the District for Regional and Local Air Pollutants.
2. Will the project conform to the assumptions in the AQPs?
3. Will the project comply with applicable control measures in the AQPs?

The use of the criteria listed above is a standard approach for CEQA analysis of projects in the SJVAPCD’s jurisdiction, as well as within other air districts, for the following reasons:

- Significant contribution to existing or new exceedances of the air quality standards would be inconsistent with the goal of attaining the air quality standards.
- Air Quality Plan (AQP) emissions inventories and attainment modeling are based on growth assumptions for the area within the SJVAPCD’s jurisdiction.



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- AQPs rely on a set of air district-initiated control measures as well as implementation of federal and state measures to reduce emissions within their jurisdictions, with the goal of attaining the air quality standards.

AQPs are plans for reaching attainment of air quality standards. The assumptions, inputs, and control measures are analyzed to determine if the SJVAB can reach attainment for the ambient air quality standards. In order to show attainment of the standards, the SJVAPCD analyzes the growth projections in the valley, contributing factors in air pollutant emissions and formations, and existing and adopted emissions controls. The SJVAPCD then formulates a control strategy to reach attainment that includes both State and SJVAPCD regulations and other local programs and measures. The applicable AQPs include the 2016 8-Hour Ozone Plan which contains measures to achieve reductions in emissions of ozone precursors and sets plans towards attainment of ambient ozone standards by 2031 and the 2018, 2016, 2015, 2012, and 2008 PM_{2.5} Plans to address multiple PM_{2.5} air quality standards and attainment deadlines.

Contribution to Air Quality Violations

A measure of determining if the Project is consistent with the air quality plans is if the Project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the air quality plans. Because of the region's nonattainment status for ozone, PM_{2.5}, and PM₁₀, if Project-generated emissions of either of the ozone precursor pollutants (ROG and NO_x), PM₁₀, or PM_{2.5} would exceed the SJVAPCD's significance thresholds, then the Project would be considered to conflict with the attainment plans.

Regional emissions

Air pollutant emissions have regional effects and localized effects. This analysis assesses the regional effects of the Project's criteria pollutant emissions in comparison to SJVAPCD thresholds of significance for short-term construction activities and long-term operation of the project. Localized emissions from Project construction and operation are also assessed using concentration-based thresholds that determine if the Project would result in a localized exceedance of any ambient air quality standards or would make a cumulatively considerable contribution to an existing exceedance.

The primary pollutants of concern during Project construction and operation are ROG, NO_x, PM₁₀, and PM_{2.5}. The SJVAPCD GAMAQI adopted in 2015 contains thresholds for ROG and NO_x; SO_x, CO, PM₁₀, and PM_{2.5}.

Ozone is a secondary pollutant that can be formed miles away from the source of emissions through reactions of ROG and NO_x emissions in the presence of sunlight. Therefore, ROG and NO_x are termed ozone precursors. The SJVAB often exceeds the state and national ozone standards. Therefore, if the Project emits a substantial quantity of ozone precursors, the Project may contribute to an exceedance of the ozone standard. The SJVAB also exceeds air quality standards for PM₁₀, and PM_{2.5}; therefore, substantial Project emissions may contribute to an exceedance for these pollutants. The SJVAPCD's



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annual emission significance thresholds used for the Project define substantial contribution both operational and construction emissions are provided in Table 9.

Construction Emissions

Construction emissions associated with the Project are shown in Table 10. For assumptions in estimating the emissions, please refer to Section 4.0 Modeling Parameters and Assumptions. As shown in Table 10, the emissions are below the significance thresholds and, therefore, are less than significant on a Project basis. It should be noted that the emissions shown do not include reductions associated with compliance with SJVAPCD Rule 9510, which would reduce NOx and PM10 emissions by 20 percent and 45 percent respectively.

Table 10 Summary of Construction-Generated Emissions of Criteria Air Pollutants – Unmitigated

Year	Emissions (Tons/Year)					
	ROG	NOx	CO	SOx	PM ₁₀	PM _{2.5}
2019 – Project East – Tract 6239	0.21	1.98	1.46	<0.01	0.34	0.21
2020 – Project East Tract 6239	1.33	5.59	5.32	<0.01	0.75	0.51
2020 – Project West – Tract 6264	0.36	2.113	1.9076	<0.01	0.20	0.16
Subtotal for 2020	1.69	7.70	7.23	0.01	0.95	0.67
2021 – Project East Tract 6239	0.71	0.16	0.1927	<0.01	0.01	<0.01
2021 – Project West – Tract 6264	0.15	<0.01	.00947	<0.01	<0.01	<0.01
Subtotal for 2021	0.86	0.17	0.20217	<0.01	0.01	<0.01
Significance Thresholds	10	10	100	27	15	15
Any Year Exceed Significance Thresholds?	No	No	No	No	No	No
Notes: Source: Stantec Consulting Services, Inc., CalEEMod 2016.3.2						



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Operations

Operational emissions occur over the lifetime of the Project and are from two main sources: area sources and motor vehicles, or mobile sources. Operational emissions are shown in Table 11. The SJVAPCD considers construction and operational emissions separately when making significance determinations; however, it is important to note that the operational emissions in 2021 combined with the construction emissions would not exceed the SJVAPCD thresholds of significance.

For assumptions in estimating the emissions, please refer to Section 4, Modeling Parameters and Assumptions. The emissions output for Project operation at full buildout for 2021 are summarized in Table 11. As shown in Table 11, the operational emissions would be less than the thresholds of significance for all criteria air pollutants. The impact is less than significant.

Table 11 Summary of Operational Emissions of Criteria Air Pollutants – Mitigated

Source	Emissions (tons/year)					
	ROG	NOx	CO	SOx	PM ₁₀	PM _{2.5}
Area	1.79	0.15	1.54	<0.01	0.02	0.02
Energy	0.03	0.24	0.10	<0.01	0.02	0.02
Mobile	0.64	2.33	7.24	0.02	2.06	0.56
2021 Total	2.46	2.72	8.88	0.02	2.09	0.60
Significance Thresholds	10	10	100	27	15	15
Exceed Significance Thresholds?	No	No	No	No	No	No
Notes: Emissions were quantified using CalEEMod, version 2016.3.2 based on project details and estimated operating year for the proposed project. Totals may not sum due to rounding. Mitigated emissions in CalEEMod accounts for locational features and regulations. Source: Stantec Consulting Services Inc., CalEEMod 2016.3.2						

Localized Impacts

Emissions occurring at or near the Project have the potential to create a localized impact also referred to as an air pollutant hotspot. Localized emissions are considered significant if when combined with background emissions, they would result in exceedance of any health-based air quality standard. In locations that already exceed standards for these pollutants, significance is based on a significant impact level (SIL) that represents the amount that is considered a cumulatively considerable contribution to an existing violation of an air quality standard. The pollutants of concern for localized impact in the SJVAB are NO₂, SO_x, and CO.

The SJVAPCD has provided guidance for screening localized impacts in the GAMAQI that establishes a screening threshold of 100 pounds per day of any criteria pollutant. If a project exceeds 100 pounds per day of any criteria pollutant, then ambient air quality modeling would be necessary. If the Project does not



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exceed 100 pounds per day of any criteria pollutant, then it can be assumed that it would not cause a violation of an ambient air quality standard.

Construction: Localized Concentrations of PM₁₀, PM_{2.5}, CO, and NO₂

Local construction impacts would be short-term in nature lasting only during the duration of construction. Because of the short duration and limited amount of construction anticipated for the Project, application of best management practices through compliance with Regulation VIII Fugitive Dust Prohibitions to minimize construction emissions, and levels of emissions less than the SJVAPCD's emission significance thresholds, localized construction concentrations are considered less than significant. It should also be noted that the on-site construction emissions would be less than 100 pounds per day for each of the criteria pollutants, as shown in Table 12 below. Phase 1 and 2 of Project East- Tract 6239 would not overlap construction schedules in 2020, however there would be some overlap between Phase 2 of Project East-Tract 6239 and Project West – Tract 6264. It should be noted that the estimates below do not include reductions associated with Rule 9510 compliance, which would reduce NOx and PM10 emissions. Based on the SJVAPCD's guidance the construction emissions would not cause an ambient air quality standard violation. Impacts would be less than significant.

Operation: Localized Concentrations of PM₁₀, PM_{2.5}, CO, and NO₂

Localized impacts could occur in areas with a single large source of emissions such as a power plant or with multiple sources concentrated in a small area such as a distribution center. Operational modeling of on-site emissions for the Project indicate that the Project would not exceed 100 pounds per day for each of the criteria pollutants, as shown in Table 12 below. Therefore, based on the SJVAPCD's guidance, the operational emissions would not cause an ambient air quality standard violation. Impacts would be less than significant.



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Table 12 Localized Concentrations of PM₁₀, PM_{2.5}, CO, and NO₂ for Construction and Operation

Source	Emissions (pounds per day)			
	NOx	CO	PM ₁₀	PM _{2.5}
2019 Construction ¹	58.24	52.38	20.60	12.17
2020 – Project East Tract 6239 (Phase 1) ¹	53.09	51.53	3.55	3.15
2020 – Project East Tract 6239 (Phase 2) ¹	53.49	51.87	20.41	11.99
2020 – Project West – Tract 6264 ¹	42.47	28.58	20.41	11.99
Subtotal 2020	95.96	80.45	40.82	23.98
2021 – Project East Tract 6239 ¹	12.96	15.03	0.80	0.66
2021 – Project West – Tract 6264 ¹	1.53	1.89	0.12	0.10
Subtotal 2021	14.49	16.92	0.92	0.76
Operation ¹	18.26	59.46	12.35	3.71
Significance Thresholds	100	100	100	100
Exceed Significance Thresholds?	No	No	No	No
Notes: 1. Maximum daily construction and operational emissions reflect emissions reported for Winter as it has higher emissions than summer. Source: Stantec Consulting Services Inc., CalEEMod 2016.3.2				



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Operational CO Hotspot

Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles. The SJVAPCD provides screening criteria to determine when to quantify local CO concentrations based on impacts to the level of service (LOS) of roadways in the project vicinity.

The Project would construct two subdivisions, which would add traffic to the local adjacent roadways. However, the local roadways are not identified as operating over acceptable conditions under existing and future buildout conditions according the City of Clovis' General Plan. In addition, because CO is not a pollutant of concern it is not measured locally, the last measurement reported was in 2012 with the highest background 24-hour concentration of 2.22 ppm, 75 percent lower than the state ambient air quality standard of 9.00 ppm. Therefore, the Project would not significantly contribute to an exceedance of state or federal CO standards.

Consistency with Assumptions in AQPs

The primary way of determining consistency with the AQPs' assumptions is determining consistency with the applicable General Plan to ensure that the project's population density and land use are consistent with the growth assumptions used in the AQPs for the SJVAB.

As required by California law, city and county General Plans contain a Land Use Element that details the types and quantities of land uses that the city or county estimates will be needed for future growth and designates locations for land uses to regulate growth. The Fresno Council of Governments (Fresno COG) uses the growth projections and land use information in adopted general plans, among other sources, to estimate future average daily trips and then vehicle miles traveled (VMT), which are then provided to the District to estimate future emissions in the AQPs. Existing and future pollutant emissions computed in the AQPs are based on land uses from area general plans. AQPs detail the control measures and emission reductions required for reaching attainment of the air standards based on these growth and emission estimates.

The applicable General Plan for the project is the City of Clovis General Plan, which was adopted in 2014, prior to the SJVAPCD's adoption of the applicable AQPs. The General Plan is amended up to four times per year to allow changes to the planned land use and other plan elements as needed to accommodate development proposals that are not currently consistent with the General Plan. The changes in land use are then incorporated into the modeling assumptions of the regional transportation model on a periodic basis. Therefore, if the project's VMT are consistent with the General Plan, then the project is automatically consistent with the growth assumptions used in the applicable AQPs. The General Plan and Development Code Update Draft Program Environmental Impact Report (PEIR) found that the plan had significant and unavoidable air quality impacts because buildout of the plan area would exceed SJVAPCD regional significance thresholds. The City of Clovis adopted a Statement of Overriding Considerations (SOC). Projects that are consistent with General Plan policies and comply with mitigation measures included in the General Plan and Development Code Update PEIR are able to rely on the SOC finding to address cumulative air quality impacts. The proposed project would comply with all applicable policies and mitigation measures. Therefore, the impact would be less than significant.



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Control Measures

The AQP contains several control measures, which are enforceable requirements through the adoption of rules and regulations. A detailed description of rules and regulations that apply to this Project is provided in the Regulatory Setting. The Project would comply with all applicable SJVAPCD rules and regulations. Therefore, the project complies with this criterion and would not conflict with or obstruct implementation of the applicable air quality attainment plan.

Conclusion

The Project would not conflict with or obstruct implementation of the applicable AQPs.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

None are required.

Level of Significance After Mitigation

Less Than Significant Impact.

Impact AIR-2 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?

Impact Analysis

To result in a less than significant impact, the following criteria must be true:

1. Regional analysis: emissions of nonattainment pollutants must be below the SJVAPCD's regional significance thresholds. This is an approach recommended by the SJVAPCD in its GAMAQI.
2. Summary of projections: the project must be consistent with current air AQPs including control measures and regulations. This is an approach consistent with Section 15130(b) of the CEQA Guidelines.
3. Cumulative health impacts: the project must result in less than significant cumulative health effects from the nonattainment pollutants. This approach correlates the significance of the regional analysis with health effects, consistent with the court decision, *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1219-20.



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Step 1: Regional Analysis

If an area is in nonattainment for a criteria pollutant, then the background concentration of that pollutant has historically exceeded the ambient air quality standard. It follows that if a project exceeds the regional threshold for that nonattainment pollutant, then it would result in a cumulatively considerable net increase of that pollutant and result in a significant cumulative impact.

The SJVAB is in nonattainment for PM₁₀, PM_{2.5}, and ozone. Therefore, if the Project exceeds the regional thresholds for PM₁₀, or PM_{2.5}, then it contributes to a cumulatively considerable impact for those pollutants. If the Project exceeds the regional threshold for NO_x or ROG, then it follows that the Project would contribute to a cumulatively considerable impact for ozone.

Regional emissions include those generated from all onsite and offsite activities. Regional significance thresholds have been established by the SJVAPCD because emissions from projects in the SJVAB can potentially contribute to the existing emission burden and possibly affect the attainment and maintenance of ambient air quality standards. Projects within the SJVAB region with regional emissions in excess of any of the thresholds presented previously are considered to have a significant regional air quality impact.

The criteria pollutant emissions analysis, as shown in Impact AIR-1, assessed whether the Project would exceed the SJVAPCD's thresholds of significance. As shown in Table 10 and Table 11, criteria pollutant emissions would not exceed any threshold of significance during Project construction or operation. Therefore, the combination of unmitigated Project emissions with the criteria pollutants from other sources within the SJVAB would not cumulatively contribute to a significant impact according to this criterion.

Step 2: Plan Approach

Section 15130(b) of the CEQA Guidelines states the following:

The following elements are necessary to an adequate discussion of significant cumulative impacts: 1) Either: (A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or (B) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact.

In accordance with CEQA Guidelines 15130(b), this analysis of cumulative impacts is based on a summary of projections analysis. The SJVAB is in nonattainment for ozone and particulate matter (PM₁₀ and PM_{2.5}), which means that concentrations of these pollutants currently exceed the applicable ambient air quality standards.

Cumulative impacts may be analyzed using other plans that evaluate relevant cumulative effects. The geographic scope for cumulative criteria pollution from air quality impacts is the SJVAB, because that is the area in which the air pollutants generated by the sources within the SJVAB circulate and are often trapped. The SJVAPCD is required to prepare and maintain air quality attainment plans and a State Implementation Plan to document the strategies and measures to be undertaken to reach attainment of



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ambient air quality standards. While the SJVAPCD does not have direct authority over land use decisions, it is recognized that changes in land use and circulation planning would help the SJVAB achieve clean air mandates. The SJVAPCD evaluated emissions from land uses and transportation in the entire SJVAB when it developed its attainment plans.

In accordance with CEQA Guidelines Section 15064, subdivision (h)(3), a lead agency may determine that a project’s incremental contribution to a cumulative effect is not cumulatively considerable if the Project complies with the requirements in a previously approved plan or mitigation program.

As discussed in impact AIR-1, the project is consistent with all applicable control measures in the air quality attainment plans. The Project would be required to comply with any SJVAPCD rules and regulations that may pertain to implementation of the AQPs. Therefore, impacts would be less than significant with regard to compliance with control measures and regulations.

Step 3: Cumulative Health Impacts

The SJVAB is in nonattainment for ozone, PM₁₀, and PM_{2.5}, which means that the background levels of those pollutants are at times higher than the ambient air quality standards. The air quality standards were set to protect public health, including the health of sensitive individuals (such as children, the elderly, and the infirm). Therefore, when the concentration of those pollutants exceeds the standard, it is likely that some sensitive individuals in the population would experience health effects.

The regional analysis of construction and operational emissions, as indicated in impact discussion b) indicates that the Project would not exceed the SJVAPCD’s significance thresholds and the Project is consistent with the applicable AQPs. Therefore, the Project would not result in significant cumulative health impacts from nonattainment pollutants and impacts would be less than significant.

Conclusion

The proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

None are required.

Level of Significance After Mitigation

Less Than Significant Impact.



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Impact AIR-3 Expose sensitive receptors to substantial pollutant concentrations?

Impact Analysis

This discussion addresses whether the proposed Project would expose sensitive receptors to Naturally Occurring Asbestos (NOA), construction-generated fugitive dust (PM₁₀), ROG, NO_x, PM_{2.5}, Valley Fever, and construction generated DPM. A sensitive receptor is a person in a population who is particularly susceptible to health effects due to exposure to an air contaminant. The following are land uses (sensitive sites) where sensitive receptors are typically located:

- Long-term health care facilities
- Rehabilitation centers
- Convalescent centers
- Hospitals
- Retirement homes
- Residences
- Schools, playgrounds and childcare centers

The proposed Project is considered a sensitive receptor. The single-family residences approximately 100 feet north and south of the project site would also be considered sensitive receptors.

Construction ROG

During the application of architectural coatings (painting), ROG is emitted. The amount emitted is dependent on the amount of ROG (or VOC) in the paint. ROG emissions are typically an indoor air quality health hazard concern rather than an outdoor air quality health hazard concern. Therefore, exposure of ROG during architectural coatings is a less than significant health impact.

There are three types of asphalt that are typically used in paving: asphalt cements, cutback asphalts, and emulsified asphalts. However, SJVAPCD Rule 4641 prohibits the use of the following types of asphalt: rapid cure cutback asphalt; medium cure cutback asphalt; slow cure asphalt that contains more than one-half (0.5) percent of organic compounds that evaporate at 500 degrees Fahrenheit (°F) or lower; and emulsified asphalt containing organic compounds, in excess of 3 percent by volume, that evaporate at 500°F or lower. An exception to this is medium cure asphalt when the National Weather Service official forecast of the high temperature for the 24-hour period following application is below 50°F.

The acute (short-term) health effects from worker direct exposure to asphalt fumes include irritation of the eyes, nose, and throat. Other effects include respiratory tract symptoms and pulmonary function changes. The studies were based on occupational exposure of fumes. Residents are not in the immediate vicinity



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of the fumes; therefore, they would not be subjected to concentrations high enough to evoke a negative response. In addition, the restrictions that are placed on asphalt in the San Joaquin Valley reduce ROG emissions from asphalt and exposure. The impact to nearby sensitive receptors from ROG during construction is less than significant.

NO_x, PM₁₀, PM_{2.5}

As discussed in Impact AIR-1, emissions during construction would not exceed the significance thresholds and would not be expected to result in concentrations that would exceed ambient standards or contribute substantially to an existing exceedance of an ambient air quality standard.

Naturally-Occurring Asbestos

According to a map of areas where naturally occurring asbestos in California are likely to occur (U.S. Geological Survey 2011), there are no such areas in the Project area. Therefore, development of the project is not anticipated to expose receptors to naturally occurring asbestos. Impacts would be less than significant.

Fugitive Dust (PM₁₀)

PM₁₀ emissions would not exceed the thresholds of significance, nevertheless, the potential for localized PM₁₀ health impacts are a concern, however, the Project would comply with the SJVAPCD's Regulation VIII incorporating Best Management Practices for reducing fugitive dust, thus potential impacts are reduced to a less than significant level.

Valley Fever

Valley fever, or coccidioidomycosis, is an infection caused by inhalation of the spores of the fungus, *Coccidioides immitis* (*C. immitis*). The spores live in soil and can live for an extended time in harsh environmental conditions. Activities or conditions that increase the amount of fugitive dust contribute to greater exposure, and they include dust storms, grading, and recreational off-road activities. The San Joaquin Valley is considered an endemic area for Valley fever.

The Project site is in an urban area that is developed on all sides. This is an area that would lead to a low probability of having *C. immitis* growth sites and exposure from disturbed soil.

Construction activities would generate fugitive dust that could contain *C. immitis* spores. The Project will minimize the generation of fugitive dust during construction activities by complying with the SJVAPCD's Regulation VIII. Therefore, this regulation would reduce Valley fever impacts to less than significant.

During operations, dust emissions are anticipated to be negligible, because most of the Project area would be occupied by buildings, pavement, and landscaped areas. This condition would preclude the possibility of the Project from generating fugitive dust that may contribute to Valley fever exposure. Impacts would be less than significant.



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Diesel Particulate Matter

Construction activities have the potential to generate DPM emissions related to the number and types of equipment typically associated with construction. Off-road, heavy-duty diesel equipment used for site grading, paving, and other construction activities result in the generation of DPM. However, construction is temporary and occurs over a relatively short duration. Operation of construction equipment is regulated by federal, state, and local regulations, including CARB and SJVAPCD rules and regulations, and occurring intermittently throughout the course of a day, the likelihood that any one sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be low. It is not anticipated that the proposed Project would expose sensitive receptors to substantial pollutant concentrations and impacts would be considered less than significant.

Operations *ROG*

During operation, ROG would be emitted primarily from motor vehicles. Direct exposure to ROG from project motor vehicles would not result in health effects, because the ROG would be distributed across the roadways and in the air. The concentrations would not be great enough to result in direct health effects.

PM₁₀, PM_{2.5}, CO, NO₂

As shown in Table 12, the proposed project's emissions would not exceed SJVAPCD screening thresholds for projects that need detailed analysis of localized impacts. Therefore, the Project would not expose sensitive receptors to substantial criteria air pollutant concentrations during construction or operation.

Toxic Air Contaminants

The CARB Air Quality and Land Use Handbook contains recommendations that will "help keep California's children and other vulnerable populations out of harm's way with respect to nearby sources of air pollution" (CARB 2005), including recommendations for distances between sensitive receptors and certain land uses. The proposed Project is not identified as a land use of concern by CARB and is not located within the screening distances for sources of toxic air contaminants.

Conclusion

Sensitive receptors would not be exposed to substantial pollutant concentrations.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

None are required.



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Level of Significance After Mitigation

Less Than Significant Impact.

Impact AIR-4 Result in other emissions (such as those leading to odors) affecting a substantial number of people?

Impact Analysis

While offensive odors rarely cause any physical harm, they can still be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and the SJVAPCD. The occurrence and severity of odor impacts depends on numerous factors, including nature, frequency, and intensity of the source, the wind speed and direction, and the sensitivity of the receptor. The nearest sensitive receptor in the vicinity of the proposed Project site would be the residences approximately 100 feet to the north and south of the Project site. Construction activities associated with the proposed Project could result in short-term odorous emissions from diesel exhaust associated with construction equipment. However, these emissions would be intermittent and would dissipate rapidly from the source. In addition, this diesel-powered equipment would only be present on site temporarily during construction activities. Therefore, construction would not create objectionable odors affecting a substantial number of people, and the impact would be less than significant.

Land uses typically considered associated with odors include wastewater treatment facilities, waste-disposal facilities, or agricultural operations. The proposed Project does not contain land uses typically associated with emitting objectionable odors and is not located within the screening distances to sources of odors recommended by the SJVAPCD. Therefore, the impact would be less than significant.

Conclusion

The proposed Project would not create objectionable odors affecting a substantial number of people.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

None.

Level of Significance After Mitigation

Less Than Significant Impact.



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6.0 GREENHOUSE GAS IMPACT ANALYSIS

6.1 CEQA GUIDELINES

The CEQA Guidelines define a significant effect on the environment as “a substantial, or potentially substantial, adverse change in the environment.” To determine if a project would have a significant impact on GHGs, the type, level, and impact of emissions generated by the project must be evaluated.

The following GHG significance thresholds are contained in Appendix G of the CEQA Guidelines:

- 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.

6.1.1 Thresholds of Significance

San Joaquin Valley Air Pollution Control District

The SJVAPCD’s Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA presents a tiered approach to analyzing project significance with respect to GHG emissions. Project GHG emissions are considered less than significant if they can meet any of the following conditions, evaluated in the order presented:

- Project is exempt from CEQA requirements;
- Project complies with an approved GHG emission reduction plan or GHG mitigation program;
- Project implements Best Performance Standards (BPS); or
- Project demonstrates that specific GHG emissions would be reduced or mitigated by at least 29% compared to Business-as-Usual (BAU), including GHG emission reductions achieved since the 2002-2004 baseline period.

Project-Specific Quantitative Threshold

Section 15064.4(b) of the CEQA Guidelines’ amendments for GHG emissions states that a lead agency may take into account the following three considerations in assessing the significance of impacts from GHG emissions.

- Consideration #1: The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.



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- Consideration #2: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- Consideration #3: The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project

The City of Clovis has not adopted its own GHG thresholds or prepared a Climate Action Plan that can be used to determine a project's significance. The General Plan PEIR Mitigation Measure 7-1 requires applicants to meet a 29 percent reduction from BAU in accordance with SJVAPCD guidance. The SJVAPCD's Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA includes thresholds based on whether the project will reduce or mitigate GHG levels by 29 percent from BAU levels compared with 2005 levels by 2020 (SJVAPCD 2009). This level of GHG reduction is based on the target established by ARB's AB 32 Scoping Plan, approved in 2008. First occupancy at the project site is expected to occur in 2020. This date is within the AB 32 2020 milestone year; however, given recent legislative and legal scrutiny on post-2020 compliance, additional discussion is provided to show progress towards GHG reduction goals identified in CARB's 2017 Scoping Plan for the year 2030. Additionally, although not included in a formal GHG reduction plan, Executive Order S-3-05 also includes a goal of reducing GHG emissions 80 percent below 1990 levels by 2050 and Executive Order B-55-18 set the goal to achieve carbon neutrality statewide by 2045. The proposed project briefly addresses those two Executive Orders.

Newhall Ranch

The California Supreme Court decision in the *Center for Biological Diversity et al. vs. California Department of Fish and Wildlife, the Newhall Land and Farming Company* (62 Cal.4th 204 [2015], and known as the Newhall Ranch decision), confirmed that the use of BAU analysis (e.g., 29 percent below BAU), a performance-based approach, would be satisfactory. However, for a project-level analysis that uses CARB's statewide BAU targets, substantial evidence must be presented to support the use of those targets for a particular project at a specific location. The court noted that this may require examination of the data behind the statewide model and adjustment to the levels of reduction from BAU used for project evaluation. To date, neither CARB nor any lead agencies have provided any guidance on how to adjust AB 32's statewide BAU target for use at the project level.

The regulations in the State's 2008 Scoping Plan have been adopted and the State is on track to meet the 2020 target and achieve continued progress towards meeting the 2017 Scoping Plan target for 2030.

In the Newhall case, the Supreme Court was concerned that new development may need to reduce GHG emissions more than existing development to demonstrate it is meeting its fair share of reductions. New development does do more than its fair share through compliance with enhanced regulations, particularly



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with respect to motor vehicles, energy efficiency, and electricity generation. If no additional reductions are required from an individual project beyond that achieved by regulations, then the amount needed to reach the 2020 target is the amount of GHG emissions a project must reduce to comply with Statewide goals.

6.2 GREENHOUSE GAS IMPACT ANALYSIS

Impact GHG-1 Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Impact Analysis

To determine significance, the analysis first will quantify project-related GHG emissions under a business-as-usual scenario, and then compare these emissions with those emissions that would occur when all project-related design features are accounted for, and when compliance with applicable regulatory measures is assumed. The standard and methodology is explained in further detail, below.

Construction

Greenhouse gas emissions generated during all phases of construction were combined and are shown in Table 13. The SJVAPCD does not have a recommendation for assessing the significance of construction related emissions, however, other jurisdictions such as the South Coast Air Quality Management District (SCAQMD) and the Sacramento Metropolitan Air Quality Management District (SMAQMD) have concluded that construction emissions should be included since they may remain in the atmosphere for years after construction is complete. The SCAQMD and SMAQMD recommend that construction emissions be amortized based on the life of the project (residential projects – 30 years) and added to the operational emissions

Table 13 Summary of Construction-Generated Greenhouse Gas Emissions

Construction Activity	MTCO _{2e}
2019	212
2020	994
2021	29
Total	1,235
Amortized over 30 years ¹	41
Notes:	
1. GHG emissions are amortized over the 30-year life of the proposed project	
Source: Stantec Consulting Services Inc., CalEEMod 2016.3.2	



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Operation

Operational or long-term emissions occur over the life of the project. Sources of emissions may include motor vehicles and trucks, energy usage, water usage, waste generation, and area sources, such as landscaping activities and residential woodburning. Operational GHG emissions associated with the project were estimated using CalEEMod 2013.2.2.

Business-as-Usual Operational Emissions

Operational emissions under the business-as-usual scenario were modeled using CalEEMod 2013.2.2. Modeling assumptions for the year 2005 were used to represent 2020 business as usual conditions (without the benefit of regulations adopted to reduce GHG emissions). The CARB and SJVAPCD guidance recommend using regulatory conditions in 2002-2004 in the baseline scenario to represent conditions as if regulations had not been adopted to allow the effect of projected growth on achieving reduction targets to be clearly defined. CalEEMod defaults were used for project energy usage, water usage, waste generation, and area sources (architectural coating, consumer products, and landscaping). The vehicle fleet mix was revised to reflect the residential fleet mix approved by SJVPACD for year 2020. The year 2020 was chosen because it is the AB 32 target year.

2020 Operational Emissions

Operational emissions for the year 2020 were modeled using CalEEMod. CalEEMod assumes compliance with some, but not all, applicable rules and regulations regarding energy efficiency, vehicle fuel efficiency, renewable energy usage, and other GHG reduction policies, as described in the CalEEMod User's Guide (SCAQMD 2017). Additional GHG reduction measures, such as further passenger vehicle efficiency standards under AB 1493 (Pavley), were adopted as revisions to the State's Low Emission Vehicle Program (LEV III) and will be in effect beginning in 2017, but have not yet been incorporated into EMFAC and CalEEMod assumptions and therefore have not been considered in this analysis as a conservative assumption.

In addition to these rules and regulations, the project would incorporate the following design features that would further reduce GHG emissions:

- Pedestrian Connections – The project is located adjacent to existing pedestrian infrastructure.
- Solar – the project would include the provision of 5 kilowatt (kW) solar systems on the homes.
- Electrical Outlets for Landscaping Equipment: Outlets provided to power electric landscaping equipment.

GHG reductions from some design features can be quantified in CalEEMod. Note that CalEEMod nominally treats these design elements and conditions as "mitigation measures," despite their inclusion in the project description. Therefore, reported operational emissions are considered to represent unmitigated project conditions.



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Table 14 2020 Project Operational Greenhouse Gases

Source	Emissions (MTCO ₂ e per year)	
	Business as Usual	2020 (with Regulation and Design Features)
Area	160	160
Energy	827	288
Mobile	3,552	1,950
Waste	103	26
Water	46	25
Subtotal	4,688	2,449
Amortized Construction Emissions	-	41
Total	4,688	2,490
Reduction		46.9%
Significance Threshold		29%
Are emissions significant?		No
Notes: MTCO ₂ e = metric tons of carbon dioxide equivalents Source of business as usual emissions: CalEEMod output for the year 2005 (Appendix A). Source of 2020 emissions: CalEEMod output for the year 2020(Appendix A).		



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Table 15 2030 Project Operational Greenhouse Gases

Source	Emissions (MTCO _{2e} per year)	
	Business as Usual	2030 (with Regulation and Design Features)
Area	160	160
Energy	827	286
Mobile	3,552	1,437
Waste	103	26
Water	46	23
Subtotal	4,688	1,932
Amortized Construction Emissions	-	41
Total	4,688	1,973
Reduction		57.9%
Significance Threshold		29%
Are emissions significant?		No
Notes: MTCO _{2e} = metric tons of carbon dioxide equivalents Source of business as usual emissions: CalEEMod output for the year 2005 (Appendix A). Source of 2030 emissions: CalEEMod output for the year 2020(Appendix A).		

As shown in Tables 14 and 15, the project would achieve a 46.9 percent reduction from BAU by the year 2020 and 57.9 percent reduction from BAU by the year 2030 with adopted regulations and design features incorporated. This is above the 29 percent reduction required by the SJVAPCD threshold, and the required 21.7 percent average reduction from all GHG emission sources to meet the AB 32 targets. The CARB originally identified a reduction of 29 percent from business as usual as needed to achieve AB 32 targets. The 2008 recession and slower growth in the years since 2008 have reduced the growth forecasted for 2020 and the amount needed to be reduced to achieve 1990 levels as required by AB 32; the target was revised to 21.7 percent.

The 46.9 percent reduction from BAU is 25.2 percent beyond the average reduction required by the State from all sources to achieve the AB 32 2020 target. This surplus addresses the Supreme Court’s concern in the Newhall case that new development must do more than average to meet its fair share of emission reductions.



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By 2030, the proposed project would achieve a 57.9 percent reduction from BAU or 36.2 percent above the 21.7 percent reduction necessary to meet the 2020 target.

The project's occupancy would begin in 2020 and would be fully built out in 2021, thus an additional analysis is provided to show consistency with post-2020 State legislative GHG goals. The SB 32 goal of 40 percent below 1990 emission levels by 2030 is the target established by the 2017 Scoping Plan Update.

The 2017 Scoping Plan includes new strategies that are not incorporated in the analysis above. Many measures that are likely to proceed include zero net energy buildings in future updates to Title 24 and enhanced motor vehicle fuel efficiency standards beyond 2025. The 2017 Scoping Plan identified an emission limit of 260 million metric tons of carbon dioxide equivalents (MMTCO_{2e}). The 2030 BAU Inventory is estimated to be 392 MMTCO_{2e}. The 2017 Scoping Plan identified that the bulk of its reductions would come from the Electric Power, Industrial fuel combustion, and Transportation. The continuance of the Cap and Trad would provide additional reductions. Although the 2017 Scoping Plan largely relies on state actions to achieve the GHG emissions limit, the CARB considers local governments partners in achieving the State's goals for reducing GHG emissions. The 2017 Scoping Plan suggests that all new land use development implement feasible measures to reduce GHG emissions, however, it does not define feasible measures nor assign a required reduction amount to new development. A fair share quantitative threshold based on the 2017 Scoping Plan is not presently feasible as the nexus between a project's contribution and its fair share mitigation is not well defined.

Based on the 46.9 percent reduction from BAU for 2020, the proposed project would not have a significant impact on GHG emissions as it would meet the SJVAPCD's threshold of 29 percent and exceed the CARB's 21.7 percent reduction necessary from all sources to meet the 2020 emissions limit.

The City of Clovis has not identified a threshold to meet the SB 32 2030 target. However, for the year 2030, the project achieves a 56.9 percent reduction from BAU, which demonstrates substantial progress towards achieving the 2030 target.

Regarding the years 2045 and 2050, there have been Executive Orders issued to address carbon neutrality and GHG reduction targets, respectively for those years, however, there are no existing GHG reduction measures or plans that specifically address those Orders. Historically, the State would take the lead in developing regulatory and market measures to achieve the required reductions. The proposed project would participate in the reductions through adherence with regulations and continued improvements to the motor vehicle efficiencies accessing the project site. Studies have shown that in order to meet the 2050 targets, aggressive pursuit of technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel, will be required. Because of the technological shifts required and the unknown parameters of the regulatory framework in 2050, quantitatively analyzing the proposed project's impacts further relative to the 2050 goals is speculative for purposes of CEQA (Mitchell, 2018).



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Conclusion

In summary, the proposed project meets the required 29 percent below BAU as established by the City of Clovis in its General Plan PEIR and is consistent with guidance provided by the SJVAPCD. Furthermore, the proposed project shows significant reductions in the year 2030 to suggest that it would not inhibit the State’s progress in achieving the 2030 GHG emissions target. The GHG emissions impact would be less than significant with respect to Consideration #1 and #2.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

None.

Level of Significance After Mitigation

Less Than Significant Impact.

Impact GHG-2 Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact Analysis

SJVAPCD Climate Change Action Plan

The SJVAPCD has adopted a CCAP, which includes suggested BPS for proposed residential development projects. Appendix J of the SJVAPCD Final Staff Report for the CCAP contains GHG reduction measures that would be applicable to the proposed project. The proposed project’s consistency with these measures is included in Table 16 below. As shown in Table 16, the proposed project would be consistent with the applicable CCAP measures.

Table 16 Consistency with SJVAPCD’s Climate Change Action Plan Measures

Measure Number	Measure Name	Measure Description	Consistency Determination
Bicycle/Pedestrian Transit Measures			
4	Proximity to bike path/bike lanes	Entire project is located within 1/2 mile of an existing Class I or Class II bike lane and project design includes a comparable network that connects the project uses to the existing offsite facility. Existing facilities are defined as those facilities that are physically constructed and ready for use prior to the first 20% of the project’s occupancy permits being granted. Project design includes a designated bicycle route connecting all units, on-site bicycle parking facilities, offsite bicycle facilities, site entrances, and primary	Consistent. As the area is developed the adjacent streets would be developed to Class II bike lanes. Class II trails are in existence 0.25 miles away on Shepherd Avenue.



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		building entrances to existing Class I or Class II bike lane(s) within 1/2 mile. Bicycle route connects to all streets contiguous with project site. Bicycle route has minimum conflicts with automobile parking and circulation facilities. All streets internal to the project wider than 75 feet have class II bicycle lanes on both sides.	
5	Pedestrian Network	The project provides a pedestrian access network that internally links all uses and connects to existing external streets and pedestrian facilities. Existing facilities are defined as those facilities that are physically constructed and ready for use prior to the first 20% of the project's occupancy permits being granted.	Consistent. The proposed project would provide pedestrian access throughout the project site.
5A	Pedestrian Network	The project provides a pedestrian access network that internally links all uses for connecting to planned external streets and pedestrian facilities (facilities must be included pedestrian master plan or equivalent).	Consistent. The proposed project would connect all uses to existing and planned streets.
6	Pedestrian barriers minimized	Site design and building placement minimize barriers to pedestrian access and interconnectivity. Physical barriers such as walls, berms, landscaping, and slopes between residential and nonresidential uses that impede bicycle or pedestrian circulation are eliminated. Barriers to pedestrian access of neighboring facilities and sites are minimized. This measure is not meant to prevent the limited use of barriers to ensure public safety by prohibiting access to hazardous areas, etc.	Consistent. The proposed project would not construct barriers that would prevent interconnectivity of the project site to surrounding areas.
Site Design Measures			
18	Residential Density with No Transit	Project provides high-density residential development. Mitigation value is based on project density with no transit. Density is calculated by determining the number of units per acre ("du/acre") within the residential portion of the project's net lot area.	Consistent. The proposed project would develop higher density residential (medium density) from the current land use designation (low density)
Building Component Measures			
25	Energy Star Roof	Install Energy Star labeled roof materials. Energy star qualified roof products reflect more of the sun's rays, decreasing the amount of heat transferred into a building.	Consistent. The proposed project would not install Energy Star roofs, but would install solar roof systems that would absorb the sun's rays and decrease the amount of heat transferred into the building.
26	Onsite Renewable Energy System	Project provides onsite renewable energy system(s).	Consistent. The proposed project would install roof top



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			solar systems on each home.
27	Exceed Title 24	Project exceeds Title 24 requirements by 20 percent.	Consistent. The proposed project would incorporate various energy savings measures that would exceed Title 24 standards.
31	Electric Lawnmower	Provide a complimentary electric lawnmower to each residential buyer.	Consistent. The proposed project would not provide a complimentary lawnmower to each residential buyer but would include electrical outlets on the front and rear of all residences. Additionally, landscaping would be designed to minimize the need for traditional lawn maintenance.
Additional GHG Emission Reduction Measures Requiring Additional Investigation			
9	Natural Gas Stove	Project features only natural gas or electric stoves in residences.	Consistent. The proposed project would include only electric or gas appliances.
16	Energy Efficient Appliances	Install energy efficient heating and cooling systems, appliances and equipment, and control systems	Consistent. The proposed project would install energy efficient heating and cooling systems, appliances, and control systems.
17	Renewable Energy Use	Install solar, wind, and geothermal power systems and solar hot water heaters. Educate consumers about existing incentives.	Consistent. The proposed project would install rooftop solar on each residence.
20	Tree Planting	Protect existing trees and encourage the planting of new trees. Adopt a tree protection and replacement ordinance, e.g., requiring that trees larger than a specified diameter that are removed to accommodate development must be replaced at a set ratio.	Consistent. The proposed project would include trees and landscaping in accordance with City of Clovis standards.
Source of Measures: SJVAPCD, 2009			
Source of Consistency Determination: Stantec Consulting Services Inc, 2019			



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CARB Scoping Plan

There are no other local or regional Climate Action Plans applicable to the proposed project, therefore, the proposed project was evaluated for consistency against the CARB 2017 Scoping Plan. Table 17 provides a summary of the consistency determination.

Table 17 Consistency with SB 32 2017 Scoping Plan Update

Measure Name	Measure Description	Consistency Determination
SB 350 50% Renewable Mandate.	Utilities subject to the legislation will be required to increase their renewable energy mix from 33% in 2020 to 50% in 2030.	Consistent. The proposed project will purchase electricity from a utility subject to the SB 350 Renewable Mandate. In addition, the proposed project includes renewable energy through roof top solar systems.
Low Carbon Fuel Standard	This measure requires fuel providers to meet an 18 percent reduction in carbon content by 2030.	Consistent. Vehicles accessing the proposed project site will use fuel containing lower carbon content as the fuel standard is implemented.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario)	Vehicle manufacturers will be required to meet existing regulations mandated by the LEV III and Heavy-Duty Vehicle programs. The strategy includes a goal of having 4.2 million ZEVs on the road by 2030 and increasing numbers of ZEV trucks and buses.	Consistent. Future residents can be expected to purchase increasing numbers of more fuel efficient and zero emission cars and trucks each year. The 2016 CalGreen Code requires electrical service in new single-family housing to be EV charger-ready. Home deliveries will be made by increasing numbers of ZEV delivery trucks.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy	The strategy requires the reduction of SLCPs by 40 percent from 2013 levels by 2030 and the reduction of black carbon by 50 percent from 2013 levels by 2030.	Consistent. The project will include only natural gas hearths that produce very little black carbon compared to wood burning fireplaces and heaters.
SB 375 Sustainable Communities Strategies	Requires Regional Transportation Plans to include a sustainable communities' strategy for reduction of per capita vehicle miles traveled.	Consistent. The proposed project would provide housing in the region that is consistent with the growth projections in the 2014 Regional Transportation Plan/Sustainable Communities Strategy (SCS). The project is not within an SCS priority area and so is not subject to requirements applicable to those areas.
Post-2020 Cap-and-Trade Program	The Post 2020 Cap-and-Trade Program continues the existing program for another 10 years. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers.	Consistent. The post-2020 Cap-and-Trade Program indirectly affects people who use the products and services produced by the regulated industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap- and-Trade



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		Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the program’s first compliance period.
Source of Measures: CARB, 2017 Source of Consistency Determination: Stantec Consulting Services Inc, 2019		

Regarding Post-2020 reduction goals, the following is excerpted from a recent City of Clovis air quality and GHG study for consistency purposes:

Taking into account the proposed project’s emissions, project design features, and the progress being made by the State towards reducing emissions in key sectors such as transportation, industry, and electricity, the project would be consistent with State GHG Plans and would further the State’s goals of reducing GHG emissions to 1990 levels by 2020, 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050, and does not obstruct their attainment. (Mitchell, 2018)

As demonstrated above, the proposed project would be consistent with applicable measures in the SJVAPCD’s CCAP and the State’s Scoping Plan. As discussed in impact GHG-1, the proposed project exceeds the required 29 percent reduction from BAU by 2020 and achieves substantial reductions in 2030 to show progress towards the 2030 GHG reduction goals. The proposed project would similarly not obstruct attainment of the State’s goals for 2030 and 2050 and would participate in the State’s endeavor for carbon neutrality by 2045 through the incorporation of renewable energy systems and the purchase of energy from a utility provider subject to the renewable energy regulation.

Conclusion

The proposed project would not conflict with the goals and objectives of the SJVAPCD’s CCAP, with CARB’s 2017 Scoping Plan, or any other State or regional plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions. As such, the proposed project would not conflict with an applicable plan; therefore, impacts would be considered less than significant.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

None.

Level of Significance After Mitigation

Less Than Significant Impact.



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Appendix A CalEEMod Output Files
June 17, 2019

APPENDIX A

CalEEMod Output Files

Granville Homes - Locan - Tract 6239 - Phase 1 - Fresno County, Annual

Granville Homes - Locan - Tract 6239 - Phase 1
Fresno County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	68.00	Dwelling Unit	16.00	122,400.00	194

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Tract Map
- Construction Phase - 2020 - 3/2021
- Off-road Equipment - Increased equipment to account for decreased schedule from default
- Off-road Equipment - Increased equipment to account for schedule reduction from default
- Off-road Equipment - Increased equipment to account for decreased schedule from default
- Demolition -
- Architectural Coating - Rule 4601 Average VOC Content
- Vehicle Trips - TIS and ITE Trip Generation Manual 10th Edition, Land Use 210

Woodstoves - No woodstoves

Area Coating - Rule 4601 Average VOC Content

Mobile Land Use Mitigation -

Area Mitigation - Rule 4601 Average VOC Content

Energy Mitigation - Assumed minimum of 5 kw solar system size per home =8441 kWh

Water Mitigation - Model Water Efficient Landscape Ordinance, Green Building Code

Waste Mitigation - 75 percent statewide diversion/recycling mandate

Fleet Mix - Residential Fleet Mix

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	65.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	65.00
tblAreaCoating	Area_EF_Residential_Exterior	150	65
tblAreaCoating	Area_EF_Residential_Interior	150	65
tblConstructionPhase	NumDays	300.00	75.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	10.00
tblFireplaces	NumberGas	37.40	68.00
tblFireplaces	NumberNoFireplace	30.60	0.00
tblFleetMix	HHD	0.12	0.02
tblFleetMix	LDA	0.48	0.54
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.02	1.6000e-003
tblFleetMix	LHD2	4.9970e-003	9.0000e-004
tblFleetMix	MCY	5.2610e-003	2.6000e-003
tblFleetMix	MDV	0.13	0.05
tblFleetMix	MH	6.6700e-004	1.5000e-003
tblFleetMix	MHD	0.03	9.1000e-003
tblFleetMix	OBUS	2.3690e-003	0.00
tblFleetMix	SBUS	1.1150e-003	1.1000e-003

tblFleetMix	UBUS	1.6750e-003	4.4000e-003
tblLandUse	LotAcreage	22.08	16.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblTripsAndVMT	WorkerTripNumber	30.00	15.00
tblVehicleTrips	ST_TR	9.91	9.54
tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.2056	1.9786	1.4611	2.3800e-003	0.2274	0.1089	0.3362	0.1055	0.1010	0.2064	0.0000	210.7830	210.7830	0.0604	0.0000	212.2940
2020	0.8108	1.2992	1.2755	1.9100e-003	5.9200e-003	0.0796	0.0856	1.6000e-003	0.0743	0.0759	0.0000	165.0217	165.0217	0.0446	0.0000	166.1362
Maximum	0.8108	1.9786	1.4611	2.3800e-003	0.2274	0.1089	0.3362	0.1055	0.1010	0.2064	0.0000	210.7830	210.7830	0.0604	0.0000	212.2940

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.2056	1.9786	1.4611	2.3800e-003	0.2274	0.1089	0.3362	0.1055	0.1010	0.2064	0.0000	210.7827	210.7827	0.0604	0.0000	212.2938
2020	0.8108	1.2992	1.2755	1.9100e-003	5.9200e-003	0.0796	0.0856	1.6000e-003	0.0743	0.0759	0.0000	165.0215	165.0215	0.0446	0.0000	166.1360
Maximum	0.8108	1.9786	1.4611	2.3800e-003	0.2274	0.1089	0.3362	0.1055	0.1010	0.2064	0.0000	210.7827	210.7827	0.0604	0.0000	212.2938

	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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-23-2019	12-22-2019	1.9673	1.9673
2	12-23-2019	3-22-2020	2.0514	2.0514
3	3-23-2020	6-22-2020	0.2429	0.2429
		Highest	2.0514	2.0514

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5487	0.0521	0.5263	3.2000e-004		6.5200e-003	6.5200e-003		6.5200e-003	6.5200e-003	0.0000	54.3850	54.3850	1.8300e-003	9.8000e-004	54.7233
Energy	9.5900e-003	0.0819	0.0349	5.2000e-004		6.6200e-003	6.6200e-003		6.6200e-003	6.6200e-003	0.0000	268.1790	268.1790	9.6500e-003	3.3600e-003	269.4219
Mobile	0.2370	0.8774	2.7068	7.7500e-003	0.6976	7.9500e-003	0.7055	0.1868	7.4500e-003	0.1943	0.0000	711.1689	711.1689	0.0505	0.0000	712.4324

Waste						0.0000	0.0000			0.0000	0.0000	14.1769	0.0000	14.1769	0.8378	0.0000	AGENDA ITEM NO. 9.	
Water						0.0000	0.0000			0.0000	0.0000	1.4056	9.8180	11.2236	0.1448	3.5000e-003		15.8871
Total	0.7953	1.0114	3.2679	8.5900e-003	0.6976	0.0211	0.7187	0.1868	0.0206	0.2074	15.5825	1,043.5509	1,059.1334	1.0447	7.8400e-003	1,087.5874		

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5484	0.0521	0.5226	3.2000e-004		6.5000e-003	6.5000e-003	6.5000e-003	6.5000e-003	6.5000e-003	0.0000	54.3775	54.3775	1.8200e-003	9.8000e-004	54.7156
Energy	9.5900e-003	0.0819	0.0349	5.2000e-004		6.6200e-003	6.6200e-003	6.6200e-003	6.6200e-003	6.6200e-003	0.0000	101.1993	101.1993	2.1000e-003	1.8000e-003	101.7879
Mobile	0.2325	0.8409	2.5647	7.2500e-003	0.6495	7.4600e-003	0.6569	0.1739	6.9900e-003	0.1809	0.0000	665.2033	665.2033	0.0483	0.0000	666.4107
Waste						0.0000	0.0000		0.0000	0.0000	3.5442	0.0000	3.5442	0.2095	0.0000	8.7807
Water						0.0000	0.0000		0.0000	0.0000	1.3198	8.8238	10.1437	0.1360	3.2800e-003	14.5211
Total	0.7906	0.9749	3.1221	8.0900e-003	0.6495	0.0206	0.6700	0.1739	0.0201	0.1940	4.8641	829.6040	834.4681	0.3976	6.0600e-003	846.2160

	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
Percent Reduction	0.59	3.61	4.46	5.82	6.90	2.42	6.77	6.90	2.33	6.45	68.79	20.50	21.21	61.94	22.70	22.19

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/23/2019	10/4/2019	5	10	
2	Grading	Grading	10/5/2019	11/15/2019	5	30	

3	Building Construction	Building Construction	11/16/2019	2/28/2020	5	75
4	Paving	Paving	2/29/2020	3/13/2020	5	10
5	Architectural Coating	Architectural Coating	3/14/2020	3/27/2020	5	10

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 247,860; Residential Outdoor: 82,620; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	12	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	12	7.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
Paving	Pavers	4	8.00	130	0.42
Paving	Paving Equipment	4	8.00	132	0.36
Paving	Rollers	4	8.00	80	0.38
Architectural Coating	Air Compressors	2	6.00	78	0.48

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
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	30	24.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	0.0217	0.2279	0.1103	1.9000e-004	0.0903	0.0120	0.1023	0.0497	0.0110	0.0607	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	4.3000e-004	2.8000e-004	2.8000e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6427	0.6427	2.0000e-005	0.0000	0.6432	
Total	4.3000e-004	2.8000e-004	2.8000e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6427	0.6427	2.0000e-005	0.0000	0.6432	

AGENDA ITEM NO. 9.

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	0.0217	0.2279	0.1103	1.9000e-004	0.0903	0.0120	0.1023	0.0497	0.0110	0.0607	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	2.8000e-004	2.8000e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6427	0.6427	2.0000e-005	0.0000	0.6432
Total	4.3000e-004	2.8000e-004	2.8000e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6427	0.6427	2.0000e-005	0.0000	0.6432

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0711	0.8178	0.5007	9.3000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	83.5520	83.5520	0.0264	0.0000	84.2129
Total	0.0711	0.8178	0.5007	9.3000e-004	0.1301	0.0357	0.1658	0.0540	0.0329	0.0868	0.0000	83.5520	83.5520	0.0264	0.0000	84.2129

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4200e-003	9.3000e-004	9.3500e-003	2.0000e-005	2.4000e-003	2.0000e-005	2.4100e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	2.1424	2.1424	6.0000e-005	0.0000	2.1440
Total	1.4200e-003	9.3000e-004	9.3500e-003	2.0000e-005	2.4000e-003	2.0000e-005	2.4100e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	2.1424	2.1424	6.0000e-005	0.0000	2.1440

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
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Category	tons/yr										MT/yr					
	Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0711	0.8178	0.5007	9.3000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	83.5519	83.5519	0.0264	0.0000	84.2128
Total	0.0711	0.8178	0.5007	9.3000e-004		0.0357	0.1658	0.0540	0.0329	0.0868	0.0000	83.5519	83.5519	0.0264	0.0000	84.2128

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4200e-003	9.3000e-004	9.3500e-003	2.0000e-005	2.4000e-003	2.0000e-005	2.4100e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	2.1424	2.1424	6.0000e-005	0.0000	2.1440
Total	1.4200e-003	9.3000e-004	9.3500e-003	2.0000e-005	2.4000e-003	2.0000e-005	2.4100e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	2.1424	2.1424	6.0000e-005	0.0000	2.1440

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1086	0.9154	0.8235	1.1600e-003		0.0610	0.0610		0.0569	0.0569	0.0000	101.5726	101.5726	0.0281	0.0000	102.2739
Total	0.1086	0.9154	0.8235	1.1600e-003		0.0610	0.0610		0.0569	0.0569	0.0000	101.5726	101.5726	0.0281	0.0000	102.2739

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.2000e-004	0.0151	2.5800e-003	3.0000e-005	7.4000e-004	1.1000e-004	8.5000e-004	2.1000e-004	1.1000e-004	3.2000e-004	0.0000	3.0467	3.0467	3.9000e-004	0.0000	3.0563
Worker	1.8100e-003	1.1900e-003	0.0120	3.0000e-005	3.0700e-003	2.0000e-005	3.0900e-003	8.2000e-004	2.0000e-005	8.3000e-004	0.0000	2.7423	2.7423	8.0000e-005	0.0000	2.7443
Total	2.3300e-003	0.0163	0.0146	6.0000e-005	3.8100e-003	1.3000e-004	3.9400e-003	1.0300e-003	1.3000e-004	1.1500e-003	0.0000	5.7889	5.7889	4.7000e-004	0.0000	5.8006

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1086	0.9154	0.8235	1.1600e-003		0.0610	0.0610		0.0569	0.0569	0.0000	101.5725	101.5725	0.0281	0.0000	102.2737
Total	0.1086	0.9154	0.8235	1.1600e-003		0.0610	0.0610		0.0569	0.0569	0.0000	101.5725	101.5725	0.0281	0.0000	102.2737

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.2000e-004	0.0151	2.5800e-003	3.0000e-005	7.4000e-004	1.1000e-004	8.5000e-004	2.1000e-004	1.1000e-004	3.2000e-004	0.0000	3.0467	3.0467	3.9000e-004	0.0000	3.0563
Worker	1.8100e-003	1.1900e-003	0.0120	3.0000e-005	3.0700e-003	2.0000e-005	3.0900e-003	8.2000e-004	2.0000e-005	8.3000e-004	0.0000	2.7423	2.7423	8.0000e-005	0.0000	2.7443
Total	2.3300e-003	0.0163	0.0146	6.0000e-005	3.8100e-003	1.3000e-004	3.9400e-003	1.0300e-003	1.3000e-004	1.1500e-003	0.0000	5.7889	5.7889	4.7000e-004	0.0000	5.8006

3.4 Building Construction - 2020
Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1310	1.1213	1.0906	1.5600e-003		0.0709	0.0709		0.0661	0.0661	0.0000	134.1191	134.1191	0.0373	0.0000	135.0513
Total	0.1310	1.1213	1.0906	1.5600e-003		0.0709	0.0709		0.0661	0.0661	0.0000	134.1191	134.1191	0.0373	0.0000	135.0513

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6000e-004	0.0187	2.9800e-003	4.0000e-005	1.0000e-003	1.0000e-004	1.1000e-003	2.9000e-004	9.0000e-005	3.8000e-004	0.0000	4.0588	4.0588	5.0000e-004	0.0000	4.0713	
Worker	2.2300e-003	1.4100e-003	0.0143	4.0000e-005	4.1300e-003	3.0000e-005	4.1500e-003	1.1000e-003	2.0000e-005	1.1200e-003	0.0000	3.5704	3.5704	1.0000e-004	0.0000	3.5728	
Total	2.7900e-003	0.0201	0.0173	8.0000e-005	5.1300e-003	1.3000e-004	5.2500e-003	1.3900e-003	1.1000e-004	1.5000e-003	0.0000	7.6292	7.6292	6.0000e-004	0.0000	7.6441	

AGENDA ITEM NO. 9.

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1310	1.1213	1.0906	1.5600e-003		0.0709	0.0709		0.0661	0.0661	0.0000	134.1189	134.1189	0.0373	0.0000	135.0512
Total	0.1310	1.1213	1.0906	1.5600e-003		0.0709	0.0709		0.0661	0.0661	0.0000	134.1189	134.1189	0.0373	0.0000	135.0512

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6000e-004	0.0187	2.9800e-003	4.0000e-005	1.0000e-003	1.0000e-004	1.1000e-003	2.9000e-004	9.0000e-005	3.8000e-004	0.0000	4.0588	4.0588	5.0000e-004	0.0000	4.0713
Worker	2.2300e-003	1.4100e-003	0.0143	4.0000e-005	4.1300e-003	3.0000e-005	4.1500e-003	1.1000e-003	2.0000e-005	1.1200e-003	0.0000	3.5704	3.5704	1.0000e-004	0.0000	3.5728
Total	2.7900e-003	0.0201	0.0173	8.0000e-005	5.1300e-003	1.3000e-004	5.2500e-003	1.3900e-003	1.1000e-004	1.5000e-003	0.0000	7.6292	7.6292	6.0000e-004	0.0000	7.6441

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	2.1000e-004	2.0800e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5190	0.5190	1.0000e-005	0.0000	0.5193
Total	3.2000e-004	2.1000e-004	2.0800e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5190	0.5190	1.0000e-005	0.0000	0.5193

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	
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	2.1000e-004	2.0800e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5190	0.5190	1.0000e-005	0.0000	0.5193
Total	3.2000e-004	2.1000e-004	2.0800e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5190	0.5190	1.0000e-005	0.0000	0.5193

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6606					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	AGENDA ITEM NO. 9.	
Total	0.6630	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000		

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	7.0000e-005	6.9000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1730	0.1730	0.0000	0.0000	0.1731
Total	1.1000e-004	7.0000e-005	6.9000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1730	0.1730	0.0000	0.0000	0.1731

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6606					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	0.6630	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	7.0000e-005	6.9000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1730	0.1730	0.0000	0.0000	0.1731
Total	1.1000e-004	7.0000e-005	6.9000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1730	0.1730	0.0000	0.0000	0.1731

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

- Improve Destination Accessibility
- 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	tons/yr										MT/yr					
Mitigated	0.2325	0.8409	2.5647	7.2500e-003	0.6495	7.4600e-003	0.6569	0.1739	6.9900e-003	0.1809	0.0000	665.2033	665.2033	0.0483	0.0000	666.4107
Unmitigated	0.2370	0.8774	2.7068	7.7500e-003	0.6976	7.9500e-003	0.7055	0.1868	7.4500e-003	0.1943	0.0000	711.1689	711.1689	0.0505	0.0000	712.4324

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	641.92	648.72	581.40	1,858,130	1,729,919
Total	641.92	648.72	581.40	1,858,130	1,729,919

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100	0.001500

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

Category	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
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6.3251	6.3251	2.9000e-004	6.0000e-005	6.3499
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	173.3048	173.3048	7.8400e-003	1.6200e-003	173.9838
Natural Gas Mitigated	9.5900e-003	0.0819	0.0349	5.2000e-004		6.6200e-003	6.6200e-003		6.6200e-003	6.6200e-003	0.0000	94.8743	94.8743	1.8200e-003	1.7400e-003	95.4380
Natural Gas Unmitigated	9.5900e-003	0.0819	0.0349	5.2000e-004		6.6200e-003	6.6200e-003		6.6200e-003	6.6200e-003	0.0000	94.8743	94.8743	1.8200e-003	1.7400e-003	95.4380

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	1.77788e+006	9.5900e-003	0.0819	0.0349	5.2000e-004		6.6200e-003	6.6200e-003		6.6200e-003	6.6200e-003	0.0000	94.8743	94.8743	1.8200e-003	1.7400e-003	95.4380
Total		9.5900e-003	0.0819	0.0349	5.2000e-004		6.6200e-003	6.6200e-003		6.6200e-003	6.6200e-003	0.0000	94.8743	94.8743	1.8200e-003	1.7400e-003	95.4380

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	1.77788e+006	9.5900e-003	0.0819	0.0349	5.2000e-004		6.6200e-003	6.6200e-003		6.6200e-003	6.6200e-003	0.0000	94.8743	94.8743	1.8200e-003	1.7400e-003	95.4380
Total		9.5900e-003	0.0819	0.0349	5.2000e-004		6.6200e-003	6.6200e-003		6.6200e-003	6.6200e-003	0.0000	94.8743	94.8743	1.8200e-003	1.7400e-003	95.4380

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e

Land Use	kWh/yr	MT/yr			
Single Family Housing	595730	173.3048	7.8400e-003	1.6200e-003	173.9838
Total		173.3048	7.8400e-003	1.6200e-003	173.9838

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	21742.3	6.3251	2.9000e-004	6.0000e-005	6.3499
Total		6.3251	2.9000e-004	6.0000e-005	6.3499

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5484	0.0521	0.5226	3.2000e-004		6.5000e-003	6.5000e-003		6.5000e-003	6.5000e-003	0.0000	54.3775	54.3775	1.8200e-003	9.8000e-004	54.7156
Unmitigated	0.5487	0.0521	0.5263	3.2000e-004		6.5200e-003	6.5200e-003		6.5200e-003	6.5200e-003	0.0000	54.3850	54.3850	1.8300e-003	9.8000e-004	54.7233

6.2 Area by SubCategory
Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0498					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4780					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.4100e-003	0.0463	0.0197	3.0000e-004		3.7400e-003	3.7400e-003		3.7400e-003	3.7400e-003	0.0000	53.5602	53.5602	1.0300e-003	9.8000e-004	53.8785
Landscaping	0.0154	5.8600e-003	0.5066	3.0000e-005		2.7900e-003	2.7900e-003		2.7900e-003	2.7900e-003	0.0000	0.8248	0.8248	8.0000e-004	0.0000	0.8449
Total	0.5487	0.0521	0.5263	3.3000e-004		6.5300e-003	6.5300e-003		6.5300e-003	6.5300e-003	0.0000	54.3850	54.3850	1.8300e-003	9.8000e-004	54.7233

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	AGENDA ITEM NO. 9.
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0498					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4780					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.4100e-003	0.0463	0.0197	3.0000e-004		3.7400e-003	3.7400e-003		3.7400e-003	3.7400e-003	0.0000	53.5602	53.5602	1.0300e-003	9.8000e-004	53.8785
Landscaping	0.0152	5.8200e-003	0.5029	3.0000e-005		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003	0.0000	0.8173	0.8173	7.9000e-004	0.0000	0.8372
Total	0.5484	0.0521	0.5226	3.3000e-004		6.5000e-003	6.5000e-003		6.5000e-003	6.5000e-003	0.0000	54.3775	54.3775	1.8200e-003	9.8000e-004	54.7156

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	10.1437	0.1360	3.2800e-003	14.5211
Unmitigated	11.2236	0.1448	3.5000e-003	15.8871

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	4.43047 / 2.79312	11.2236	0.1448	3.5000e-003	15.8871
Total		11.2236	0.1448	3.5000e-003	15.8871

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	4.16021 / 2.2345	10.1437	0.1360	3.2800e-003	14.5211
Total		10.1437	0.1360	3.2800e-003	14.5211

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e

	MT/yr			
Mitigated	3.5442	0.2095	0.0000	8.7807
Unmitigated	14.1769	0.8378	0.0000	35.1226

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	69.84	14.1769	0.8378	0.0000	35.1226
Total		14.1769	0.8378	0.0000	35.1226

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	17.46	3.5442	0.2095	0.0000	8.7807
Total		3.5442	0.2095	0.0000	8.7807

9.0 Operational Offroad

AGENDA ITEM NO. 9.

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

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Granville Homes - Locan - Tract 6239 - Phase 1 - Fresno County, Winter

Granville Homes - Locan - Tract 6239 - Phase 1
Fresno County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	68.00	Dwelling Unit	16.00	122,400.00	194

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Tract Map
- Construction Phase - 2020 - 3/2021
- Off-road Equipment - Increased equipment to account for decreased schedule from default
- Off-road Equipment - Increased equipment to account for schedule reduction from default
- Off-road Equipment - Increased equipment to account for decreased schedule from default
- Demolition -
- Architectural Coating - Rule 4601 Average VOC Content
- Vehicle Trips - TIS and ITE Trip Generation Manual 10th Edition, Land Use 210

Woodstoves - No woodstoves

Area Coating - Rule 4601 Average VOC Content

Mobile Land Use Mitigation -

Area Mitigation - Rule 4601 Average VOC Content

Energy Mitigation - Assumed minimum of 5 kw solar system size per home =8441 kWh

Water Mitigation - Model Water Efficient Landscape Ordinance, Green Building Code

Waste Mitigation - 75 percent statewide diversion/recycling mandate

Fleet Mix - Residential Fleet Mix

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	65.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	65.00
tblAreaCoating	Area_EF_Residential_Exterior	150	65
tblAreaCoating	Area_EF_Residential_Interior	150	65
tblConstructionPhase	NumDays	300.00	75.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	10.00
tblFireplaces	NumberGas	37.40	68.00
tblFireplaces	NumberNoFireplace	30.60	0.00
tblFleetMix	HHD	0.12	0.02
tblFleetMix	LDA	0.48	0.54
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.02	1.6000e-003
tblFleetMix	LHD2	4.9970e-003	9.0000e-004
tblFleetMix	MCY	5.2610e-003	2.6000e-003
tblFleetMix	MDV	0.13	0.05
tblFleetMix	MH	6.6700e-004	1.5000e-003
tblFleetMix	MHD	0.03	9.1000e-003
tblFleetMix	OBUS	2.3690e-003	0.00
tblFleetMix	SBUS	1.1150e-003	1.1000e-003

tblFleetMix	UBUS	1.6750e-003	4.4000e-003
tblLandUse	LotAcreage	22.08	16.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblTripsAndVMT	WorkerTripNumber	30.00	15.00
tblVehicleTrips	ST_TR	9.91	9.54
tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	6.9424	58.2398	52.3823	0.0766	18.2141	3.8217	20.6054	9.9699	3.5662	12.1699	0.0000	7,385.4394	7,385.4394	1.9666	0.0000	7,434.6051
2020	132.6227	53.0929	51.5343	0.0765	0.2446	3.3019	3.5465	0.0660	3.0814	3.1474	0.0000	7,256.5418	7,256.5418	1.9442	0.0000	7,305.1459
Maximum	132.6227	58.2398	52.3823	0.0766	18.2141	3.8217	20.6054	9.9699	3.5662	12.1699	0.0000	7,385.4394	7,385.4394	1.9666	0.0000	7,434.6051

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	lb/day										lb/day					
2019	6.9424	58.2398	52.3823	0.0766	18.2141	3.8217	20.6054	9.9699	3.5662	12.1699	0.0000	7,385.4394	7,385.4394	1.9666	0.0000	7,434.6050
2020	132.6227	53.0929	51.5343	0.0765	0.2446	3.3019	3.5465	0.0660	3.0814	3.1474	0.0000	7,256.5418	7,256.5418	1.9442	0.0000	7,305.1459
Maximum	132.6227	58.2398	52.3823	0.0766	18.2141	3.8217	20.6054	9.9699	3.5662	12.1699	0.0000	7,385.4394	7,385.4394	1.9666	0.0000	7,434.6050

	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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**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/day										lb/day					
Area	3.1955	1.1931	6.1087	7.5000e-003		0.1222	0.1222		0.1222	0.1222	0.0000	1,450.1016	1,450.1016	0.0375	0.0264	1,458.9050
Energy	0.0525	0.4489	0.1910	2.8700e-003		0.0363	0.0363		0.0363	0.0363		573.0464	573.0464	0.0110	0.0105	576.4517
Mobile	1.2151	5.0672	15.3639	0.0421	4.0267	0.0449	4.0717	1.0760	0.0421	1.1181		4,258.9964	4,258.9964	0.3197		4,266.9897
Total	4.4632	6.7092	21.6637	0.0525	4.0267	0.2034	4.2301	1.0760	0.2006	1.2765	0.0000	6,282.1443	6,282.1443	0.3682	0.0369	6,302.3464

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/day										lb/day					
Area	3.1931	1.1927	6.0681	7.4900e-003		0.1219	0.1219		0.1219	0.1219	0.0000	1,450.0106	1,450.0106	0.0373	0.0264	1,458.8105
Energy	0.0525	0.4489	0.1910	2.8700e-003		0.0363	0.0363		0.0363	0.0363		573.0464	573.0464	0.0110	0.0105	576.4517
Mobile	1.1904	4.8524	14.6118	0.0394	3.7489	0.0422	3.7911	1.0017	0.0395	1.0413		3,983.3852	3,983.3852	0.3061		3,991.0377
Total	4.4361	6.4940	20.8709	0.0497	3.7489	0.2004	3.9493	1.0017	0.1977	1.1995	0.0000	6,006.4421	6,006.4421	0.3544	0.0369	6,026.2999

	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
Percent Reduction	0.61	3.21	3.66	5.20	6.90	1.47	6.64	6.90	1.41	6.04	0.00	4.39	4.39	3.74	0.00	4.38

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/23/2019	10/4/2019	5	10	
2	Grading	Grading	10/5/2019	11/15/2019	5	30	
3	Building Construction	Building Construction	11/16/2019	2/28/2020	5	75	
4	Paving	Paving	2/29/2020	3/13/2020	5	10	
5	Architectural Coating	Architectural Coating	3/14/2020	3/27/2020	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 247,860; Residential Outdoor: 82,620; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

AGENDA ITEM NO. 9.

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	12	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	12	7.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
Paving	Pavers	4	8.00	130	0.42
Paving	Paving Equipment	4	8.00	132	0.36
Paving	Rollers	4	8.00	80	0.38
Architectural Coating	Air Compressors	2	6.00	78	0.48

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
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	30	24.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2019

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/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298		3,766.4529	3,766.4529	1.1917		3,796.2445

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	lb/day										lb/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
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
Worker	0.0898	0.0613	0.5541	1.3700e-003	0.1479	9.5000e-004	0.1488	0.0392	8.8000e-004	0.0401		136.1943	136.1943	4.1300e-003		136.2976
Total	0.0898	0.0613	0.5541	1.3700e-003	0.1479	9.5000e-004	0.1488	0.0392	8.8000e-004	0.0401		136.1943	136.1943	4.1300e-003		136.2976

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
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Category	lb/day										lb/day				
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000		0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917	3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298	0.0000	3,766.4529	3,766.4529	1.1917	3,796.2445

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	lb/day										lb/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
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
Worker	0.0898	0.0613	0.5541	1.3700e-003	0.1479	9.5000e-004	0.1488	0.0392	8.8000e-004	0.0401		136.1943	136.1943	4.1300e-003		136.2976
Total	0.0898	0.0613	0.5541	1.3700e-003	0.1479	9.5000e-004	0.1488	0.0392	8.8000e-004	0.0401		136.1943	136.1943	4.1300e-003		136.2976

3.3 Grading - 2019

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/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854

Total	4.7389	54.5202	33.3768	0.0620	8.6733	2.3827	11.0560	3.5965	2.1920	5.7885		6,140.0195	6,140.0195	1.9426		AGENDA ITEM NO. 9.
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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	lb/day										lb/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
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
Worker	0.0998	0.0681	0.6157	1.5200e-003	0.1643	1.0600e-003	0.1654	0.0436	9.8000e-004	0.0446		151.3270	151.3270	4.5900e-003		151.4418
Total	0.0998	0.0681	0.6157	1.5200e-003	0.1643	1.0600e-003	0.1654	0.0436	9.8000e-004	0.0446		151.3270	151.3270	4.5900e-003		151.4418

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/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	4.7389	54.5202	33.3768	0.0620	8.6733	2.3827	11.0560	3.5965	2.1920	5.7885	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854

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	lb/day										lb/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
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
Worker	0.0998	0.0681	0.6157	1.5200e-003	0.1643	1.0600e-003	0.1654	0.0436	9.8000e-004	0.0446		151.3270	151.3270	4.5900e-003		151.4418
Total	0.0998	0.0681	0.6157	1.5200e-003	0.1643	1.0600e-003	0.1654	0.0436	9.8000e-004	0.0446		151.3270	151.3270	4.5900e-003		151.4418

3.4 Building Construction - 2019

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/day										lb/day					
Off-Road	6.7896	57.2132	51.4666	0.0728		3.8135	3.8135		3.5584	3.5584		6,997.7891	6,997.7891	1.9325		7,046.1024
Total	6.7896	57.2132	51.4666	0.0728		3.8135	3.8135		3.5584	3.5584		6,997.7891	6,997.7891	1.9325		7,046.1024

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	lb/day										lb/day					

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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	0.0331	0.9449	0.1769	1.9700e-003	0.0474	6.9400e-003	0.0544	0.0137	6.6400e-003	0.0203		206.0579	206.0579	0.0286		206.7725
Worker	0.1197	0.0817	0.7389	1.8200e-003	0.1972	1.2700e-003	0.1984	0.0523	1.1700e-003	0.0535		181.5924	181.5924	5.5100e-003		181.7302
Total	0.1528	1.0267	0.9157	3.7900e-003	0.2446	8.2100e-003	0.2528	0.0660	7.8100e-003	0.0738		387.6503	387.6503	0.0341		388.5027

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/day										lb/day					
Off-Road	6.7896	57.2132	51.4666	0.0728		3.8135	3.8135		3.5584	3.5584	0.0000	6,997.7891	6,997.7891	1.9325		7,046.1024
Total	6.7896	57.2132	51.4666	0.0728		3.8135	3.8135		3.5584	3.5584	0.0000	6,997.7891	6,997.7891	1.9325		7,046.1024

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	lb/day										lb/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
Vendor	0.0331	0.9449	0.1769	1.9700e-003	0.0474	6.9400e-003	0.0544	0.0137	6.6400e-003	0.0203		206.0579	206.0579	0.0286		206.7725
Worker	0.1197	0.0817	0.7389	1.8200e-003	0.1972	1.2700e-003	0.1984	0.0523	1.1700e-003	0.0535		181.5924	181.5924	5.5100e-003		181.7302
Total	0.1528	1.0267	0.9157	3.7900e-003	0.2446	8.2100e-003	0.2528	0.0660	7.8100e-003	0.0738		387.6503	387.6503	0.0341		388.5027

3.4 Building Construction - 2020
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/day										lb/day					
Off-Road	6.0920	52.1556	50.7245	0.0728		3.2960	3.2960		3.0758	3.0758		6,876.3257	6,876.3257	1.9118		6,924.1203
Total	6.0920	52.1556	50.7245	0.0728		3.2960	3.2960		3.0758	3.0758		6,876.3257	6,876.3257	1.9118		6,924.1203

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	lb/day										lb/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
Vendor	0.0269	0.8654	0.1524	1.9500e-003	0.0474	4.6600e-003	0.0521	0.0137	4.4600e-003	0.0181		204.2708	204.2708	0.0276		204.9606
Worker	0.1094	0.0720	0.6574	1.7700e-003	0.1972	1.2300e-003	0.1984	0.0523	1.1400e-003	0.0534		175.9453	175.9453	4.7900e-003		176.0650
Total	0.1363	0.9374	0.8098	3.7200e-003	0.2446	5.8900e-003	0.2505	0.0660	5.6000e-003	0.0715		380.2161	380.2161	0.0324		381.0256

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	
Category	lb/day										lb/day					
Off-Road	6.0920	52.1556	50.7245	0.0728		3.2960	3.2960		3.0758	3.0758	0.0000	6,876.3257	6,876.3257	1.9118		6,924.1203
Total	6.0920	52.1556	50.7245	0.0728		3.2960	3.2960		3.0758	3.0758	0.0000	6,876.3257	6,876.3257	1.9118		6,924.1203

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	lb/day										lb/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
Vendor	0.0269	0.8654	0.1524	1.9500e-003	0.0474	4.6600e-003	0.0521	0.0137	4.4600e-003	0.0181		204.2708	204.2708	0.0276		204.9606
Worker	0.1094	0.0720	0.6574	1.7700e-003	0.1972	1.2300e-003	0.1984	0.0523	1.1400e-003	0.0534		175.9453	175.9453	4.7900e-003		176.0650
Total	0.1363	0.9374	0.8098	3.7200e-003	0.2446	5.8900e-003	0.2505	0.0660	5.6000e-003	0.0715		380.2161	380.2161	0.0324		381.0256

3.5 Paving - 2020

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/day										lb/day					
Off-Road	2.7131	28.1311	29.3042	0.0456		1.5056	1.5056		1.3851	1.3851		4,415.4669	4,415.4669	1.4281		4,451.1682

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000								AGENDA ITEM NO. 9.
Total	2.7131	28.1311	29.3042	0.0456		1.5056	1.5056		1.3851	1.3851			4,415.4669	4,415.4669	1.4281						4,451.1682

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	lb/day										lb/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
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
Worker	0.0683	0.0450	0.4108	1.1000e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		109.9658	109.9658	2.9900e-003			110.0406
Total	0.0683	0.0450	0.4108	1.1000e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		109.9658	109.9658	2.9900e-003			110.0406

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/day										lb/day						
Off-Road	2.7131	28.1311	29.3042	0.0456		1.5056	1.5056		1.3851	1.3851	0.0000	4,415.4669	4,415.4669	1.4281			4,451.1682
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.7131	28.1311	29.3042	0.0456		1.5056	1.5056		1.3851	1.3851	0.0000	4,415.4669	4,415.4669	1.4281			4,451.1682

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	lb/day										lb/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
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
Worker	0.0683	0.0450	0.4108	1.1000e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		109.9658	109.9658	2.9900e-003		110.0406
Total	0.0683	0.0450	0.4108	1.1000e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		109.9658	109.9658	2.9900e-003		110.0406

3.6 Architectural Coating - 2020
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/day										lb/day					
Archit. Coating	132.1156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4844	3.3677	3.6628	5.9400e-003		0.2219	0.2219		0.2219	0.2219		562.8961	562.8961	0.0436		563.9856
Total	132.5999	3.3677	3.6628	5.9400e-003		0.2219	0.2219		0.2219	0.2219		562.8961	562.8961	0.0436		563.9856

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	lb/day										lb/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	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		0.0000
Worker	0.0228	0.0150	0.1370	3.7000e-004	0.0411	2.6000e-004	0.0413	0.0109	2.4000e-004	0.0111		36.6553	36.6553	1.0000e-003			36.6802	
Total	0.0228	0.0150	0.1370	3.7000e-004	0.0411	2.6000e-004	0.0413	0.0109	2.4000e-004	0.0111		36.6553	36.6553	1.0000e-003			36.6802	

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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/day										lb/day					
Archit. Coating	132.1156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4844	3.3677	3.6628	5.9400e-003		0.2219	0.2219		0.2219	0.2219	0.0000	562.8961	562.8961	0.0436		563.9856
Total	132.5999	3.3677	3.6628	5.9400e-003		0.2219	0.2219		0.2219	0.2219	0.0000	562.8961	562.8961	0.0436		563.9856

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	lb/day										lb/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
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
Worker	0.0228	0.0150	0.1370	3.7000e-004	0.0411	2.6000e-004	0.0413	0.0109	2.4000e-004	0.0111		36.6553	36.6553	1.0000e-003		36.6802
Total	0.0228	0.0150	0.1370	3.7000e-004	0.0411	2.6000e-004	0.0413	0.0109	2.4000e-004	0.0111		36.6553	36.6553	1.0000e-003		36.6802

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

- Improve Destination Accessibility
- 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/day										lb/day						
Mitigated	1.1904	4.8524	14.6118	0.0394	3.7489	0.0422	3.7911	1.0017	0.0395	1.0413		3,983.3852	3,983.3852	0.3061			3,991.0377
Unmitigated	1.2151	5.0672	15.3639	0.0421	4.0267	0.0449	4.0717	1.0760	0.0421	1.1181		4,258.9964	4,258.9964	0.3197			4,266.9897

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	641.92	648.72	581.40	1,858,130	1,729,919
Total	641.92	648.72	581.40	1,858,130	1,729,919

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
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Single Family Housing	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100
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AGENDA ITEM NO. 9.

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	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/day										lb/day					
Natural Gas Mitigated	0.0525	0.4489	0.1910	2.8700e-003		0.0363	0.0363		0.0363	0.0363		573.0464	573.0464	0.0110	0.0105	576.4517
Natural Gas Unmitigated	0.0525	0.4489	0.1910	2.8700e-003		0.0363	0.0363		0.0363	0.0363		573.0464	573.0464	0.0110	0.0105	576.4517

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas 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/day										lb/day					
Single Family Housing	4870.89	0.0525	0.4489	0.1910	2.8700e-003		0.0363	0.0363		0.0363	0.0363		573.0464	573.0464	0.0110	0.0105	576.4517
Total		0.0525	0.4489	0.1910	2.8700e-003		0.0363	0.0363		0.0363	0.0363		573.0464	573.0464	0.0110	0.0105	576.4517

Mitigated

	Natural Gas 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/day										lb/day					
Single Family Housing	4.87089	0.0525	0.4489	0.1910	2.8700e-003		0.0363	0.0363		0.0363	0.0363		573.0464	573.0464	0.0110	0.0105	576.4517
Total		0.0525	0.4489	0.1910	2.8700e-003		0.0363	0.0363		0.0363	0.0363		573.0464	573.0464	0.0110	0.0105	576.4517

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use only Natural Gas Hearths

	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/day										lb/day					
Mitigated	3.1931	1.1927	6.0681	7.4900e-003		0.1219	0.1219		0.1219	0.1219	0.0000	1,450.0106	1,450.0106	0.0373	0.0264	1,458.8105

Unmitigated	3.1955	1.1931	6.1087	7.5000e-003		0.1222	0.1222		0.1222	0.1222	0.0000	1,450.1016	1,450.1016	0.0375	0.0264	AGENDA ITEM NO. 9.
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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	0.2728					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.6194					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1320	1.1280	0.4800	7.2000e-003		0.0912	0.0912		0.0912	0.0912	0.0000	1,440.0000	1,440.0000	0.0276	0.0264	1,448.5572
Landscaping	0.1714	0.0651	5.6287	3.0000e-004		0.0310	0.0310		0.0310	0.0310		10.1016	10.1016	9.8500e-003		10.3478
Total	3.1955	1.1931	6.1087	7.5000e-003		0.1222	0.1222		0.1222	0.1222	0.0000	1,450.1016	1,450.1016	0.0375	0.0264	1,458.9050

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/day										lb/day					
Architectural Coating	0.2728					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.6194					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1320	1.1280	0.4800	7.2000e-003		0.0912	0.0912		0.0912	0.0912	0.0000	1,440.0000	1,440.0000	0.0276	0.0264	1,448.5572
Landscaping	0.1690	0.0647	5.5881	2.9000e-004		0.0307	0.0307		0.0307	0.0307		10.1016	10.1016	9.7100e-003		10.2533

Total	3.1931	1.1927	6.0681	7.4900e-003		0.1219	0.1219		0.1219	0.1219	0.0000	1,450.0106	1,450.0106	0.0373	0.0264	AGENDA ITEM NO. 9.
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7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Granville Homes - Locan - Tract 6239 - Phase 1 - Fresno County, Summer

Granville Homes - Locan - Tract 6239 - Phase 1
Fresno County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	68.00	Dwelling Unit	16.00	122,400.00	194

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Tract Map
- Construction Phase - 2020 - 3/2021
- Off-road Equipment - Increased equipment to account for decreased schedule from default
- Off-road Equipment - Increased equipment to account for schedule reduction from default
- Off-road Equipment - Increased equipment to account for decreased schedule from default
- Demolition -
- Architectural Coating - Rule 4601 Average VOC Content
- Vehicle Trips - TIS and ITE Trip Generation Manual 10th Edition, Land Use 210

Woodstoves - No woodstoves

Area Coating - Rule 4601 Average VOC Content

Mobile Land Use Mitigation -

Area Mitigation - Rule 4601 Average VOC Content

Energy Mitigation - Assumed minimum of 5 kw solar system size per home =8441 kWh

Water Mitigation - Model Water Efficient Landscape Ordinance, Green Building Code

Waste Mitigation - 75 percent statewide diversion/recycling mandate

Fleet Mix - Residential Fleet Mix

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	65.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	65.00
tblAreaCoating	Area_EF_Residential_Exterior	150	65
tblAreaCoating	Area_EF_Residential_Interior	150	65
tblConstructionPhase	NumDays	300.00	75.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	10.00
tblFireplaces	NumberGas	37.40	68.00
tblFireplaces	NumberNoFireplace	30.60	0.00
tblFleetMix	HHD	0.12	0.02
tblFleetMix	LDA	0.48	0.54
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.02	1.6000e-003
tblFleetMix	LHD2	4.9970e-003	9.0000e-004
tblFleetMix	MCY	5.2610e-003	2.6000e-003
tblFleetMix	MDV	0.13	0.05
tblFleetMix	MH	6.6700e-004	1.5000e-003
tblFleetMix	MHD	0.03	9.1000e-003
tblFleetMix	OBUS	2.3690e-003	0.00
tblFleetMix	SBUS	1.1150e-003	1.1000e-003

tblFleetMix	UBUS	1.6750e-003	4.4000e-003
tblLandUse	LotAcreage	22.08	16.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblTripsAndVMT	WorkerTripNumber	30.00	15.00
tblVehicleTrips	ST_TR	9.91	9.54
tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	6.9504	58.2144	52.4800	0.0769	18.2141	3.8216	20.6054	9.9699	3.5661	12.1699	0.0000	7,417.6547	7,417.6547	1.9640	0.0000	7,466.7556
2020	132.6245	53.0723	51.6246	0.0768	0.2446	3.3018	3.5464	0.0660	3.0813	3.1473	0.0000	7,287.9482	7,287.9482	1.9416	0.0000	7,336.4875
Maximum	132.6245	58.2144	52.4800	0.0769	18.2141	3.8216	20.6054	9.9699	3.5661	12.1699	0.0000	7,417.6547	7,417.6547	1.9640	0.0000	7,466.7556

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	lb/day										lb/day					
2019	6.9504	58.2144	52.4800	0.0769	18.2141	3.8216	20.6054	9.9699	3.5661	12.1699	0.0000	7,417.6547	7,417.6547	1.9640	0.0000	7,466.7556
2020	132.6245	53.0723	51.6246	0.0768	0.2446	3.3018	3.5464	0.0660	3.0813	3.1473	0.0000	7,287.9482	7,287.9482	1.9416	0.0000	7,336.4875
Maximum	132.6245	58.2144	52.4800	0.0769	18.2141	3.8216	20.6054	9.9699	3.5661	12.1699	0.0000	7,417.6547	7,417.6547	1.9640	0.0000	7,466.7556

	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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**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/day										lb/day					
Area	3.1955	1.1931	6.1087	7.5000e-003		0.1222	0.1222		0.1222	0.1222	0.0000	1,450.1016	1,450.1016	0.0375	0.0264	1,458.9050
Energy	0.0525	0.4489	0.1910	2.8700e-003		0.0363	0.0363		0.0363	0.0363		573.0464	573.0464	0.0110	0.0105	576.4517
Mobile	1.7188	4.7745	17.0341	0.0472	4.0267	0.0446	4.0713	1.0760	0.0418	1.1178		4,763.3668	4,763.3668	0.3173		4,771.2986
Total	4.9669	6.4165	23.3338	0.0575	4.0267	0.2030	4.2298	1.0760	0.2003	1.2762	0.0000	6,786.5147	6,786.5147	0.3657	0.0369	6,806.6553

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/day										lb/day					
Area	3.1931	1.1927	6.0681	7.4900e-003		0.1219	0.1219		0.1219	0.1219	0.0000	1,450.0106	1,450.0106	0.0373	0.0264	1,458.8105
Energy	0.0525	0.4489	0.1910	2.8700e-003		0.0363	0.0363		0.0363	0.0363		573.0464	573.0464	0.0110	0.0105	576.4517
Mobile	1.6917	4.5811	16.0675	0.0441	3.7489	0.0419	3.7907	1.0017	0.0392	1.0410		4,454.6762	4,454.6762	0.3025		4,462.2389
Total	4.9373	6.2227	22.3266	0.0545	3.7489	0.2001	3.9489	1.0017	0.1974	1.1992	0.0000	6,477.7332	6,477.7332	0.3508	0.0369	6,497.5011

	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
Percent Reduction	0.60	3.02	4.32	5.34	6.90	1.47	6.64	6.90	1.41	6.04	0.00	4.55	4.55	4.07	0.00	4.54

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/23/2019	10/4/2019	5	10	
2	Grading	Grading	10/5/2019	11/15/2019	5	30	
3	Building Construction	Building Construction	11/16/2019	2/28/2020	5	75	
4	Paving	Paving	2/29/2020	3/13/2020	5	10	
5	Architectural Coating	Architectural Coating	3/14/2020	3/27/2020	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 247,860; Residential Outdoor: 82,620; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

AGENDA ITEM NO. 9.

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	12	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	12	7.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
Paving	Pavers	4	8.00	130	0.42
Paving	Paving Equipment	4	8.00	132	0.36
Paving	Rollers	4	8.00	80	0.38
Architectural Coating	Air Compressors	2	6.00	78	0.48

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
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	30	24.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2019

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/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298		3,766.4529	3,766.4529	1.1917		3,796.2445

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	lb/day										lb/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
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
Worker	0.0968	0.0521	0.6474	1.5600e-003	0.1479	9.5000e-004	0.1488	0.0392	8.8000e-004	0.0401		155.3904	155.3904	4.6700e-003		155.5072
Total	0.0968	0.0521	0.6474	1.5600e-003	0.1479	9.5000e-004	0.1488	0.0392	8.8000e-004	0.0401		155.3904	155.3904	4.6700e-003		155.5072

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
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Category	lb/day										lb/day				
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000		0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917	3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298	0.0000	3,766.4529	3,766.4529	1.1917	3,796.2445

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	lb/day										lb/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
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
Worker	0.0968	0.0521	0.6474	1.5600e-003	0.1479	9.5000e-004	0.1488	0.0392	8.8000e-004	0.0401		155.3904	155.3904	4.6700e-003		155.5072
Total	0.0968	0.0521	0.6474	1.5600e-003	0.1479	9.5000e-004	0.1488	0.0392	8.8000e-004	0.0401		155.3904	155.3904	4.6700e-003		155.5072

3.3 Grading - 2019

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/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854

Total	4.7389	54.5202	33.3768	0.0620	8.6733	2.3827	11.0560	3.5965	2.1920	5.7885		6,140.0195	6,140.0195	1.9426		AGENDA ITEM NO. 9.
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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	lb/day										lb/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
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
Worker	0.1076	0.0579	0.7194	1.7400e-003	0.1643	1.0600e-003	0.1654	0.0436	9.8000e-004	0.0446		172.6560	172.6560	5.1900e-003		172.7857
Total	0.1076	0.0579	0.7194	1.7400e-003	0.1643	1.0600e-003	0.1654	0.0436	9.8000e-004	0.0446		172.6560	172.6560	5.1900e-003		172.7857

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/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	4.7389	54.5202	33.3768	0.0620	8.6733	2.3827	11.0560	3.5965	2.1920	5.7885	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854

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	lb/day										lb/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
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
Worker	0.1076	0.0579	0.7194	1.7400e-003	0.1643	1.0600e-003	0.1654	0.0436	9.8000e-004	0.0446		172.6560	172.6560	5.1900e-003		172.7857
Total	0.1076	0.0579	0.7194	1.7400e-003	0.1643	1.0600e-003	0.1654	0.0436	9.8000e-004	0.0446		172.6560	172.6560	5.1900e-003		172.7857

3.4 Building Construction - 2019
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/day										lb/day					
Off-Road	6.7896	57.2132	51.4666	0.0728		3.8135	3.8135		3.5584	3.5584		6,997.7891	6,997.7891	1.9325		7,046.1024
Total	6.7896	57.2132	51.4666	0.0728		3.8135	3.8135		3.5584	3.5584		6,997.7891	6,997.7891	1.9325		7,046.1024

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	lb/day										lb/day					

AGENDA ITEM NO. 9.

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	0.0318	0.9318	0.1501	2.0300e-003	0.0474	6.8100e-003	0.0542	0.0137	6.5200e-003	0.0202		212.6783	212.6783	0.0253		213.3104
Worker	0.1291	0.0695	0.8632	2.0800e-003	0.1972	1.2700e-003	0.1984	0.0523	1.1700e-003	0.0535		207.1872	207.1872	6.2300e-003		207.3429
Total	0.1609	1.0012	1.0133	4.1100e-003	0.2446	8.0800e-003	0.2527	0.0660	7.6900e-003	0.0736		419.8655	419.8655	0.0315		420.6532

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/day										lb/day					
Off-Road	6.7896	57.2132	51.4666	0.0728		3.8135	3.8135		3.5584	3.5584	0.0000	6,997.7891	6,997.7891	1.9325		7,046.1024
Total	6.7896	57.2132	51.4666	0.0728		3.8135	3.8135		3.5584	3.5584	0.0000	6,997.7891	6,997.7891	1.9325		7,046.1024

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	lb/day										lb/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
Vendor	0.0318	0.9318	0.1501	2.0300e-003	0.0474	6.8100e-003	0.0542	0.0137	6.5200e-003	0.0202		212.6783	212.6783	0.0253		213.3104
Worker	0.1291	0.0695	0.8632	2.0800e-003	0.1972	1.2700e-003	0.1984	0.0523	1.1700e-003	0.0535		207.1872	207.1872	6.2300e-003		207.3429
Total	0.1609	1.0012	1.0133	4.1100e-003	0.2446	8.0800e-003	0.2527	0.0660	7.6900e-003	0.0736		419.8655	419.8655	0.0315		420.6532

3.4 Building Construction - 2020
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/day										lb/day					
Off-Road	6.0920	52.1556	50.7245	0.0728		3.2960	3.2960		3.0758	3.0758		6,876.3257	6,876.3257	1.9118		6,924.1203
Total	6.0920	52.1556	50.7245	0.0728		3.2960	3.2960		3.0758	3.0758		6,876.3257	6,876.3257	1.9118		6,924.1203

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	lb/day										lb/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
Vendor	0.0258	0.8555	0.1282	2.0100e-003	0.0474	4.5600e-003	0.0520	0.0137	4.3600e-003	0.0180		210.8641	210.8641	0.0244		211.4730
Worker	0.1179	0.0612	0.7718	2.0200e-003	0.1972	1.2300e-003	0.1984	0.0523	1.1400e-003	0.0534		200.7584	200.7584	5.4300e-003		200.8942
Total	0.1436	0.9167	0.9000	4.0300e-003	0.2446	5.7900e-003	0.2504	0.0660	5.5000e-003	0.0715		411.6225	411.6225	0.0298		412.3672

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	
Category	lb/day										lb/day					
Off-Road	6.0920	52.1556	50.7245	0.0728		3.2960	3.2960		3.0758	3.0758	0.0000	6,876.3257	6,876.3257	1.9118		6,924.1203
Total	6.0920	52.1556	50.7245	0.0728		3.2960	3.2960		3.0758	3.0758	0.0000	6,876.3257	6,876.3257	1.9118		6,924.1203

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	lb/day										lb/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
Vendor	0.0258	0.8555	0.1282	2.0100e-003	0.0474	4.5600e-003	0.0520	0.0137	4.3600e-003	0.0180		210.8641	210.8641	0.0244		211.4730
Worker	0.1179	0.0612	0.7718	2.0200e-003	0.1972	1.2300e-003	0.1984	0.0523	1.1400e-003	0.0534		200.7584	200.7584	5.4300e-003		200.8942
Total	0.1436	0.9167	0.9000	4.0300e-003	0.2446	5.7900e-003	0.2504	0.0660	5.5000e-003	0.0715		411.6225	411.6225	0.0298		412.3672

3.5 Paving - 2020

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/day										lb/day					
Off-Road	2.7131	28.1311	29.3042	0.0456		1.5056	1.5056		1.3851	1.3851		4,415.4669	4,415.4669	1.4281		4,451.1682

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000										AGENDA ITEM NO. 9.
Total	2.7131	28.1311	29.3042	0.0456		1.5056	1.5056		1.3851	1.3851			4,415.4669	4,415.4669	1.4281							4,451.1682	

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	lb/day										lb/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
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
Worker	0.0737	0.0383	0.4824	1.2600e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		125.4740	125.4740	3.4000e-003			125.5589
Total	0.0737	0.0383	0.4824	1.2600e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		125.4740	125.4740	3.4000e-003			125.5589

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/day										lb/day						
Off-Road	2.7131	28.1311	29.3042	0.0456		1.5056	1.5056		1.3851	1.3851	0.0000	4,415.4669	4,415.4669	1.4281			4,451.1682
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.7131	28.1311	29.3042	0.0456		1.5056	1.5056		1.3851	1.3851	0.0000	4,415.4669	4,415.4669	1.4281			4,451.1682

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	lb/day										lb/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
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
Worker	0.0737	0.0383	0.4824	1.2600e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		125.4740	125.4740	3.4000e-003		125.5589
Total	0.0737	0.0383	0.4824	1.2600e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		125.4740	125.4740	3.4000e-003		125.5589

3.6 Architectural Coating - 2020
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/day										lb/day					
Archit. Coating	132.1156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4844	3.3677	3.6628	5.9400e-003		0.2219	0.2219		0.2219	0.2219		562.8961	562.8961	0.0436		563.9856
Total	132.5999	3.3677	3.6628	5.9400e-003		0.2219	0.2219		0.2219	0.2219		562.8961	562.8961	0.0436		563.9856

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	lb/day										lb/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	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	0.0246	0.0128	0.1608	4.2000e-004	0.0411	2.6000e-004	0.0413	0.0109	2.4000e-004	0.0111		41.8247	41.8247	1.1300e-003		41.8530		
Total	0.0246	0.0128	0.1608	4.2000e-004	0.0411	2.6000e-004	0.0413	0.0109	2.4000e-004	0.0111		41.8247	41.8247	1.1300e-003		41.8530		

AGENDA ITEM NO. 9.

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/day										lb/day					
Archit. Coating	132.1156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4844	3.3677	3.6628	5.9400e-003		0.2219	0.2219		0.2219	0.2219	0.0000	562.8961	562.8961	0.0436		563.9856
Total	132.5999	3.3677	3.6628	5.9400e-003		0.2219	0.2219		0.2219	0.2219	0.0000	562.8961	562.8961	0.0436		563.9856

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	lb/day										lb/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
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
Worker	0.0246	0.0128	0.1608	4.2000e-004	0.0411	2.6000e-004	0.0413	0.0109	2.4000e-004	0.0111		41.8247	41.8247	1.1300e-003		41.8530
Total	0.0246	0.0128	0.1608	4.2000e-004	0.0411	2.6000e-004	0.0413	0.0109	2.4000e-004	0.0111		41.8247	41.8247	1.1300e-003		41.8530

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

- Improve Destination Accessibility
- 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/day										lb/day					
Mitigated	1.6917	4.5811	16.0675	0.0441	3.7489	0.0419	3.7907	1.0017	0.0392	1.0410		4,454.6762	4,454.6762	0.3025		4,462.2389
Unmitigated	1.7188	4.7745	17.0341	0.0472	4.0267	0.0446	4.0713	1.0760	0.0418	1.1178		4,763.3668	4,763.3668	0.3173		4,771.2986

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	641.92	648.72	581.40	1,858,130	1,729,919
Total	641.92	648.72	581.40	1,858,130	1,729,919

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
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Single Family Housing	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100
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AGENDA ITEM NO. 9.

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	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/day										lb/day					
Natural Gas Mitigated	0.0525	0.4489	0.1910	2.8700e-003		0.0363	0.0363		0.0363	0.0363		573.0464	573.0464	0.0110	0.0105	576.4517
Natural Gas Unmitigated	0.0525	0.4489	0.1910	2.8700e-003		0.0363	0.0363		0.0363	0.0363		573.0464	573.0464	0.0110	0.0105	576.4517

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas 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/day										lb/day					
Single Family Housing	4870.89	0.0525	0.4489	0.1910	2.8700e-003		0.0363	0.0363		0.0363	0.0363		573.0464	573.0464	0.0110	0.0105	576.4517
Total		0.0525	0.4489	0.1910	2.8700e-003		0.0363	0.0363		0.0363	0.0363		573.0464	573.0464	0.0110	0.0105	576.4517

Mitigated

	Natural Gas 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/day										lb/day					
Single Family Housing	4.87089	0.0525	0.4489	0.1910	2.8700e-003		0.0363	0.0363		0.0363	0.0363		573.0464	573.0464	0.0110	0.0105	576.4517
Total		0.0525	0.4489	0.1910	2.8700e-003		0.0363	0.0363		0.0363	0.0363		573.0464	573.0464	0.0110	0.0105	576.4517

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use only Natural Gas Hearths

	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/day										lb/day					
Mitigated	3.1931	1.1927	6.0681	7.4900e-003		0.1219	0.1219		0.1219	0.1219	0.0000	1,450.0106	1,450.0106	0.0373	0.0264	1,458.8105

Unmitigated	3.1955	1.1931	6.1087	7.5000e-003		0.1222	0.1222		0.1222	0.1222	0.0000	1,450.1016	1,450.1016	0.0375	0.0264	AGENDA ITEM NO. 9.
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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	0.2728						0.0000	0.0000		0.0000			0.0000			0.0000
Consumer Products	2.6194						0.0000	0.0000		0.0000			0.0000			0.0000
Hearth	0.1320	1.1280	0.4800	7.2000e-003			0.0912	0.0912		0.0912	0.0000	1,440.0000	1,440.0000	0.0276	0.0264	1,448.5572
Landscaping	0.1714	0.0651	5.6287	3.0000e-004			0.0310	0.0310		0.0310		10.1016	10.1016	9.8500e-003		10.3478
Total	3.1955	1.1931	6.1087	7.5000e-003			0.1222	0.1222		0.1222	0.0000	1,450.1016	1,450.1016	0.0375	0.0264	1,458.9050

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/day										lb/day					
Architectural Coating	0.2728						0.0000	0.0000		0.0000			0.0000			0.0000
Consumer Products	2.6194						0.0000	0.0000		0.0000			0.0000			0.0000
Hearth	0.1320	1.1280	0.4800	7.2000e-003			0.0912	0.0912		0.0912	0.0000	1,440.0000	1,440.0000	0.0276	0.0264	1,448.5572
Landscaping	0.1690	0.0647	5.5881	2.9000e-004			0.0307	0.0307		0.0307		10.1016	10.1016	9.7100e-003		10.2533

Total	3.1931	1.1927	6.0681	7.4900e-003		0.1219	0.1219		0.1219	0.1219	0.0000	1,450.0106	1,450.0106	0.0373	0.0264	AGENDA ITEM NO. 9.
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7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Granville_Locan_Tract_6239_Phase2 - Fresno County, Annual

Granville_Locan_Tract_6239_Phase2
Fresno County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	94.00	Dwelling Unit	29.00	169,200.00	269

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Tract Map
- Construction Phase - Construction to go from 4/2020 - 3/2021
- Off-road Equipment - increased equipment to account for reduced construction schedule from default
- Architectural Coating - Avg VOC Content - Rule 4601
- Vehicle Trips - TIS and ITE Trip Generation Manual 10th Edition, Land Use 210
- Woodstoves - No woodburning
- Area Coating - Avg VOC Content - Rule 4601
- Mobile Land Use Mitigation -

Area Mitigation - Avg VOC Content - Rule 4601

Energy Mitigation - Assumed 3 kw solar system size for homes

Water Mitigation - Model Water Efficient Landscape Ordinance, Green Building Code

Waste Mitigation - 75 percent statewide diversion/recycling mandate

Fleet Mix - SJVAPCD Residential Fleet Mix for 2021

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	65.00
tblAreaCoating	Area_EF_Residential_Exterior	150	65
tblAreaCoating	Area_EF_Residential_Interior	150	65
tblConstructionPhase	NumDays	440.00	115.00
tblFireplaces	NumberGas	51.70	94.00
tblFireplaces	NumberNoFireplace	42.30	0.00
tblFleetMix	HHD	0.12	0.02
tblFleetMix	LDA	0.49	0.54
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.02	1.4000e-003
tblFleetMix	LHD2	4.7320e-003	9.0000e-004
tblFleetMix	MCY	5.1540e-003	2.6000e-003
tblFleetMix	MDV	0.12	0.05
tblFleetMix	MH	6.2900e-004	1.6000e-003
tblFleetMix	MHD	0.03	9.0000e-003
tblFleetMix	OBUS	2.3660e-003	0.00
tblFleetMix	SBUS	1.0970e-003	9.0000e-004
tblFleetMix	UBUS	1.5900e-003	4.4000e-003
tblLandUse	LotAcreage	30.52	29.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00

tblVehicleTrips	ST_TR	9.91	9.54
tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.5144	4.7296	4.0396	6.4900e-003	0.4011	0.2662	0.6673	0.1870	0.2474	0.4345	0.0000	562.8508	562.8508	0.1571	0.0000	566.7792
2021	0.7063	0.1631	0.1927	3.1000e-004	2.2400e-003	8.7800e-003	0.0110	5.9000e-004	8.2100e-003	8.8000e-003	0.0000	27.3639	27.3639	7.1500e-003	0.0000	27.5427
Maximum	0.7063	4.7296	4.0396	6.4900e-003	0.4011	0.2662	0.6673	0.1870	0.2474	0.4345	0.0000	562.8508	562.8508	0.1571	0.0000	566.7792

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.5144	4.7296	4.0396	6.4900e-003	0.4011	0.2662	0.6673	0.1870	0.2474	0.4345	0.0000	562.8502	562.8502	0.1571	0.0000	566.7785
2021	0.7063	0.1631	0.1927	3.1000e-004	2.2400e-003	8.7800e-003	0.0110	5.9000e-004	8.2100e-003	8.8000e-003	0.0000	27.3639	27.3639	7.1500e-003	0.0000	27.5427
Maximum	0.7063	4.7296	4.0396	6.4900e-003	0.4011	0.2662	0.6673	0.1870	0.2474	0.4345	0.0000	562.8502	562.8502	0.1571	0.0000	566.7785

	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	
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

AGENDA ITEM NO. 9.

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-6-2020	7-5-2020	1.7086	1.7086
2	7-6-2020	10-5-2020	1.9636	1.9636
3	10-6-2020	1-5-2021	1.5669	1.5669
4	1-6-2021	4-5-2021	0.8419	0.8419
		Highest	1.9636	1.9636

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.7583	0.0720	0.7267	4.4000e-004		9.0200e-003	9.0200e-003		9.0200e-003	9.0200e-003	0.0000	75.1792	75.1792	2.5200e-003	1.3600e-003	75.6468
Energy	0.0133	0.1132	0.0482	7.2000e-004		9.1600e-003	9.1600e-003		9.1600e-003	9.1600e-003	0.0000	370.7181	370.7181	0.0134	4.6500e-003	372.4361
Mobile	0.3011	1.1010	3.4207	0.0104	0.9638	9.3500e-003	0.9731	0.2580	8.7400e-003	0.2668	0.0000	953.9741	953.9741	0.0660	0.0000	955.6244
Waste						0.0000	0.0000		0.0000	0.0000	19.6576	0.0000	19.6576	1.1617	0.0000	48.7010
Water						0.0000	0.0000		0.0000	0.0000	1.9430	13.5720	15.5150	0.2002	4.8400e-003	21.9616
Total	1.0726	1.2863	4.1956	0.0116	0.9638	0.0275	0.9913	0.2580	0.0269	0.2849	21.6007	1,413.4433	1,435.0440	1.4438	0.0109	1,474.3699

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	AGENDA ITEM NO. 9.	
Category	tons/yr										MT/yr						
Area	0.7580	0.0720	0.7216	4.4000e-004		9.0000e-003	9.0000e-003		9.0000e-003	9.0000e-003	0.0000	75.1689	75.1689	2.5100e-003	1.3600e-003	75.6361	
Energy	0.0133	0.1132	0.0482	7.2000e-004		9.1600e-003	9.1600e-003		9.1600e-003	9.1600e-003	0.0000	139.8932	139.8932	2.9100e-003	2.4900e-003	140.7068	
Mobile	0.2955	1.0568	3.2404	9.7200e-003	0.8973	8.7800e-003	0.9061	0.2402	8.2100e-003	0.2484	0.0000	892.3612	892.3612	0.0631	0.0000	893.9389	
Waste						0.0000	0.0000		0.0000	0.0000	4.9144	0.0000	4.9144	0.2904	0.0000	12.1753	
Water						0.0000	0.0000		0.0000	0.0000	1.5544	11.4041	12.9585	0.1602	3.8800e-003	18.1179	
Total	1.0667	1.2420	4.0102	0.0109	0.8973	0.0269	0.9242	0.2402	0.0264	0.2666	6.4688	1,118.8274	1,125.2962	0.5191	7.7300e-003	1,140.5749	

	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
Percent Reduction	0.55	3.44	4.42	5.80	6.90	2.14	6.77	6.90	2.04	6.44	70.05	20.84	21.58	64.04	28.76	22.64

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/6/2020	5/1/2020	5	20	
2	Grading	Grading	5/2/2020	7/3/2020	5	45	
3	Building Construction	Building Construction	7/4/2020	12/11/2020	5	115	
4	Paving	Paving	12/12/2020	1/29/2021	5	35	
5	Architectural Coating	Architectural Coating	1/30/2021	3/19/2021	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 342,630; Residential Outdoor: 114,210; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

AGENDA ITEM NO. 9.

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	12	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	12	7.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
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
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
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	30	34.00	10.00	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	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0408	0.4242	0.2151	3.8000e-004		0.0220	0.0220		0.0202	0.0202	0.0000	33.4307	33.4307	0.0108	0.0000	33.7010
Total	0.0408	0.4242	0.2151	3.8000e-004	0.1807	0.0220	0.2026	0.0993	0.0202	0.1195	0.0000	33.4307	33.4307	0.0108	0.0000	33.7010

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8000e-004	4.9000e-004	5.0000e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2455	1.2455	3.0000e-005	0.0000	1.2463
Total	7.8000e-004	4.9000e-004	5.0000e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2455	1.2455	3.0000e-005	0.0000	1.2463

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
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Category	tons/yr										MT/yr					
	Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0408	0.4242	0.2151	3.8000e-004		0.0220	0.0220		0.0202	0.0202	0.0000	33.4306	33.4306	0.0108	0.0000	33.7009
Total	0.0408	0.4242	0.2151	3.8000e-004	0.1807	0.0220	0.2026	0.0993	0.0202	0.1195	0.0000	33.4306	33.4306	0.0108	0.0000	33.7009

Mitigated Construction Off-Site

Category	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
	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8000e-004	4.9000e-004	5.0000e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2455	1.2455	3.0000e-005	0.0000	1.2463
Total	7.8000e-004	4.9000e-004	5.0000e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2455	1.2455	3.0000e-005	0.0000	1.2463

3.3 Grading - 2020

Unmitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Fugitive Dust					0.1952	0.0000	0.1952	0.0809	0.0000	0.0809	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1001	1.1294	0.7191	1.4000e-003		0.0489	0.0489		0.0450	0.0450	0.0000	122.5897	122.5897	0.0397	0.0000	123.5809

Total	0.1001	1.1294	0.7191	1.4000e-003	0.1952	0.0489	0.2441	0.0809	0.0450	0.1259	0.0000	122.5897	122.5897	0.0397	0.0000	AGENDA ITEM NO. 9.
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9400e-003	1.2300e-003	0.0125	3.0000e-005	3.6000e-003	2.0000e-005	3.6200e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	3.1137	3.1137	8.0000e-005	0.0000	3.1158
Total	1.9400e-003	1.2300e-003	0.0125	3.0000e-005	3.6000e-003	2.0000e-005	3.6200e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	3.1137	3.1137	8.0000e-005	0.0000	3.1158

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1952	0.0000	0.1952	0.0809	0.0000	0.0809	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1001	1.1294	0.7191	1.4000e-003		0.0489	0.0489		0.0450	0.0450	0.0000	122.5895	122.5895	0.0397	0.0000	123.5807
Total	0.1001	1.1294	0.7191	1.4000e-003	0.1952	0.0489	0.2441	0.0809	0.0450	0.1259	0.0000	122.5895	122.5895	0.0397	0.0000	123.5807

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9400e-003	1.2300e-003	0.0125	3.0000e-005	3.6000e-003	2.0000e-005	3.6200e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	3.1137	3.1137	8.0000e-005	0.0000	3.1158
Total	1.9400e-003	1.2300e-003	0.0125	3.0000e-005	3.6000e-003	2.0000e-005	3.6200e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	3.1137	3.1137	8.0000e-005	0.0000	3.1158

3.4 Building Construction - 2020
Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3503	2.9990	2.9167	4.1800e-003		0.1895	0.1895		0.1769	0.1769	0.0000	358.6906	358.6906	0.0997	0.0000	361.1837
Total	0.3503	2.9990	2.9167	4.1800e-003		0.1895	0.1895		0.1769	0.1769	0.0000	358.6906	358.6906	0.0997	0.0000	361.1837

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

AGENDA ITEM NO. 9.

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1500e-003	0.0713	0.0114	1.6000e-004	3.8100e-003	3.8000e-004	4.1900e-003	1.1000e-003	3.6000e-004	1.4600e-003	0.0000	15.5069	15.5069	1.9200e-003	0.0000	15.5549
Worker	8.4400e-003	5.3500e-003	0.0543	1.5000e-004	0.0156	1.0000e-004	0.0157	4.1500e-003	9.0000e-005	4.2500e-003	0.0000	13.5274	13.5274	3.6000e-004	0.0000	13.5365
Total	0.0106	0.0766	0.0657	3.1000e-004	0.0194	4.8000e-004	0.0199	5.2500e-003	4.5000e-004	5.7100e-003	0.0000	29.0343	29.0343	2.2800e-003	0.0000	29.0913

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3503	2.9989	2.9167	4.1800e-003		0.1895	0.1895		0.1769	0.1769	0.0000	358.6902	358.6902	0.0997	0.0000	361.1833
Total	0.3503	2.9989	2.9167	4.1800e-003		0.1895	0.1895		0.1769	0.1769	0.0000	358.6902	358.6902	0.0997	0.0000	361.1833

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1500e-003	0.0713	0.0114	1.6000e-004	3.8100e-003	3.8000e-004	4.1900e-003	1.1000e-003	3.6000e-004	1.4600e-003	0.0000	15.5069	15.5069	1.9200e-003	0.0000	15.5549
Worker	8.4400e-003	5.3500e-003	0.0543	1.5000e-004	0.0156	1.0000e-004	0.0157	4.1500e-003	9.0000e-005	4.2500e-003	0.0000	13.5274	13.5274	3.6000e-004	0.0000	13.5365
Total	0.0106	0.0766	0.0657	3.1000e-004	0.0194	4.8000e-004	0.0199	5.2500e-003	4.5000e-004	5.7100e-003	0.0000	29.0343	29.0343	2.2800e-003	0.0000	29.0913

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.5000e-003	0.0985	0.1026	1.6000e-004		5.2700e-003	5.2700e-003		4.8500e-003	4.8500e-003	0.0000	14.0198	14.0198	4.5300e-003	0.0000	14.1331
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.5000e-003	0.0985	0.1026	1.6000e-004		5.2700e-003	5.2700e-003		4.8500e-003	4.8500e-003	0.0000	14.0198	14.0198	4.5300e-003	0.0000	14.1331

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5000e-004	2.9000e-004	2.9200e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.4000e-004	2.2000e-004	0.0000	2.3000e-004	0.0000	0.7265	0.7265	2.0000e-005	0.0000	0.7270
Total	4.5000e-004	2.9000e-004	2.9200e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.4000e-004	2.2000e-004	0.0000	2.3000e-004	0.0000	0.7265	0.7265	2.0000e-005	0.0000	0.7270

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	
Category	tons/yr										MT/yr					
Off-Road	9.5000e-003	0.0985	0.1026	1.6000e-004		5.2700e-003	5.2700e-003		4.8500e-003	4.8500e-003	0.0000	14.0197	14.0197	4.5300e-003	0.0000	14.1331
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.5000e-003	0.0985	0.1026	1.6000e-004		5.2700e-003	5.2700e-003		4.8500e-003	4.8500e-003	0.0000	14.0197	14.0197	4.5300e-003	0.0000	14.1331

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5000e-004	2.9000e-004	2.9200e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.4000e-004	2.2000e-004	0.0000	2.3000e-004	0.0000	0.7265	0.7265	2.0000e-005	0.0000	0.7270
Total	4.5000e-004	2.9000e-004	2.9200e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.4000e-004	2.2000e-004	0.0000	2.3000e-004	0.0000	0.7265	0.7265	2.0000e-005	0.0000	0.7270

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0132	0.1357	0.1539	2.4000e-004		7.1200e-003	7.1200e-003		6.5500e-003	6.5500e-003	0.0000	21.0247	21.0247	6.8000e-003	0.0000	21.1947

Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	AGENDA ITEM NO. 9.
Total	0.0132	0.1357	0.1539	2.4000e-004		7.1200e-003	7.1200e-003		6.5500e-003	6.5500e-003	0.0000	21.0247	21.0247	6.8000e-003	0.0000	21.1947	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	3.8000e-004	3.9700e-003	1.0000e-005	1.2600e-003	1.0000e-005	1.2700e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0525	1.0525	3.0000e-005	0.0000	1.0531
Total	6.3000e-004	3.8000e-004	3.9700e-003	1.0000e-005	1.2600e-003	1.0000e-005	1.2700e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0525	1.0525	3.0000e-005	0.0000	1.0531

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0132	0.1357	0.1539	2.4000e-004		7.1200e-003	7.1200e-003		6.5500e-003	6.5500e-003	0.0000	21.0246	21.0246	6.8000e-003	0.0000	21.1946
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0132	0.1357	0.1539	2.4000e-004		7.1200e-003	7.1200e-003		6.5500e-003	6.5500e-003	0.0000	21.0246	21.0246	6.8000e-003	0.0000	21.1946

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	3.8000e-004	3.9700e-003	1.0000e-005	1.2600e-003	1.0000e-005	1.2700e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0525	1.0525	3.0000e-005	0.0000	1.0531
Total	6.3000e-004	3.8000e-004	3.9700e-003	1.0000e-005	1.2600e-003	1.0000e-005	1.2700e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0525	1.0525	3.0000e-005	0.0000	1.0531

3.6 Architectural Coating - 2021
Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6882					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8300e-003	0.0267	0.0318	5.0000e-005		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003	0.0000	4.4682	4.4682	3.1000e-004	0.0000	4.4759
Total	0.6920	0.0267	0.0318	5.0000e-005		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003	0.0000	4.4682	4.4682	3.1000e-004	0.0000	4.4759

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	AGENDA ITEM NO. 9.
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	0.0000	
Worker	4.9000e-004	3.0000e-004	3.0900e-003	1.0000e-005	9.8000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8186	0.8186	2.0000e-005	0.0000	0.8191		
Total	4.9000e-004	3.0000e-004	3.0900e-003	1.0000e-005	9.8000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8186	0.8186	2.0000e-005	0.0000	0.8191		

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6882					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8300e-003	0.0267	0.0318	5.0000e-005		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003	0.0000	4.4682	4.4682	3.1000e-004	0.0000	4.4759
Total	0.6920	0.0267	0.0318	5.0000e-005		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003	0.0000	4.4682	4.4682	3.1000e-004	0.0000	4.4759

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9000e-004	3.0000e-004	3.0900e-003	1.0000e-005	9.8000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8186	0.8186	2.0000e-005	0.0000	0.8191
Total	4.9000e-004	3.0000e-004	3.0900e-003	1.0000e-005	9.8000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8186	0.8186	2.0000e-005	0.0000	0.8191

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

- Improve Destination Accessibility
- 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	tons/yr										MT/yr					
Mitigated	0.2955	1.0568	3.2404	9.7200e-003	0.8973	8.7800e-003	0.9061	0.2402	8.2100e-003	0.2484	0.0000	892.3612	892.3612	0.0631	0.0000	893.9389
Unmitigated	0.3011	1.1010	3.4207	0.0104	0.9638	9.3500e-003	0.9731	0.2580	8.7400e-003	0.2668	0.0000	953.9741	953.9741	0.0660	0.0000	955.6244

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	887.36	896.76	803.70	2,568,592	2,391,359
Total	887.36	896.76	803.70	2,568,592	2,391,359

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	8.7435	8.7435	4.0000e-004	8.0000e-005	8.7778
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	239.5684	239.5684	0.0108	2.2400e-003	240.5071
NaturalGas Mitigated	0.0133	0.1132	0.0482	7.2000e-004		9.1600e-003	9.1600e-003		9.1600e-003	9.1600e-003	0.0000	131.1497	131.1497	2.5100e-003	2.4000e-003	131.9291
NaturalGas Unmitigated	0.0133	0.1132	0.0482	7.2000e-004		9.1600e-003	9.1600e-003		9.1600e-003	9.1600e-003	0.0000	131.1497	131.1497	2.5100e-003	2.4000e-003	131.9291

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	2.45765e+006	0.0133	0.1132	0.0482	7.2000e-004		9.1600e-003	9.1600e-003		9.1600e-003	9.1600e-003	0.0000	131.1497	131.1497	2.5100e-003	2.4000e-003	131.9291
Total		0.0133	0.1132	0.0482	7.2000e-004		9.1600e-003	9.1600e-003		9.1600e-003	9.1600e-003	0.0000	131.1497	131.1497	2.5100e-003	2.4000e-003	131.9291

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	2.45765e+006	0.0133	0.1132	0.0482	7.2000e-004		9.1600e-003	9.1600e-003		9.1600e-003	9.1600e-003	0.0000	131.1497	131.1497	2.5100e-003	2.4000e-003	131.9291
Total		0.0133	0.1132	0.0482	7.2000e-004		9.1600e-003	9.1600e-003		9.1600e-003	9.1600e-003	0.0000	131.1497	131.1497	2.5100e-003	2.4000e-003	131.9291

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	823510	239.5684	0.0108	2.2400e-003	240.5071
Total		239.5684	0.0108	2.2400e-003	240.5071

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	30055.6	8.7435	4.0000e-004	8.0000e-005	8.7778
Total		8.7435	4.0000e-004	8.0000e-005	8.7778

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7580	0.0720	0.7216	4.4000e-004		9.0000e-003	9.0000e-003		9.0000e-003	9.0000e-003	0.0000	75.1689	75.1689	2.5100e-003	1.3600e-003	75.6361
Unmitigated	0.7583	0.0720	0.7267	4.4000e-004		9.0200e-003	9.0200e-003		9.0200e-003	9.0200e-003	0.0000	75.1792	75.1792	2.5200e-003	1.3600e-003	75.6468

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0688					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6608					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.4800e-003	0.0639	0.0272	4.1000e-004		5.1700e-003	5.1700e-003		5.1700e-003	5.1700e-003	0.0000	74.0391	74.0391	1.4200e-003	1.3600e-003	74.4791
Landscaping	0.0212	8.0700e-003	0.6995	4.0000e-005		3.8600e-003	3.8600e-003		3.8600e-003	3.8600e-003	0.0000	1.1401	1.1401	1.1000e-003	0.0000	1.1677
Total	0.7583	0.0720	0.7267	4.5000e-004		9.0300e-003	9.0300e-003		9.0300e-003	9.0300e-003	0.0000	75.1792	75.1792	2.5200e-003	1.3600e-003	75.6468

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0688					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6608					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.4800e-003	0.0639	0.0272	4.1000e-004		5.1700e-003	5.1700e-003		5.1700e-003	5.1700e-003	0.0000	74.0391	74.0391	1.4200e-003	1.3600e-003	74.4791
Landscaping	0.0209	8.0200e-003	0.6944	4.0000e-005		3.8300e-003	3.8300e-003		3.8300e-003	3.8300e-003	0.0000	1.1298	1.1298	1.0900e-003	0.0000	1.1571
Total	0.7580	0.0720	0.7216	4.5000e-004		9.0000e-003	9.0000e-003		9.0000e-003	9.0000e-003	0.0000	75.1689	75.1689	2.5100e-003	1.3600e-003	75.6361

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	12.9585	0.1602	3.8800e-003	18.1179
Unmitigated	15.5150	0.2002	4.8400e-003	21.9616

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	6.12448 / 3.86108	15.5150	0.2002	4.8400e-003	21.9616
Total		15.5150	0.2002	4.8400e-003	21.9616

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
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Land Use	Mgal	MT/yr			
Single Family Housing	4.89958 / 3.62556	12.9585	0.1602	3.8800e-003	18.1179
Total		12.9585	0.1602	3.8800e-003	18.1179

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.9144	0.2904	0.0000	12.1753
Unmitigated	19.6576	1.1617	0.0000	48.7010

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			

Single Family Housing	96.84	19.6576	1.1617	0.0000	48.7010
Total		19.6576	1.1617	0.0000	48.7010

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	24.21	4.9144	0.2904	0.0000	12.1753
Total		4.9144	0.2904	0.0000	12.1753

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Granville_Locan_Tract_6239_Phase2 - Fresno County, Winter

Granville_Locan_Tract_6239_Phase2
Fresno County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	94.00	Dwelling Unit	29.00	169,200.00	269

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Tract Map
- Construction Phase - Construction to go from 4/2020 - 3/2021
- Off-road Equipment - increased equipment to account for reduced construction schedule from default
- Architectural Coating - Avg VOC Content - Rule 4601
- Vehicle Trips - TIS and ITE Trip Generation Manual 10th Edition, Land Use 210
- Woodstoves - No woodburning
- Area Coating - Avg VOC Content - Rule 4601
- Mobile Land Use Mitigation -

Area Mitigation - Avg VOC Content - Rule 4601

Energy Mitigation - Assumed 3 kw solar system size for homes

Water Mitigation - Model Water Efficient Landscape Ordinance, Green Building Code

Waste Mitigation - 75 percent statewide diversion/recycling mandate

Fleet Mix - SJVAPCD Residential Fleet Mix for 2021

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	65.00
tblAreaCoating	Area_EF_Residential_Exterior	150	65
tblAreaCoating	Area_EF_Residential_Interior	150	65
tblConstructionPhase	NumDays	440.00	115.00
tblFireplaces	NumberGas	51.70	94.00
tblFireplaces	NumberNoFireplace	42.30	0.00
tblFleetMix	HHD	0.12	0.02
tblFleetMix	LDA	0.49	0.54
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.02	1.4000e-003
tblFleetMix	LHD2	4.7320e-003	9.0000e-004
tblFleetMix	MCY	5.1540e-003	2.6000e-003
tblFleetMix	MDV	0.12	0.05
tblFleetMix	MH	6.2900e-004	1.6000e-003
tblFleetMix	MHD	0.03	9.0000e-003
tblFleetMix	OBUS	2.3660e-003	0.00
tblFleetMix	SBUS	1.0970e-003	9.0000e-004
tblFleetMix	UBUS	1.5900e-003	4.4000e-003
tblLandUse	LotAcreage	30.52	29.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00

tblVehicleTrips	ST_TR	9.91	9.54
tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	9.52	9.44

AGENDA ITEM NO. 9.

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	6.2854	53.4938	51.8735	0.0781	18.2141	3.3044	20.4125	9.9699	3.0838	11.9924	0.0000	7,417.3970	7,417.3970	1.9580	0.0000	7,466.3465
2021	39.5725	12.9591	15.0253	0.0239	0.1232	0.6785	0.8017	0.0327	0.6242	0.6569	0.0000	2,313.4094	2,313.4094	0.7165	0.0000	2,331.3222
Maximum	39.5725	53.4938	51.8735	0.0781	18.2141	3.3044	20.4125	9.9699	3.0838	11.9924	0.0000	7,417.3970	7,417.3970	1.9580	0.0000	7,466.3465

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	lb/day										lb/day					
2020	6.2854	53.4938	51.8735	0.0781	18.2141	3.3044	20.4125	9.9699	3.0838	11.9924	0.0000	7,417.3970	7,417.3970	1.9580	0.0000	7,466.3465
2021	39.5725	12.9591	15.0253	0.0239	0.1232	0.6785	0.8017	0.0327	0.6242	0.6569	0.0000	2,313.4094	2,313.4094	0.7165	0.0000	2,331.3222
Maximum	39.5725	53.4938	51.8735	0.0781	18.2141	3.3044	20.4125	9.9699	3.0838	11.9924	0.0000	7,417.3970	7,417.3970	1.9580	0.0000	7,466.3465

	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	AGENDA ITEM NO. 9.
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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/day										lb/day					
Area	4.4159	1.6490	8.4355	0.0104		0.1689	0.1689		0.1689	0.1689	0.0000	2,004.5522	2,004.5522	0.0517	0.0365	2,016.7195
Energy	0.0726	0.6205	0.2641	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.1523	792.1523	0.0152	0.0145	796.8597
Mobile	1.5373	6.3535	19.3856	0.0564	5.5634	0.0528	5.6163	1.4861	0.0494	1.5355		5,713.4450	5,713.4450	0.4179		5,723.8933
Total	6.0258	8.6230	28.0852	0.0708	5.5634	0.2719	5.8354	1.4861	0.2685	1.7546	0.0000	8,510.1494	8,510.1494	0.4848	0.0510	8,537.4725

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/day										lb/day					
Area	4.4126	1.6484	8.3795	0.0104		0.1686	0.1686		0.1686	0.1686	0.0000	2,004.4264	2,004.4264	0.0515	0.0365	2,016.5889
Energy	0.0726	0.6205	0.2641	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.1523	792.1523	0.0152	0.0145	796.8597
Mobile	1.5066	6.0928	18.4323	0.0528	5.1796	0.0497	5.2292	1.3836	0.0464	1.4300		5,343.9702	5,343.9702	0.4003		5,353.9769
Total	5.9918	8.3618	27.0758	0.0671	5.1796	0.2684	5.4480	1.3836	0.2652	1.6487	0.0000	8,140.5489	8,140.5489	0.4669	0.0510	8,167.4255

	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	N2	AGENDA ITEM NO. 9.	
Percent Reduction	0.56	3.03	3.59	5.16	6.90	1.29	6.64	6.90	1.24	6.03	0.00	4.34	4.34	3.68	0.00	4.33	

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/6/2020	5/1/2020	5	20	
2	Grading	Grading	5/2/2020	7/3/2020	5	45	
3	Building Construction	Building Construction	7/4/2020	12/11/2020	5	115	
4	Paving	Paving	12/12/2020	1/29/2021	5	35	
5	Architectural Coating	Architectural Coating	1/30/2021	3/19/2021	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 342,630; Residential Outdoor: 114,210; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	12	8.00	89	0.20

Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	12	7.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
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
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
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	30	34.00	10.00	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	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2020

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/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.0663	2.1974	20.2637	9.9307	2.0216	11.9523		3,685.1016	3,685.1016	1.1918		3,714.8975

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	lb/day										lb/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
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
Worker	0.0820	0.0540	0.4930	1.3300e-003	0.1479	9.3000e-004	0.1488	0.0392	8.5000e-004	0.0401		131.9590	131.9590	3.5900e-003		132.0487
Total	0.0820	0.0540	0.4930	1.3300e-003	0.1479	9.3000e-004	0.1488	0.0392	8.5000e-004	0.0401		131.9590	131.9590	3.5900e-003		132.0487

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/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.0663	2.1974	20.2637	9.9307	2.0216	11.9523	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975

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	
Category	lb/day										lb/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
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
Worker	0.0820	0.0540	0.4930	1.3300e-003	0.1479	9.3000e-004	0.1488	0.0392	8.5000e-004	0.0401		131.9590	131.9590	3.5900e-003		132.0487
Total	0.0820	0.0540	0.4930	1.3300e-003	0.1479	9.3000e-004	0.1488	0.0392	8.5000e-004	0.0401		131.9590	131.9590	3.5900e-003		132.0487

3.3 Grading - 2020

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/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	8.6733	2.1739	10.8472	3.5965	2.0000	5.5965		6,005.8653	6,005.8653	1.9424		6,054.4257

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	lb/day										lb/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

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	0.0911	0.0600	0.5478	1.4700e-003	0.1643	1.0300e-003	0.1653	0.0436	9.5000e-004	0.0445		146.6211	146.6211	3.9900e-003		146.7208
Total	0.0911	0.0600	0.5478	1.4700e-003	0.1643	1.0300e-003	0.1653	0.0436	9.5000e-004	0.0445		146.6211	146.6211	3.9900e-003		146.7208

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/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	8.6733	2.1739	10.8472	3.5965	2.0000	5.5965	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257

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	lb/day										lb/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
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
Worker	0.0911	0.0600	0.5478	1.4700e-003	0.1643	1.0300e-003	0.1653	0.0436	9.5000e-004	0.0445		146.6211	146.6211	3.9900e-003		146.7208
Total	0.0911	0.0600	0.5478	1.4700e-003	0.1643	1.0300e-003	0.1653	0.0436	9.5000e-004	0.0445		146.6211	146.6211	3.9900e-003		146.7208

3.4 Building Construction - 2020

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/day										lb/day					
Off-Road	6.0920	52.1556	50.7245	0.0728		3.2960	3.2960		3.0758	3.0758		6,876.3257	6,876.3257	1.9118		6,924.1203
Total	6.0920	52.1556	50.7245	0.0728		3.2960	3.2960		3.0758	3.0758		6,876.3257	6,876.3257	1.9118		6,924.1203

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	lb/day										lb/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
Vendor	0.0384	1.2363	0.2177	2.7800e-003	0.0678	6.6500e-003	0.0744	0.0195	6.3700e-003	0.0259		291.8155	291.8155	0.0394		292.8009
Worker	0.1549	0.1020	0.9313	2.5000e-003	0.2793	1.7500e-003	0.2811	0.0741	1.6100e-003	0.0757		249.2558	249.2558	6.7800e-003		249.4254
Total	0.1934	1.3382	1.1490	5.2800e-003	0.3471	8.4000e-003	0.3555	0.0936	7.9800e-003	0.1016		541.0713	541.0713	0.0462		542.2263

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
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Category	lb/day										lb/day					AGENDA ITEM NO. 9.
Off-Road	6.0920	52.1556	50.7245	0.0728		3.2960	3.2960		3.0758	3.0758	0.0000	6,876.3257	6,876.3257	1.9118		6,924.1203
Total	6.0920	52.1556	50.7245	0.0728		3.2960	3.2960		3.0758	3.0758	0.0000	6,876.3257	6,876.3257	1.9118		6,924.1203

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	lb/day										lb/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
Vendor	0.0384	1.2363	0.2177	2.7800e-003	0.0678	6.6500e-003	0.0744	0.0195	6.3700e-003	0.0259		291.8155	291.8155	0.0394		292.8009
Worker	0.1549	0.1020	0.9313	2.5000e-003	0.2793	1.7500e-003	0.2811	0.0741	1.6100e-003	0.0757		249.2558	249.2558	6.7800e-003		249.4254
Total	0.1934	1.3382	1.1490	5.2800e-003	0.3471	8.4000e-003	0.3555	0.0936	7.9800e-003	0.1016		541.0713	541.0713	0.0462		542.2263

3.5 Paving - 2020

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/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140			AGENDA ITEM NO. 9.
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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	lb/day										lb/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
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
Worker	0.0683	0.0450	0.4108	1.1000e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		109.9658	109.9658	2.9900e-003			110.0406
Total	0.0683	0.0450	0.4108	1.1000e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		109.9658	109.9658	2.9900e-003			110.0406

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/day										lb/day						
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140			2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140			2,225.5841

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	lb/day										lb/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
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
Worker	0.0683	0.0450	0.4108	1.1000e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		109.9658	109.9658	2.9900e-003		110.0406
Total	0.0683	0.0450	0.4108	1.1000e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		109.9658	109.9658	2.9900e-003		110.0406

3.5 Paving - 2021

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/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573

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	lb/day										lb/day					

AGENDA ITEM NO. 9.

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	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	0.0000
Worker	0.0632	0.0400	0.3720	1.0700e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334	106.1985	106.1985	2.6600e-003	106.2650			
Total	0.0632	0.0400	0.3720	1.0700e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334	106.1985	106.1985	2.6600e-003	106.2650			

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/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573

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	lb/day										lb/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
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
Worker	0.0632	0.0400	0.3720	1.0700e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334	106.1985	106.1985	2.6600e-003	106.2650		
Total	0.0632	0.0400	0.3720	1.0700e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334	106.1985	106.1985	2.6600e-003	106.2650		

3.6 Architectural Coating - 2021
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/day										lb/day					
Archit. Coating	39.3241					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	39.5430	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

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	lb/day										lb/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
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
Worker	0.0295	0.0187	0.1736	5.0000e-004	0.0575	3.5000e-004	0.0579	0.0153	3.2000e-004	0.0156		49.5593	49.5593	1.2400e-003		49.5903
Total	0.0295	0.0187	0.1736	5.0000e-004	0.0575	3.5000e-004	0.0579	0.0153	3.2000e-004	0.0156		49.5593	49.5593	1.2400e-003		49.5903

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	
Category	lb/day										lb/day					
Archit. Coating	39.3241					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	39.5430	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

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	lb/day										lb/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
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
Worker	0.0295	0.0187	0.1736	5.0000e-004	0.0575	3.5000e-004	0.0579	0.0153	3.2000e-004	0.0156		49.5593	49.5593	1.2400e-003		49.5903
Total	0.0295	0.0187	0.1736	5.0000e-004	0.0575	3.5000e-004	0.0579	0.0153	3.2000e-004	0.0156		49.5593	49.5593	1.2400e-003		49.5903

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Destination Accessibility

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/day										lb/day					
Mitigated	1.5066	6.0928	18.4323	0.0528	5.1796	0.0497	5.2292	1.3836	0.0464	1.4300		5,343.9702	5,343.9702	0.4003		5,353.9769
Unmitigated	1.5373	6.3535	19.3856	0.0564	5.5634	0.0528	5.6163	1.4861	0.0494	1.5355		5,713.4450	5,713.4450	0.4179		5,723.8933

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	887.36	896.76	803.70	2,568,592	2,391,359
Total	887.36	896.76	803.70	2,568,592	2,391,359

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.537300	0.200000	0.167100	0.054200	0.001400	0.000900	0.009000	0.020600	0.000000	0.004400	0.002600	0.000900	0.001600

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	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/day										lb/day					
NaturalGas Mitigated	0.0726	0.6205	0.2641	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.1523	792.1523	0.0152	0.0145	796.8597
NaturalGas Unmitigated	0.0726	0.6205	0.2641	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.1523	792.1523	0.0152	0.0145	796.8597

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	6733.29	0.0726	0.6205	0.2641	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.1523	792.1523	0.0152	0.0145	796.8597
Total		0.0726	0.6205	0.2641	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.1523	792.1523	0.0152	0.0145	796.8597

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Land Use	kBTU/yr	lb/day										lb/day			AGENDA ITEM NO. 9.		
Single Family Housing	6.73329	0.0726	0.6205	0.2641	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.1523	792.1523	0.0152	0.0145	796.8597
Total		0.0726	0.6205	0.2641	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.1523	792.1523	0.0152	0.0145	796.8597

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use only Natural Gas Hearths

	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/day										lb/day					
Mitigated	4.4126	1.6484	8.3795	0.0104		0.1686	0.1686		0.1686	0.1686	0.0000	2,004.4264	2,004.4264	0.0515	0.0365	2,016.5889
Unmitigated	4.4159	1.6490	8.4355	0.0104		0.1689	0.1689		0.1689	0.1689	0.0000	2,004.5522	2,004.5522	0.0517	0.0365	2,016.7195

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	0.3771					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.6209					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1825	1.5593	0.6635	9.9500e-003		0.1261	0.1261		0.1261	0.1261	0.0000	1,990.5882	1,990.5882	0.0382	0.0365	2,002.4173
Landscaping	0.2355	0.0897	7.7720	4.1000e-004		0.0428	0.0428		0.0428	0.0428		13.9639	13.9639	0.0135		14.3022
Total	4.4159	1.6490	8.4355	0.0104		0.1689	0.1689		0.1689	0.1689	0.0000	2,004.5522	2,004.5522	0.0517	0.0365	2,016.7195

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/day										lb/day					
Architectural Coating	0.3771					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.6209					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1825	1.5593	0.6635	9.9500e-003		0.1261	0.1261		0.1261	0.1261	0.0000	1,990.5882	1,990.5882	0.0382	0.0365	2,002.4173
Landscaping	0.2322	0.0892	7.7159	4.1000e-004		0.0425	0.0425		0.0425	0.0425		13.8381	13.8381	0.0133		14.1716
Total	4.4126	1.6484	8.3795	0.0104		0.1686	0.1686		0.1686	0.1686	0.0000	2,004.4264	2,004.4264	0.0515	0.0365	2,016.5889

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Granville_Locan_Tract_6239_Phase2 - Fresno County, Summer

Granville_Locan_Tract_6239_Phase2
Fresno County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	94.00	Dwelling Unit	29.00	169,200.00	269

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Tract Map
- Construction Phase - Construction to go from 4/2020 - 3/2021
- Off-road Equipment - increased equipment to account for reduced construction schedule from default
- Architectural Coating - Avg VOC Content - Rule 4601
- Vehicle Trips - TIS and ITE Trip Generation Manual 10th Edition, Land Use 210
- Woodstoves - No woodburning
- Area Coating - Avg VOC Content - Rule 4601
- Mobile Land Use Mitigation -

Area Mitigation - Avg VOC Content - Rule 4601

Energy Mitigation - Assumed 3 kw solar system size for homes

Water Mitigation - Model Water Efficient Landscape Ordinance, Green Building Code

Waste Mitigation - 75 percent statewide diversion/recycling mandate

Fleet Mix - SJVAPCD Residential Fleet Mix for 2021

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	65.00
tblAreaCoating	Area_EF_Residential_Exterior	150	65
tblAreaCoating	Area_EF_Residential_Interior	150	65
tblConstructionPhase	NumDays	440.00	115.00
tblFireplaces	NumberGas	51.70	94.00
tblFireplaces	NumberNoFireplace	42.30	0.00
tblFleetMix	HHD	0.12	0.02
tblFleetMix	LDA	0.49	0.54
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.02	1.4000e-003
tblFleetMix	LHD2	4.7320e-003	9.0000e-004
tblFleetMix	MCY	5.1540e-003	2.6000e-003
tblFleetMix	MDV	0.12	0.05
tblFleetMix	MH	6.2900e-004	1.6000e-003
tblFleetMix	MHD	0.03	9.0000e-003
tblFleetMix	OBUS	2.3660e-003	0.00
tblFleetMix	SBUS	1.0970e-003	9.0000e-004
tblFleetMix	UBUS	1.5900e-003	4.4000e-003
tblLandUse	LotAcreage	30.52	29.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00

tblVehicleTrips	ST_TR	9.91	9.54
tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

Year	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
lb/day											lb/day					
2020	6.2958	53.4645	52.0011	0.0785	18.2141	3.3043	20.4125	9.9699	3.0837	11.9924	0.0000	7,461.9679	7,461.9679	1.9543	0.0000	7,510.8247
2021	39.5748	12.9532	15.0918	0.0240	0.1232	0.6785	0.8017	0.0327	0.6242	0.6569	0.0000	2,328.3825	2,328.3825	0.7169	0.0000	2,346.3045
Maximum	39.5748	53.4645	52.0011	0.0785	18.2141	3.3043	20.4125	9.9699	3.0837	11.9924	0.0000	7,461.9679	7,461.9679	1.9543	0.0000	7,510.8247

Mitigated Construction

Year	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
lb/day											lb/day					
2020	6.2958	53.4645	52.0011	0.0785	18.2141	3.3043	20.4125	9.9699	3.0837	11.9924	0.0000	7,461.9679	7,461.9679	1.9543	0.0000	7,510.8247
2021	39.5748	12.9532	15.0918	0.0240	0.1232	0.6785	0.8017	0.0327	0.6242	0.6569	0.0000	2,328.3825	2,328.3825	0.7169	0.0000	2,346.3045
Maximum	39.5748	53.4645	52.0011	0.0785	18.2141	3.3043	20.4125	9.9699	3.0837	11.9924	0.0000	7,461.9679	7,461.9679	1.9543	0.0000	7,510.8247

	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	AGENDA ITEM NO. 9.
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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/day										lb/day					
Area	4.4159	1.6490	8.4355	0.0104		0.1689	0.1689		0.1689	0.1689	0.0000	2,004.5522	2,004.5522	0.0517	0.0365	2,016.7195
Energy	0.0726	0.6205	0.2641	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.1523	792.1523	0.0152	0.0145	796.8597
Mobile	2.1902	5.9993	21.5571	0.0632	5.5634	0.0525	5.6159	1.4861	0.0490	1.5352		6,388.0837	6,388.0837	0.4136		6,398.4228
Total	6.6788	8.2688	30.2566	0.0775	5.5634	0.2715	5.8350	1.4861	0.2681	1.7542	0.0000	9,184.7882	9,184.7882	0.4804	0.0510	9,212.0020

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/day										lb/day					
Area	4.4126	1.6484	8.3795	0.0104		0.1686	0.1686		0.1686	0.1686	0.0000	2,004.4264	2,004.4264	0.0515	0.0365	2,016.5889
Energy	0.0726	0.6205	0.2641	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.1523	792.1523	0.0152	0.0145	796.8597
Mobile	2.1565	5.7648	20.3300	0.0591	5.1796	0.0493	5.2288	1.3836	0.0460	1.4296		6,974.4158	6,974.4158	0.3945		5,984.2781
Total	6.6417	8.0338	28.9735	0.0734	5.1796	0.2680	5.4476	1.3836	0.2648	1.6484	0.0000	8,770.9945	8,770.9945	0.4612	0.0510	8,797.7267

	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	N2	AGENDA ITEM NO. 9.	
Percent Reduction	0.56	2.84	4.24	5.28	6.90	1.30	6.64	6.90	1.24	6.03	0.00	4.51	4.51	4.01	0.00	4.50	

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/6/2020	5/1/2020	5	20	
2	Grading	Grading	5/2/2020	7/3/2020	5	45	
3	Building Construction	Building Construction	7/4/2020	12/11/2020	5	115	
4	Paving	Paving	12/12/2020	1/29/2021	5	35	
5	Architectural Coating	Architectural Coating	1/30/2021	3/19/2021	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 342,630; Residential Outdoor: 114,210; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	12	8.00	89	0.20

Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	12	7.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
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
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
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	30	34.00	10.00	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	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2020

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/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.0663	2.1974	20.2637	9.9307	2.0216	11.9523		3,685.1016	3,685.1016	1.1918		3,714.8975

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	lb/day										lb/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
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
Worker	0.0884	0.0459	0.5789	1.5100e-003	0.1479	9.3000e-004	0.1488	0.0392	8.5000e-004	0.0401		150.5688	150.5688	4.0800e-003		150.6707
Total	0.0884	0.0459	0.5789	1.5100e-003	0.1479	9.3000e-004	0.1488	0.0392	8.5000e-004	0.0401		150.5688	150.5688	4.0800e-003		150.6707

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/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.0663	2.1974	20.2637	9.9307	2.0216	11.9523	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975

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	
Category	lb/day										lb/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
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
Worker	0.0884	0.0459	0.5789	1.5100e-003	0.1479	9.3000e-004	0.1488	0.0392	8.5000e-004	0.0401		150.5688	150.5688	4.0800e-003		150.6707
Total	0.0884	0.0459	0.5789	1.5100e-003	0.1479	9.3000e-004	0.1488	0.0392	8.5000e-004	0.0401		150.5688	150.5688	4.0800e-003		150.6707

3.3 Grading - 2020

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/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	8.6733	2.1739	10.8472	3.5965	2.0000	5.5965		6,005.8653	6,005.8653	1.9424		6,054.4257

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	lb/day										lb/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

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	0.0982	0.0510	0.6432	1.6800e-003	0.1643	1.0300e-003	0.1653	0.0436	9.5000e-004	0.0445		167.2986	167.2986	4.5300e-003		167.4119
Total	0.0982	0.0510	0.6432	1.6800e-003	0.1643	1.0300e-003	0.1653	0.0436	9.5000e-004	0.0445		167.2986	167.2986	4.5300e-003		167.4119

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/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	8.6733	2.1739	10.8472	3.5965	2.0000	5.5965	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257

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	lb/day										lb/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
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
Worker	0.0982	0.0510	0.6432	1.6800e-003	0.1643	1.0300e-003	0.1653	0.0436	9.5000e-004	0.0445		167.2986	167.2986	4.5300e-003		167.4119
Total	0.0982	0.0510	0.6432	1.6800e-003	0.1643	1.0300e-003	0.1653	0.0436	9.5000e-004	0.0445		167.2986	167.2986	4.5300e-003		167.4119

3.4 Building Construction - 2020

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/day										lb/day					
Off-Road	6.0920	52.1556	50.7245	0.0728		3.2960	3.2960		3.0758	3.0758		6,876.3257	6,876.3257	1.9118		6,924.1203
Total	6.0920	52.1556	50.7245	0.0728		3.2960	3.2960		3.0758	3.0758		6,876.3257	6,876.3257	1.9118		6,924.1203

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	lb/day										lb/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
Vendor	0.0368	1.2222	0.1832	2.8700e-003	0.0678	6.5200e-003	0.0743	0.0195	6.2300e-003	0.0257		301.2345	301.2345	0.0348		302.1043
Worker	0.1670	0.0867	1.0934	2.8600e-003	0.2793	1.7500e-003	0.2811	0.0741	1.6100e-003	0.0757		284.4077	284.4077	7.7000e-003		284.6002
Total	0.2038	1.3089	1.2766	5.7300e-003	0.3471	8.2700e-003	0.3553	0.0936	7.8400e-003	0.1014		585.6422	585.6422	0.0425		586.7044

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
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Category	lb/day										lb/day					
Off-Road	6.0920	52.1556	50.7245	0.0728		3.2960	3.2960		3.0758	3.0758	0.0000	6,876.3257	6,876.3257	1.9118		6,924.1203
Total	6.0920	52.1556	50.7245	0.0728		3.2960	3.2960		3.0758	3.0758	0.0000	6,876.3257	6,876.3257	1.9118		6,924.1203

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	lb/day										lb/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
Vendor	0.0368	1.2222	0.1832	2.8700e-003	0.0678	6.5200e-003	0.0743	0.0195	6.2300e-003	0.0257		301.2345	301.2345	0.0348		302.1043
Worker	0.1670	0.0867	1.0934	2.8600e-003	0.2793	1.7500e-003	0.2811	0.0741	1.6100e-003	0.0757		284.4077	284.4077	7.7000e-003		284.6002
Total	0.2038	1.3089	1.2766	5.7300e-003	0.3471	8.2700e-003	0.3553	0.0936	7.8400e-003	0.1014		585.6422	585.6422	0.0425		586.7044

3.5 Paving - 2020

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/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140			AGENDA ITEM NO. 9.
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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	lb/day										lb/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
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
Worker	0.0737	0.0383	0.4824	1.2600e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		125.4740	125.4740	3.4000e-003			125.5589
Total	0.0737	0.0383	0.4824	1.2600e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		125.4740	125.4740	3.4000e-003			125.5589

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/day										lb/day						
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140			2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140			2,225.5841

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	lb/day										lb/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
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
Worker	0.0737	0.0383	0.4824	1.2600e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		125.4740	125.4740	3.4000e-003		125.5589
Total	0.0737	0.0383	0.4824	1.2600e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		125.4740	125.4740	3.4000e-003		125.5589

3.5 Paving - 2021

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/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573

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	lb/day										lb/day					

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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	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	0.0000
Worker	0.0680	0.0341	0.4385	1.2200e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334	121.1716	121.1716	3.0200e-003	121.2472			
Total	0.0680	0.0341	0.4385	1.2200e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334	121.1716	121.1716	3.0200e-003	121.2472			

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/day										lb/day						
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139			2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139			2,225.0573

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	lb/day										lb/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
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
Worker	0.0680	0.0341	0.4385	1.2200e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334	121.1716	121.1716	3.0200e-003	121.2472		
Total	0.0680	0.0341	0.4385	1.2200e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334	121.1716	121.1716	3.0200e-003	121.2472		

3.6 Architectural Coating - 2021
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/day										lb/day					
Archit. Coating	39.3241					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	39.5430	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

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	lb/day										lb/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
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
Worker	0.0317	0.0159	0.2047	5.7000e-004	0.0575	3.5000e-004	0.0579	0.0153	3.2000e-004	0.0156		56.5468	56.5468	1.4100e-003		56.5820
Total	0.0317	0.0159	0.2047	5.7000e-004	0.0575	3.5000e-004	0.0579	0.0153	3.2000e-004	0.0156		56.5468	56.5468	1.4100e-003		56.5820

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	
Category	lb/day										lb/day					
Archit. Coating	39.3241					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	39.5430	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

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	lb/day										lb/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
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
Worker	0.0317	0.0159	0.2047	5.7000e-004	0.0575	3.5000e-004	0.0579	0.0153	3.2000e-004	0.0156		56.5468	56.5468	1.4100e-003		56.5820
Total	0.0317	0.0159	0.2047	5.7000e-004	0.0575	3.5000e-004	0.0579	0.0153	3.2000e-004	0.0156		56.5468	56.5468	1.4100e-003		56.5820

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Destination Accessibility

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/day										lb/day					
Mitigated	2.1565	5.7648	20.3300	0.0591	5.1796	0.0493	5.2288	1.3836	0.0460	1.4296		5,974.4158	5,974.4158	0.3945		5,984.2781
Unmitigated	2.1902	5.9993	21.5571	0.0632	5.5634	0.0525	5.6159	1.4861	0.0490	1.5352		6,388.0837	6,388.0837	0.4136		6,398.4228

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	887.36	896.76	803.70	2,568,592	2,391,359
Total	887.36	896.76	803.70	2,568,592	2,391,359

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.537300	0.200000	0.167100	0.054200	0.001400	0.000900	0.009000	0.020600	0.000000	0.004400	0.002600	0.000900	0.001600

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	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/day										lb/day					
NaturalGas Mitigated	0.0726	0.6205	0.2641	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.1523	792.1523	0.0152	0.0145	796.8597
NaturalGas Unmitigated	0.0726	0.6205	0.2641	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.1523	792.1523	0.0152	0.0145	796.8597

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	6733.29	0.0726	0.6205	0.2641	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.1523	792.1523	0.0152	0.0145	796.8597
Total		0.0726	0.6205	0.2641	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.1523	792.1523	0.0152	0.0145	796.8597

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Land Use	kBTU/yr	lb/day										lb/day			AGENDA ITEM NO. 9.		
Single Family Housing	6.73329	0.0726	0.6205	0.2641	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.1523	792.1523	0.0152	0.0145	796.8597
Total		0.0726	0.6205	0.2641	3.9600e-003		0.0502	0.0502		0.0502	0.0502		792.1523	792.1523	0.0152	0.0145	796.8597

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use only Natural Gas Hearths

	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/day										lb/day					
Mitigated	4.4126	1.6484	8.3795	0.0104		0.1686	0.1686		0.1686	0.1686	0.0000	2,004.4264	2,004.4264	0.0515	0.0365	2,016.5889
Unmitigated	4.4159	1.6490	8.4355	0.0104		0.1689	0.1689		0.1689	0.1689	0.0000	2,004.5522	2,004.5522	0.0517	0.0365	2,016.7195

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	0.3771					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.6209					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1825	1.5593	0.6635	9.9500e-003		0.1261	0.1261		0.1261	0.1261	0.0000	1,990.5882	1,990.5882	0.0382	0.0365	2,002.4173
Landscaping	0.2355	0.0897	7.7720	4.1000e-004		0.0428	0.0428		0.0428	0.0428		13.9639	13.9639	0.0135		14.3022
Total	4.4159	1.6490	8.4355	0.0104		0.1689	0.1689		0.1689	0.1689	0.0000	2,004.5522	2,004.5522	0.0517	0.0365	2,016.7195

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/day										lb/day					
Architectural Coating	0.3771					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.6209					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1825	1.5593	0.6635	9.9500e-003		0.1261	0.1261		0.1261	0.1261	0.0000	1,990.5882	1,990.5882	0.0382	0.0365	2,002.4173
Landscaping	0.2322	0.0892	7.7159	4.1000e-004		0.0425	0.0425		0.0425	0.0425		13.8381	13.8381	0.0133		14.1716
Total	4.4126	1.6484	8.3795	0.0104		0.1686	0.1686		0.1686	0.1686	0.0000	2,004.4264	2,004.4264	0.0515	0.0365	2,016.5889

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Granville_Tract6264 - Fresno County, Annual

Granville_Tract6264
Fresno County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	37.00	Dwelling Unit	5.00	66,600.00	106

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Tract Map
- Construction Phase - 2020 - 2021 schedule
- Off-road Equipment - increased equipment to account for shortened schedule from default
- Vehicle Trips - TIS and ITE Trip Generation Manual 10th Edition, Land Use 210
- Woodstoves - No woodburning
- Mobile Land Use Mitigation -
- Area Mitigation - Rule 4601 - Average VOC Content
- Energy Mitigation - Assumed 5 kw solar systems for residences

Water Mitigation - Model Water Efficient Landscape Ordinance, Green Building Code

Waste Mitigation - 75 percent statewide diversion/recycling mandate

Fleet Mix - SJVAPCD Residential Fleet Mix

Architectural Coating - Rule 4601 - Average VOC Content

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	65.00
tblAreaMitigation	UseLowVOCPaintResidentialExteriorVal	150	65
tblAreaMitigation	UseLowVOCPaintResidentialInteriorVal	150	65
tblConstructionPhase	NumDays	230.00	115.00
tblFireplaces	NumberGas	20.35	37.00
tblFireplaces	NumberNoFireplace	16.65	0.00
tblFleetMix	HHD	0.12	0.02
tblFleetMix	LDA	0.49	0.54
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.02	1.4000e-003
tblFleetMix	LHD2	4.7320e-003	9.0000e-004
tblFleetMix	MCY	5.1540e-003	2.6000e-003
tblFleetMix	MDV	0.12	0.05
tblFleetMix	MH	6.2900e-004	1.6000e-003
tblFleetMix	MHD	0.03	9.0000e-003
tblFleetMix	OBUS	2.3660e-003	0.00
tblFleetMix	SBUS	1.0970e-003	9.0000e-004
tblFleetMix	UBUS	1.5900e-003	4.4000e-003
tblLandUse	LotAcreage	12.01	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblVehicleTrips	ST_TR	9.91	9.54

tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	9.52	9.44

AGENDA ITEM NO. 9.

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.3567	2.1113	1.9076	3.0000e-003	0.0809	0.1240	0.2049	0.0409	0.1158	0.1567	0.0000	259.2939	259.2939	0.0678	0.0000	260.9899
2021	0.1516	7.6700e-003	9.4700e-003	2.0000e-005	1.2000e-004	4.7000e-004	5.9000e-004	3.0000e-005	4.7000e-004	5.0000e-004	0.0000	1.3769	1.3769	9.0000e-005	0.0000	1.3791
Maximum	0.3567	2.1113	1.9076	3.0000e-003	0.0809	0.1240	0.2049	0.0409	0.1158	0.1567	0.0000	259.2939	259.2939	0.0678	0.0000	260.9899

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.3567	2.1113	1.9076	3.0000e-003	0.0809	0.1240	0.2049	0.0409	0.1158	0.1567	0.0000	259.2936	259.2936	0.0678	0.0000	260.9896
2021	0.1516	7.6700e-003	9.4700e-003	2.0000e-005	1.2000e-004	4.7000e-004	5.9000e-004	3.0000e-005	4.7000e-004	5.0000e-004	0.0000	1.3769	1.3769	9.0000e-005	0.0000	1.3791
Maximum	0.3567	2.1113	1.9076	3.0000e-003	0.0809	0.1240	0.2049	0.0409	0.1158	0.1567	0.0000	259.2936	259.2936	0.0678	0.0000	260.9896

	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
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Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	AGENDA ITEM NO. 9.
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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2020	8-31-2020	1.1239	1.1239
2	9-1-2020	11-30-2020	1.0789	1.0789
3	12-1-2020	2-28-2021	0.3903	0.3903
		Highest	1.1239	1.1239

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3339	0.0283	0.2860	1.8000e-004		3.5500e-003	3.5500e-003		3.5500e-003	3.5500e-003	0.0000	29.5918	29.5918	9.9000e-004	5.3000e-004	29.7759
Energy	5.2200e-003	0.0446	0.0190	2.8000e-004		3.6000e-003	3.6000e-003		3.6000e-003	3.6000e-003	0.0000	145.9209	145.9209	5.2500e-003	1.8300e-003	146.5972
Mobile	0.1185	0.4334	1.3465	4.0900e-003	0.3794	3.6800e-003	0.3830	0.1016	3.4400e-003	0.1050	0.0000	375.5004	375.5004	0.0260	0.0000	376.1500
Waste						0.0000	0.0000		0.0000	0.0000	7.7461	0.0000	7.7461	0.4578	0.0000	19.1907
Water						0.0000	0.0000		0.0000	0.0000	0.7648	5.3422	6.1070	0.0788	1.9000e-003	8.6445
Total	0.4576	0.5063	1.6515	4.5500e-003	0.3794	0.0108	0.3902	0.1016	0.0106	0.1122	8.5109	556.3554	564.8663	0.5688	4.2600e-003	580.3583

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Area	0.2984	0.0283	0.2841	1.7000e-004		3.5400e-003	3.5400e-003		3.5400e-003	3.5400e-003	0.0000	29.5878	29.5878	9.9000e-004	5.3000e-004	
Energy	5.2200e-003	0.0446	0.0190	2.8000e-004		3.6000e-003	3.6000e-003		3.6000e-003	3.6000e-003	0.0000	55.0644	55.0644	1.1500e-003	9.8000e-004	55.3846
Mobile	0.1163	0.4160	1.2755	3.8200e-003	0.3532	3.4600e-003	0.3566	0.0946	3.2300e-003	0.0978	0.0000	351.2486	351.2486	0.0248	0.0000	351.8696
Waste						0.0000	0.0000		0.0000	0.0000	1.9365	0.0000	1.9365	0.1145	0.0000	4.7977
Water						0.0000	0.0000		0.0000	0.0000	0.6118	4.4888	5.1007	0.0631	1.5300e-003	7.1315
Total	0.4199	0.4889	1.5785	4.2700e-003	0.3532	0.0106	0.3638	0.0946	0.0104	0.1049	2.5484	440.3895	442.9379	0.2045	3.0400e-003	448.9550

AGENDA ITEM NO. 9.

	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
Percent Reduction	8.25	3.44	4.42	6.15	6.90	2.12	6.77	6.90	2.08	6.45	70.06	20.84	21.59	64.05	28.64	22.64

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2020	6/5/2020	5	5	
2	Grading	Grading	6/6/2020	6/17/2020	5	8	
3	Building Construction	Building Construction	6/18/2020	11/25/2020	5	115	
4	Paving	Paving	11/26/2020	12/21/2020	5	18	
5	Architectural Coating	Architectural Coating	12/22/2020	1/14/2021	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 134,865; Residential Outdoor: 44,955; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40

Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
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
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	16	13.00	4.00	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	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2020

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	
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0102	0.1060	0.0538	1.0000e-004		5.4900e-003	5.4900e-003		5.0500e-003	5.0500e-003	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4253
Total	0.0102	0.1060	0.0538	1.0000e-004	0.0452	5.4900e-003	0.0507	0.0248	5.0500e-003	0.0299	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4253

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.2000e-004	1.2500e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3114	0.3114	1.0000e-005	0.0000	0.3116
Total	1.9000e-004	1.2000e-004	1.2500e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3114	0.3114	1.0000e-005	0.0000	0.3116

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0102	0.1060	0.0538	1.0000e-004		5.4900e-003	5.4900e-003		5.0500e-003	5.0500e-003	0.0000	8.3577	8.3577	2.7000e-003	0.0000	AGENDA ITEM NO. 9.	
Total	0.0102	0.1060	0.0538	1.0000e-004	0.0452	5.4900e-003	0.0507	0.0248	5.0500e-003	0.0299	0.0000	8.3577	8.3577	2.7000e-003	0.0000		

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.2000e-004	1.2500e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3114	0.3114	1.0000e-005	0.0000	0.3116
Total	1.9000e-004	1.2000e-004	1.2500e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3114	0.3114	1.0000e-005	0.0000	0.3116

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1055	0.0642	1.2000e-004		5.0900e-003	5.0900e-003		4.6900e-003	4.6900e-003	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078
Total	9.7200e-003	0.1055	0.0642	1.2000e-004	0.0262	5.0900e-003	0.0313	0.0135	4.6900e-003	0.0182	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.6000e-004	1.6700e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4152	0.4152	1.0000e-005	0.0000	0.4154
Total	2.6000e-004	1.6000e-004	1.6700e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4152	0.4152	1.0000e-005	0.0000	0.4154

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1055	0.0642	1.2000e-004		5.0900e-003	5.0900e-003		4.6900e-003	4.6900e-003	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078
Total	9.7200e-003	0.1055	0.0642	1.2000e-004	0.0262	5.0900e-003	0.0313	0.0135	4.6900e-003	0.0182	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

AGENDA ITEM NO. 9.

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	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	0.0000
Worker	2.6000e-004	1.6000e-004	1.6700e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4152	0.4152	1.0000e-005	0.0000	0.4154	
Total	2.6000e-004	1.6000e-004	1.6700e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4152	0.4152	1.0000e-005	0.0000	0.4154	

3.4 Building Construction - 2020
Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1980	1.7351	1.6181	2.4300e-003		0.1060	0.1060		0.0992	0.0992	0.0000	208.3474	208.3474	0.0549	0.0000	209.7199
Total	0.1980	1.7351	1.6181	2.4300e-003		0.1060	0.1060		0.0992	0.0992	0.0000	208.3474	208.3474	0.0549	0.0000	209.7199

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.6000e-004	0.0285	4.5500e-003	7.0000e-005	1.5200e-003	1.5000e-004	1.6800e-003	4.4000e-004	1.4000e-004	5.8000e-004	0.0000	6.2028	6.2028	7.7000e-004	0.0000	6.2219
Worker	3.2300e-003	2.0500e-003	0.0208	6.0000e-005	5.9800e-003	4.0000e-005	6.0100e-003	1.5900e-003	4.0000e-005	1.6200e-003	0.0000	5.1722	5.1722	1.4000e-004	0.0000	5.1757
Total	4.0900e-003	0.0306	0.0253	1.3000e-004	7.5000e-003	1.9000e-004	7.6900e-003	2.0300e-003	1.8000e-004	2.2000e-003	0.0000	11.3750	11.3750	9.1000e-004	0.0000	11.3977

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1980	1.7351	1.6181	2.4300e-003		0.1060	0.1060		0.0992	0.0992	0.0000	208.3471	208.3471	0.0549	0.0000	209.7197
Total	0.1980	1.7351	1.6181	2.4300e-003		0.1060	0.1060		0.0992	0.0992	0.0000	208.3471	208.3471	0.0549	0.0000	209.7197

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.6000e-004	0.0285	4.5500e-003	7.0000e-005	1.5200e-003	1.5000e-004	1.6800e-003	4.4000e-004	1.4000e-004	5.8000e-004	0.0000	6.2028	6.2028	7.7000e-004	0.0000	6.2219
Worker	3.2300e-003	2.0500e-003	0.0208	6.0000e-005	5.9800e-003	4.0000e-005	6.0100e-003	1.5900e-003	4.0000e-005	1.6200e-003	0.0000	5.1722	5.1722	1.4000e-004	0.0000	5.1757
Total	4.0900e-003	0.0306	0.0253	1.3000e-004	7.5000e-003	1.9000e-004	7.6900e-003	2.0300e-003	1.8000e-004	2.2000e-003	0.0000	11.3750	11.3750	9.1000e-004	0.0000	11.3977

3.5 Paving - 2020

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	
Category	tons/yr										MT/yr					
Off-Road	0.0122	0.1266	0.1319	2.1000e-004		6.7800e-003	6.7800e-003		6.2300e-003	6.2300e-003	0.0000	18.0254	18.0254	5.8300e-003	0.0000	18.1711
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0122	0.1266	0.1319	2.1000e-004		6.7800e-003	6.7800e-003		6.2300e-003	6.2300e-003	0.0000	18.0254	18.0254	5.8300e-003	0.0000	18.1711

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	3.7000e-004	3.7500e-003	1.0000e-005	1.0800e-003	1.0000e-005	1.0900e-003	2.9000e-004	1.0000e-005	2.9000e-004	0.0000	0.9341	0.9341	3.0000e-005	0.0000	0.9347
Total	5.8000e-004	3.7000e-004	3.7500e-003	1.0000e-005	1.0800e-003	1.0000e-005	1.0900e-003	2.9000e-004	1.0000e-005	2.9000e-004	0.0000	0.9341	0.9341	3.0000e-005	0.0000	0.9347

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0122	0.1266	0.1319	2.1000e-004		6.7800e-003	6.7800e-003		6.2300e-003	6.2300e-003	0.0000	18.0254	18.0254	5.8300e-003	0.0000	18.1711

Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	AGENDA ITEM NO. 9.
Total	0.0122	0.1266	0.1319	2.1000e-004		6.7800e-003	6.7800e-003		6.2300e-003	6.2300e-003	0.0000	18.0254	18.0254	5.8300e-003	0.0000	18.1711		

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	3.7000e-004	3.7500e-003	1.0000e-005	1.0800e-003	1.0000e-005	1.0900e-003	2.9000e-004	1.0000e-005	2.9000e-004	0.0000	0.9341	0.9341	3.0000e-005	0.0000	0.9347
Total	5.8000e-004	3.7000e-004	3.7500e-003	1.0000e-005	1.0800e-003	1.0000e-005	1.0900e-003	2.9000e-004	1.0000e-005	2.9000e-004	0.0000	0.9341	0.9341	3.0000e-005	0.0000	0.9347

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1204					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7000e-004	6.7400e-003	7.3300e-003	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	1.0213	1.0213	8.0000e-005	0.0000	1.0233
Total	0.1214	6.7400e-003	7.3300e-003	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	1.0213	1.0213	8.0000e-005	0.0000	1.0233

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	3.0000e-005	3.3000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0830	0.0830	0.0000	0.0000	0.0831
Total	5.0000e-005	3.0000e-005	3.3000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0830	0.0830	0.0000	0.0000	0.0831

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1204					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7000e-004	6.7400e-003	7.3300e-003	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	1.0213	1.0213	8.0000e-005	0.0000	1.0233
Total	0.1214	6.7400e-003	7.3300e-003	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	1.0213	1.0213	8.0000e-005	0.0000	1.0233

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

AGENDA ITEM NO. 9.

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	5.0000e-005	3.0000e-005	3.3000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0830	0.0830	0.0000	0.0000	0.0831
Total	5.0000e-005	3.0000e-005	3.3000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0830	0.0830	0.0000	0.0000	0.0831

**3.6 Architectural Coating - 2021
Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1505					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788
Total	0.1516	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	3.8000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1002	0.1002	0.0000	0.0000	0.1003
Total	6.0000e-005	4.0000e-005	3.8000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1002	0.1002	0.0000	0.0000	0.1003

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1505					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788
Total	0.1516	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	3.8000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1002	0.1002	0.0000	0.0000	0.1003
Total	6.0000e-005	4.0000e-005	3.8000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1002	0.1002	0.0000	0.0000	0.1003

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Destination Accessibility

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1163	0.4160	1.2755	3.8200e-003	0.3532	3.4600e-003	0.3566	0.0946	3.2300e-003	0.0978	0.0000	351.2486	351.2486	0.0248	0.0000	351.8696
Unmitigated	0.1185	0.4334	1.3465	4.0900e-003	0.3794	3.6800e-003	0.3830	0.1016	3.4400e-003	0.1050	0.0000	375.5004	375.5004	0.0260	0.0000	376.1500

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	349.28	352.98	316.35	1,011,041	941,280
Total	349.28	352.98	316.35	1,011,041	941,280

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-...	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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.537300	0.200000	0.167100	0.054200	0.001400	0.000900	0.009000	0.020600	0.000000	0.004400	0.002600	0.000900	0.001600

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	tons/yr										MT/yr					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	3.4416	3.4416	1.6000e-004	3.0000e-005	3.4551
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	94.2982	94.2982	4.2600e-003	8.8000e-004	94.6677
Natural Gas Mitigated	5.2200e-003	0.0446	0.0190	2.8000e-004			3.6000e-003	3.6000e-003		3.6000e-003	3.6000e-003	51.6228	51.6228	9.9000e-004	9.5000e-004	51.9295
Natural Gas Unmitigated	5.2200e-003	0.0446	0.0190	2.8000e-004			3.6000e-003	3.6000e-003		3.6000e-003	3.6000e-003	51.6228	51.6228	9.9000e-004	9.5000e-004	51.9295

5.2 Energy by Land Use - Natural Gas
Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	967374	5.2200e-003	0.0446	0.0190	2.8000e-004			3.6000e-003	3.6000e-003		3.6000e-003	3.6000e-003	51.6228	51.6228	9.9000e-004	9.5000e-004	51.9295
Total		5.2200e-003	0.0446	0.0190	2.8000e-004			3.6000e-003	3.6000e-003		3.6000e-003	3.6000e-003	51.6228	51.6228	9.9000e-004	9.5000e-004	51.9295

Mitigated

	Natural Gas 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		
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	967374	5.2200e-003	0.0446	0.0190	2.8000e-004		3.6000e-003	3.6000e-003		3.6000e-003	3.6000e-003	0.0000	51.6228	51.6228	9.9000e-004	9.5000e-004	51.9295
Total		5.2200e-003	0.0446	0.0190	2.8000e-004		3.6000e-003	3.6000e-003		3.6000e-003	3.6000e-003	0.0000	51.6228	51.6228	9.9000e-004	9.5000e-004	51.9295

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	324147	94.2982	4.2600e-003	8.8000e-004	94.6677
Total		94.2982	4.2600e-003	8.8000e-004	94.6677

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	11830.4	3.4416	1.6000e-004	3.0000e-005	3.4551
Total		3.4416	1.6000e-004	3.0000e-005	3.4551

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2984	0.0283	0.2841	1.7000e-004		3.5400e-003	3.5400e-003		3.5400e-003	3.5400e-003	0.0000	29.5878	29.5878	9.9000e-004	5.3000e-004	29.7717
Unmitigated	0.3339	0.0283	0.2860	1.8000e-004		3.5500e-003	3.5500e-003		3.5500e-003	3.5500e-003	0.0000	29.5918	29.5918	9.9000e-004	5.3000e-004	29.7759

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					

Architectural Coating	0.0625				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	0.2601				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.9400e-003	0.0252	0.0107	1.6000e-004	2.0300e-003	2.0300e-003		2.0300e-003	2.0300e-003	0.0000	29.1430	29.1430	5.6000e-004	5.3000e-004	29.3162	
Landscaping	8.3400e-003	3.1800e-003	0.2753	1.0000e-005	1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	0.4488	0.4488	4.3000e-004	0.0000	0.4596	
Total	0.3339	0.0283	0.2860	1.7000e-004	3.5500e-003	3.5500e-003		3.5500e-003	3.5500e-003	0.0000	29.5918	29.5918	9.9000e-004	5.3000e-004	29.7759	

AGENDA ITEM NO. 9.

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0271					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2601					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.9400e-003	0.0252	0.0107	1.6000e-004	2.0300e-003	2.0300e-003		2.0300e-003	2.0300e-003	0.0000	29.1430	29.1430	5.6000e-004	5.3000e-004	29.3162	
Landscaping	8.2200e-003	3.1600e-003	0.2733	1.0000e-005	1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	0.4447	0.4447	4.3000e-004	0.0000	0.4554	
Total	0.2984	0.0283	0.2841	1.7000e-004	3.5400e-003	3.5400e-003		3.5400e-003	3.5400e-003	0.0000	29.5878	29.5878	9.9000e-004	5.3000e-004	29.7717	

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.1007	0.0631	1.5300e-003	7.1315
Unmitigated	6.1070	0.0788	1.9000e-003	8.6445

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	2.4107 / 1.51979	6.1070	0.0788	1.9000e-003	8.6445
Total		6.1070	0.0788	1.9000e-003	8.6445

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.92856 / 1.42708	5.1007	0.0631	1.5300e-003	7.1315
Total		5.1007	0.0631	1.5300e-003	7.1315

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.9365	0.1145	0.0000	4.7977
Unmitigated	7.7461	0.4578	0.0000	19.1907

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	38.16	7.7461	0.4578	0.0000	19.1907
Total		7.7461	0.4578	0.0000	19.1907

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	9.54	1.9365	0.1145	0.0000	4.7977
Total		1.9365	0.1145	0.0000	4.7977

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Granville_Tract6264 - Fresno County, Winter

Granville_Tract6264
Fresno County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	37.00	Dwelling Unit	5.00	66,600.00	106

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Tract Map
- Construction Phase - 2020 - 2021 schedule
- Off-road Equipment - increased equipment to account for shortened schedule from default
- Vehicle Trips - TIS and ITE Trip Generation Manual 10th Edition, Land Use 210
- Woodstoves - No woodburning
- Mobile Land Use Mitigation -
- Area Mitigation - Rule 4601 - Average VOC Content
- Energy Mitigation - Assumed 5 kw solar systems for residences

Water Mitigation - Model Water Efficient Landscape Ordinance, Green Building Code

Waste Mitigation - 75 percent statewide diversion/recycling mandate

Fleet Mix - SJVAPCD Residential Fleet Mix

Architectural Coating - Rule 4601 - Average VOC Content

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	65.00
tblAreaMitigation	UseLowVOCPaintResidentialExteriorVal	150	65
tblAreaMitigation	UseLowVOCPaintResidentialInteriorVal	150	65
tblConstructionPhase	NumDays	230.00	115.00
tblFireplaces	NumberGas	20.35	37.00
tblFireplaces	NumberNoFireplace	16.65	0.00
tblFleetMix	HHD	0.12	0.02
tblFleetMix	LDA	0.49	0.54
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.02	1.4000e-003
tblFleetMix	LHD2	4.7320e-003	9.0000e-004
tblFleetMix	MCY	5.1540e-003	2.6000e-003
tblFleetMix	MDV	0.12	0.05
tblFleetMix	MH	6.2900e-004	1.6000e-003
tblFleetMix	MHD	0.03	9.0000e-003
tblFleetMix	OBUS	2.3660e-003	0.00
tblFleetMix	SBUS	1.0970e-003	9.0000e-004
tblFleetMix	UBUS	1.5900e-003	4.4000e-003
tblLandUse	LotAcreage	12.01	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblVehicleTrips	ST_TR	9.91	9.54

tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	9.52	9.44

AGENDA ITEM NO. 9.

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	30.3532	42.4713	28.5837	0.0443	18.2141	2.1983	20.4125	9.9699	2.0225	11.9924	0.0000	4,206.1805	4,206.1805	1.1954	0.0000	4,232.9520
2021	30.3289	1.5348	1.8920	3.1800e-003	0.0246	0.0943	0.1189	6.5400e-003	0.0942	0.1008	0.0000	302.6878	302.6878	0.0198	0.0000	303.1839
Maximum	30.3532	42.4713	28.5837	0.0443	18.2141	2.1983	20.4125	9.9699	2.0225	11.9924	0.0000	4,206.1805	4,206.1805	1.1954	0.0000	4,232.9520

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	lb/day										lb/day					
2020	30.3532	42.4713	28.5837	0.0443	18.2141	2.1983	20.4125	9.9699	2.0225	11.9924	0.0000	4,206.1805	4,206.1805	1.1954	0.0000	4,232.9520
2021	30.3289	1.5348	1.8920	3.1800e-003	0.0246	0.0943	0.1189	6.5400e-003	0.0942	0.1008	0.0000	302.6878	302.6878	0.0198	0.0000	303.1839
Maximum	30.3532	42.4713	28.5837	0.0443	18.2141	2.1983	20.4125	9.9699	2.0225	11.9924	0.0000	4,206.1805	4,206.1805	1.1954	0.0000	4,232.9520

	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
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Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	AGENDA ITEM NO. 9.
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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/day										lb/day					
Area	1.9323	0.6491	3.3204	4.0800e-003		0.0665	0.0665		0.0665	0.0665	0.0000	789.0259	789.0259	0.0203	0.0144	793.8151
Energy	0.0286	0.2443	0.1039	1.5600e-003		0.0198	0.0198		0.0198	0.0198		311.8046	311.8046	5.9800e-003	5.7200e-003	313.6575
Mobile	0.6051	2.5009	7.6305	0.0222	2.1899	0.0208	2.2107	0.5850	0.0194	0.6044		2,248.9092	2,248.9092	0.1645		2,253.0219
Total	2.5659	3.3942	11.0548	0.0279	2.1899	0.1070	2.2969	0.5850	0.1057	0.6906	0.0000	3,349.7397	3,349.7397	0.1908	0.0201	3,360.4945

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/day										lb/day					
Area	1.7369	0.6489	3.2983	4.0800e-003		0.0664	0.0664		0.0664	0.0664	0.0000	788.9763	788.9763	0.0203	0.0144	793.7637
Energy	0.0286	0.2443	0.1039	1.5600e-003		0.0198	0.0198		0.0198	0.0198		311.8046	311.8046	5.9800e-003	5.7200e-003	313.6575
Mobile	0.5930	2.3982	7.2553	0.0208	2.0388	0.0195	2.0583	0.5446	0.0183	0.5629		2,103.4776	2,103.4776	0.1576		2,107.4165
Total	2.3585	3.2913	10.6575	0.0264	2.0388	0.1057	2.1444	0.5446	0.1044	0.6490	0.0000	3,204.2586	3,204.2586	0.1838	0.0201	3,214.8377

	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
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Percent Reduction	8.09	3.03	3.59	5.13	6.90	1.30	6.64	6.90	1.23	6.03	0.00	4.34	4.34	3.68	0.0	AGENDA ITEM NO. 9.
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3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2020	6/5/2020	5	5	
2	Grading	Grading	6/6/2020	6/17/2020	5	8	
3	Building Construction	Building Construction	6/18/2020	11/25/2020	5	115	
4	Paving	Paving	11/26/2020	12/21/2020	5	18	
5	Architectural Coating	Architectural Coating	12/22/2020	1/14/2021	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 134,865; Residential Outdoor: 44,955; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45

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
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	16	13.00	4.00	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	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2020

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/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.0663	2.1974	20.2637	9.9307	2.0216	11.9523		3,685.1016	3,685.1016	1.1918		3,714.8975

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	lb/day										lb/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
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
Worker	0.0820	0.0540	0.4930	1.3300e-003	0.1479	9.3000e-004	0.1488	0.0392	8.5000e-004	0.0401		131.9590	131.9590	3.5900e-003		132.0487
Total	0.0820	0.0540	0.4930	1.3300e-003	0.1479	9.3000e-004	0.1488	0.0392	8.5000e-004	0.0401		131.9590	131.9590	3.5900e-003		132.0487

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/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.0663	2.1974	20.2637	9.9307	2.0216	11.9523	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975

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	lb/day										lb/day					

AGENDA ITEM NO. 9.

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	0.0820	0.0540	0.4930	1.3300e-003	0.1479	9.3000e-004	0.1488	0.0392	8.5000e-004	0.0401	131.9590	131.9590	3.5900e-003	132.0487		
Total	0.0820	0.0540	0.4930	1.3300e-003	0.1479	9.3000e-004	0.1488	0.0392	8.5000e-004	0.0401	131.9590	131.9590	3.5900e-003	132.0487		

3.3 Grading - 2020

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/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	2.4288	26.3859	16.0530	0.0297	6.5523	1.2734	7.8258	3.3675	1.1716	4.5390		2,872.4851	2,872.4851	0.9290		2,895.7106

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	lb/day										lb/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
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
Worker	0.0683	0.0450	0.4108	1.1000e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		109.9658	109.9658	2.9900e-003		110.0406
Total	0.0683	0.0450	0.4108	1.1000e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		109.9658	109.9658	2.9900e-003		110.0406

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/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	2.4288	26.3859	16.0530	0.0297	6.5523	1.2734	7.8258	3.3675	1.1716	4.5390	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106

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	lb/day										lb/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
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
Worker	0.0683	0.0450	0.4108	1.1000e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		109.9658	109.9658	2.9900e-003		110.0406
Total	0.0683	0.0450	0.4108	1.1000e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		109.9658	109.9658	2.9900e-003		110.0406

3.4 Building Construction - 2020

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	
Category	lb/day										lb/day					
Off-Road	3.4439	30.1759	28.1405	0.0422		1.8434	1.8434		1.7255	1.7255		3,994.1506	3,994.1506	1.0525		4,020.4631
Total	3.4439	30.1759	28.1405	0.0422		1.8434	1.8434		1.7255	1.7255		3,994.1506	3,994.1506	1.0525		4,020.4631

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	lb/day										lb/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
Vendor	0.0154	0.4945	0.0871	1.1100e-003	0.0271	2.6600e-003	0.0298	7.8000e-003	2.5500e-003	0.0104		116.7262	116.7262	0.0158		117.1204
Worker	0.0592	0.0390	0.3561	9.6000e-004	0.1068	6.7000e-004	0.1075	0.0283	6.2000e-004	0.0289		95.3037	95.3037	2.5900e-003		95.3685
Total	0.0746	0.5335	0.4432	2.0700e-003	0.1339	3.3300e-003	0.1372	0.0361	3.1700e-003	0.0393		212.0299	212.0299	0.0184		212.4889

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/day										lb/day					
Off-Road	3.4439	30.1759	28.1405	0.0422		1.8434	1.8434		1.7255	1.7255	0.0000	3,994.1506	3,994.1506	1.0525		4,020.4631

Total	3.4439	30.1759	28.1405	0.0422		1.8434	1.8434		1.7255	1.7255	0.0000	3,994.1506	3,994.1506	1.0525			AGENDA ITEM NO. 9.
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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	lb/day										lb/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
Vendor	0.0154	0.4945	0.0871	1.1100e-003	0.0271	2.6600e-003	0.0298	7.8000e-003	2.5500e-003	0.0104		116.7262	116.7262	0.0158			117.1204
Worker	0.0592	0.0390	0.3561	9.6000e-004	0.1068	6.7000e-004	0.1075	0.0283	6.2000e-004	0.0289		95.3037	95.3037	2.5900e-003			95.3685
Total	0.0746	0.5335	0.4432	2.0700e-003	0.1339	3.3300e-003	0.1372	0.0361	3.1700e-003	0.0393		212.0299	212.0299	0.0184			212.4889

3.5 Paving - 2020

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/day										lb/day						
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140			2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140			2,225.5841

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	lb/day										lb/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
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
Worker	0.0683	0.0450	0.4108	1.1000e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		109.9658	109.9658	2.9900e-003		110.0406
Total	0.0683	0.0450	0.4108	1.1000e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		109.9658	109.9658	2.9900e-003		110.0406

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/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841

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	lb/day										lb/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	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	0.0683	0.0450	0.4108	1.1000e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334	109.9658	109.9658	2.9900e-003	110.0406		
Total	0.0683	0.0450	0.4108	1.1000e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334	109.9658	109.9658	2.9900e-003	110.0406		

3.6 Architectural Coating - 2020
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/day										lb/day					
Archit. Coating	30.0974					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	30.3396	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

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	lb/day										lb/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
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
Worker	0.0137	9.0000e-003	0.0822	2.2000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6800e-003		21.9932	21.9932	6.0000e-004		22.0081
Total	0.0137	9.0000e-003	0.0822	2.2000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6800e-003		21.9932	21.9932	6.0000e-004		22.0081

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/day										lb/day					
Archit. Coating	30.0974					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	30.3396	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

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	lb/day										lb/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
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
Worker	0.0137	9.0000e-003	0.0822	2.2000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6800e-003		21.9932	21.9932	6.0000e-004		22.0081
Total	0.0137	9.0000e-003	0.0822	2.2000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6800e-003		21.9932	21.9932	6.0000e-004		22.0081

3.6 Architectural Coating - 2021

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	
Category	lb/day										lb/day					
Archit. Coating	30.0974					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	30.3163	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

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	lb/day										lb/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
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
Worker	0.0126	8.0000e-003	0.0744	2.1000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6700e-003		21.2397	21.2397	5.3000e-004		21.2530
Total	0.0126	8.0000e-003	0.0744	2.1000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6700e-003		21.2397	21.2397	5.3000e-004		21.2530

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/day										lb/day					
Archit. Coating	30.0974					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193			AGENDA ITEM NO. 9.
Total	30.3163	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193			281.9309

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	lb/day										lb/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
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
Worker	0.0126	8.0000e-003	0.0744	2.1000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6700e-003		21.2397	21.2397	5.3000e-004		21.2530
Total	0.0126	8.0000e-003	0.0744	2.1000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6700e-003		21.2397	21.2397	5.3000e-004		21.2530

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Destination Accessibility

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/day										lb/day					

Mitigated	0.5930	2.3982	7.2553	0.0208	2.0388	0.0195	2.0583	0.5446	0.0183	0.5629		2,103.4776	2,103.4776	0.1576	
Unmitigated	0.6051	2.5009	7.6305	0.0222	2.1899	0.0208	2.2107	0.5850	0.0194	0.6044		2,248.9092	2,248.9092	0.1645	2,253.0219

AGENDA ITEM NO. 9.

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	349.28	352.98	316.35	1,011,041	941,280
Total	349.28	352.98	316.35	1,011,041	941,280

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.537300	0.200000	0.167100	0.054200	0.001400	0.000900	0.009000	0.020600	0.000000	0.004400	0.002600	0.000900	0.001600

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

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
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Category	lb/day										lb/day					AGENDA ITEM NO. 9.
	Natural Gas Mitigated	0.0286	0.2443	0.1039	1.5600e-003		0.0198	0.0198		0.0198	0.0198		311.8046	311.8046	5.9800e-003	
Natural Gas Mitigated	0.0286	0.2443	0.1039	1.5600e-003		0.0198	0.0198		0.0198	0.0198		311.8046	311.8046	5.9800e-003	5.7200e-003	313.6575
Natural Gas Unmitigated	0.0286	0.2443	0.1039	1.5600e-003		0.0198	0.0198		0.0198	0.0198		311.8046	311.8046	5.9800e-003	5.7200e-003	313.6575

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas 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/day										lb/day					
Single Family Housing	2650.34	0.0286	0.2443	0.1039	1.5600e-003		0.0198	0.0198		0.0198	0.0198		311.8046	311.8046	5.9800e-003	5.7200e-003	313.6575
Total		0.0286	0.2443	0.1039	1.5600e-003		0.0198	0.0198		0.0198	0.0198		311.8046	311.8046	5.9800e-003	5.7200e-003	313.6575

Mitigated

	Natural Gas 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/day										lb/day					
Single Family Housing	2.65034	0.0286	0.2443	0.1039	1.5600e-003		0.0198	0.0198		0.0198	0.0198		311.8046	311.8046	5.9800e-003	5.7200e-003	313.6575
Total		0.0286	0.2443	0.1039	1.5600e-003		0.0198	0.0198		0.0198	0.0198		311.8046	311.8046	5.9800e-003	5.7200e-003	313.6575

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use only Natural Gas Hearths

	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/day										lb/day					
Mitigated	1.7369	0.6489	3.2983	4.0800e-003		0.0664	0.0664		0.0664	0.0664	0.0000	788.9763	788.9763	0.0203	0.0144	793.7637
Unmitigated	1.9323	0.6491	3.3204	4.0800e-003		0.0665	0.0665		0.0665	0.0665	0.0000	789.0259	789.0259	0.0203	0.0144	793.8151

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	0.3425					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Consumer Products	1.4252				0.0000	0.0000		0.0000	0.0000			0.0000				
Hearth	0.0718	0.6138	0.2612	3.9200e-003	0.0496	0.0496		0.0496	0.0496	0.0000	783.5294	783.5294	0.0150	0.0144	788.1855	
Landscaping	0.0927	0.0353	3.0592	1.6000e-004	0.0169	0.0169		0.0169	0.0169		5.4964	5.4964	5.3300e-003		5.6296	
Total	1.9323	0.6491	3.3204	4.0800e-003	0.0665	0.0665		0.0665	0.0665	0.0000	789.0259	789.0259	0.0204	0.0144	793.8151	

AGENDA ITEM NO. 9.

Mitigated

SubCategory	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
	lb/day										lb/day					
Architectural Coating	0.1484					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4252					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0718	0.6138	0.2612	3.9200e-003	0.0496	0.0496		0.0496	0.0496	0.0000	783.5294	783.5294	0.0150	0.0144	788.1855	
Landscaping	0.0914	0.0351	3.0371	1.6000e-004	0.0167	0.0167		0.0167	0.0167		5.4469	5.4469	5.2500e-003		5.5782	
Total	1.7369	0.6489	3.2983	4.0800e-003		0.0664	0.0664		0.0664	0.0664	0.0000	788.9763	788.9763	0.0203	0.0144	793.7637

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

AGENDA ITEM NO. 9.

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

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Granville_Tract6264 - Fresno County, Summer

Granville_Tract6264
Fresno County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	37.00	Dwelling Unit	5.00	66,600.00	106

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Tract Map
- Construction Phase - 2020 - 2021 schedule
- Off-road Equipment - increased equipment to account for shortened schedule from default
- Vehicle Trips - TIS and ITE Trip Generation Manual 10th Edition, Land Use 210
- Woodstoves - No woodburning
- Mobile Land Use Mitigation -
- Area Mitigation - Rule 4601 - Average VOC Content
- Energy Mitigation - Assumed 5 kw solar systems for residences

Water Mitigation - Model Water Efficient Landscape Ordinance, Green Building Code

Waste Mitigation - 75 percent statewide diversion/recycling mandate

Fleet Mix - SJVAPCD Residential Fleet Mix

Architectural Coating - Rule 4601 - Average VOC Content

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	65.00
tblAreaMitigation	UseLowVOCPaintResidentialExteriorVal	150	65
tblAreaMitigation	UseLowVOCPaintResidentialInteriorVal	150	65
tblConstructionPhase	NumDays	230.00	115.00
tblFireplaces	NumberGas	20.35	37.00
tblFireplaces	NumberNoFireplace	16.65	0.00
tblFleetMix	HHD	0.12	0.02
tblFleetMix	LDA	0.49	0.54
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.02	1.4000e-003
tblFleetMix	LHD2	4.7320e-003	9.0000e-004
tblFleetMix	MCY	5.1540e-003	2.6000e-003
tblFleetMix	MDV	0.12	0.05
tblFleetMix	MH	6.2900e-004	1.6000e-003
tblFleetMix	MHD	0.03	9.0000e-003
tblFleetMix	OBUS	2.3660e-003	0.00
tblFleetMix	SBUS	1.0970e-003	9.0000e-004
tblFleetMix	UBUS	1.5900e-003	4.4000e-003
tblLandUse	LotAcreage	12.01	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblVehicleTrips	ST_TR	9.91	9.54

tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	9.52	9.44

AGENDA ITEM NO. 9.

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	30.3543	42.4632	28.6318	0.0444	18.2141	2.1983	20.4125	9.9699	2.0225	11.9924	0.0000	4,223.3885	4,223.3885	1.1959	0.0000	4,250.1225
2021	30.3299	1.5337	1.9053	3.2100e-003	0.0246	0.0943	0.1189	6.5400e-003	0.0942	0.1008	0.0000	305.6824	305.6824	0.0199	0.0000	306.1804
Maximum	30.3543	42.4632	28.6318	0.0444	18.2141	2.1983	20.4125	9.9699	2.0225	11.9924	0.0000	4,223.3885	4,223.3885	1.1959	0.0000	4,250.1225

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	lb/day										lb/day					
2020	30.3543	42.4632	28.6318	0.0444	18.2141	2.1983	20.4125	9.9699	2.0225	11.9924	0.0000	4,223.3885	4,223.3885	1.1959	0.0000	4,250.1225
2021	30.3299	1.5337	1.9053	3.2100e-003	0.0246	0.0943	0.1189	6.5400e-003	0.0942	0.1008	0.0000	305.6824	305.6824	0.0199	0.0000	306.1804
Maximum	30.3543	42.4632	28.6318	0.0444	18.2141	2.1983	20.4125	9.9699	2.0225	11.9924	0.0000	4,223.3885	4,223.3885	1.1959	0.0000	4,250.1225

	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
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Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	AGENDA ITEM NO. 9.
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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/day										lb/day					
Area	1.9323	0.6491	3.3204	4.0800e-003		0.0665	0.0665		0.0665	0.0665	0.0000	789.0259	789.0259	0.0203	0.0144	793.8151
Energy	0.0286	0.2443	0.1039	1.5600e-003		0.0198	0.0198		0.0198	0.0198		311.8046	311.8046	5.9800e-003	5.7200e-003	313.6575
Mobile	0.8621	2.3614	8.4852	0.0249	2.1899	0.0207	2.2105	0.5850	0.0193	0.6043		2,514.4585	2,514.4585	0.1628		2,518.5281
Total	2.8230	3.2547	11.9095	0.0305	2.1899	0.1069	2.2968	0.5850	0.1055	0.6905	0.0000	3,615.2890	3,615.2890	0.1891	0.0201	3,626.0008

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/day										lb/day					
Area	1.7369	0.6489	3.2983	4.0800e-003		0.0664	0.0664		0.0664	0.0664	0.0000	788.9763	788.9763	0.0203	0.0144	793.7637
Energy	0.0286	0.2443	0.1039	1.5600e-003		0.0198	0.0198		0.0198	0.0198		311.8046	311.8046	5.9800e-003	5.7200e-003	313.6575
Mobile	0.8488	2.2691	8.0022	0.0233	2.0388	0.0194	2.0582	0.5446	0.0181	0.5627		2,351.6318	2,351.6318	0.1553		2,355.5137
Total	2.6143	3.1622	11.4045	0.0289	2.0388	0.1055	2.1443	0.5446	0.1042	0.6488	0.0000	3,452.4127	3,452.4127	0.1815	0.0201	3,462.9350

	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
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Percent Reduction	7.39	2.84	4.24	5.28	6.90	1.30	6.64	6.90	1.24	6.03	0.00	4.51	4.51	4.01	0.0	AGENDA ITEM NO. 9.
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3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2020	6/5/2020	5	5	
2	Grading	Grading	6/6/2020	6/17/2020	5	8	
3	Building Construction	Building Construction	6/18/2020	11/25/2020	5	115	
4	Paving	Paving	11/26/2020	12/21/2020	5	18	
5	Architectural Coating	Architectural Coating	12/22/2020	1/14/2021	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 134,865; Residential Outdoor: 44,955; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45

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
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	16	13.00	4.00	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	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2020

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/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.0663	2.1974	20.2637	9.9307	2.0216	11.9523		3,685.1016	3,685.1016	1.1918		3,714.8975

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	lb/day										lb/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
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
Worker	0.0884	0.0459	0.5789	1.5100e-003	0.1479	9.3000e-004	0.1488	0.0392	8.5000e-004	0.0401		150.5688	150.5688	4.0800e-003		150.6707
Total	0.0884	0.0459	0.5789	1.5100e-003	0.1479	9.3000e-004	0.1488	0.0392	8.5000e-004	0.0401		150.5688	150.5688	4.0800e-003		150.6707

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/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.0663	2.1974	20.2637	9.9307	2.0216	11.9523	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975

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	lb/day										lb/day					

AGENDA ITEM NO. 9.

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	0.0884	0.0459	0.5789	1.5100e-003	0.1479	9.3000e-004	0.1488	0.0392	8.5000e-004	0.0401	150.5688	150.5688	4.0800e-003	150.6707		
Total	0.0884	0.0459	0.5789	1.5100e-003	0.1479	9.3000e-004	0.1488	0.0392	8.5000e-004	0.0401	150.5688	150.5688	4.0800e-003	150.6707		

3.3 Grading - 2020

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/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	2.4288	26.3859	16.0530	0.0297	6.5523	1.2734	7.8258	3.3675	1.1716	4.5390		2,872.4851	2,872.4851	0.9290		2,895.7106

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	lb/day										lb/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
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
Worker	0.0737	0.0383	0.4824	1.2600e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		125.4740	125.4740	3.4000e-003		125.5589
Total	0.0737	0.0383	0.4824	1.2600e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		125.4740	125.4740	3.4000e-003		125.5589

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/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	2.4288	26.3859	16.0530	0.0297	6.5523	1.2734	7.8258	3.3675	1.1716	4.5390	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106

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	lb/day										lb/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
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
Worker	0.0737	0.0383	0.4824	1.2600e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		125.4740	125.4740	3.4000e-003		125.5589
Total	0.0737	0.0383	0.4824	1.2600e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		125.4740	125.4740	3.4000e-003		125.5589

3.4 Building Construction - 2020

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	
Category	lb/day										lb/day					
Off-Road	3.4439	30.1759	28.1405	0.0422		1.8434	1.8434		1.7255	1.7255		3,994.1506	3,994.1506	1.0525		4,020.4631
Total	3.4439	30.1759	28.1405	0.0422		1.8434	1.8434		1.7255	1.7255		3,994.1506	3,994.1506	1.0525		4,020.4631

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	lb/day										lb/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
Vendor	0.0147	0.4889	0.0733	1.1500e-003	0.0271	2.6100e-003	0.0297	7.8000e-003	2.4900e-003	0.0103		120.4938	120.4938	0.0139		120.8417
Worker	0.0639	0.0332	0.4181	1.0900e-003	0.1068	6.7000e-004	0.1075	0.0283	6.2000e-004	0.0289		108.7441	108.7441	2.9400e-003		108.8177
Total	0.0786	0.5220	0.4913	2.2400e-003	0.1339	3.2800e-003	0.1372	0.0361	3.1100e-003	0.0392		229.2379	229.2379	0.0169		229.6594

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/day										lb/day					
Off-Road	3.4439	30.1759	28.1405	0.0422		1.8434	1.8434		1.7255	1.7255	0.0000	3,994.1506	3,994.1506	1.0525		4,020.4631

Total	3.4439	30.1759	28.1405	0.0422		1.8434	1.8434		1.7255	1.7255	0.0000	3,994.1506	3,994.1506	1.0525			AGENDA ITEM NO. 9.
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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	lb/day										lb/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
Vendor	0.0147	0.4889	0.0733	1.1500e-003	0.0271	2.6100e-003	0.0297	7.8000e-003	2.4900e-003	0.0103		120.4938	120.4938	0.0139			120.8417
Worker	0.0639	0.0332	0.4181	1.0900e-003	0.1068	6.7000e-004	0.1075	0.0283	6.2000e-004	0.0289		108.7441	108.7441	2.9400e-003			108.8177
Total	0.0786	0.5220	0.4913	2.2400e-003	0.1339	3.2800e-003	0.1372	0.0361	3.1100e-003	0.0392		229.2379	229.2379	0.0169			229.6594

3.5 Paving - 2020

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/day										lb/day						
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140			2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140			2,225.5841

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	lb/day										lb/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
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
Worker	0.0737	0.0383	0.4824	1.2600e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		125.4740	125.4740	3.4000e-003		125.5589
Total	0.0737	0.0383	0.4824	1.2600e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		125.4740	125.4740	3.4000e-003		125.5589

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/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841

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	lb/day										lb/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	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	0.0737	0.0383	0.4824	1.2600e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334	125.4740	125.4740	3.4000e-003	125.5589		
Total	0.0737	0.0383	0.4824	1.2600e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334	125.4740	125.4740	3.4000e-003	125.5589		

3.6 Architectural Coating - 2020
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/day										lb/day					
Archit. Coating	30.0974					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	30.3396	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

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	lb/day										lb/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
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
Worker	0.0147	7.6500e-003	0.0965	2.5000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6800e-003		25.0948	25.0948	6.8000e-004		25.1118
Total	0.0147	7.6500e-003	0.0965	2.5000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6800e-003		25.0948	25.0948	6.8000e-004		25.1118

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/day										lb/day					
Archit. Coating	30.0974					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	30.3396	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

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	lb/day										lb/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
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
Worker	0.0147	7.6500e-003	0.0965	2.5000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6800e-003		25.0948	25.0948	6.8000e-004		25.1118
Total	0.0147	7.6500e-003	0.0965	2.5000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6800e-003		25.0948	25.0948	6.8000e-004		25.1118

3.6 Architectural Coating - 2021

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	
Category	lb/day										lb/day					
Archit. Coating	30.0974					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	30.3163	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

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	lb/day										lb/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
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
Worker	0.0136	6.8100e-003	0.0877	2.4000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6700e-003		24.2343	24.2343	6.0000e-004		24.2495
Total	0.0136	6.8100e-003	0.0877	2.4000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6700e-003		24.2343	24.2343	6.0000e-004		24.2495

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/day										lb/day					
Archit. Coating	30.0974					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193			AGENDA ITEM NO. 9.
Total	30.3163	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193			281.9309

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	lb/day										lb/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
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
Worker	0.0136	6.8100e-003	0.0877	2.4000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6700e-003		24.2343	24.2343	6.0000e-004		24.2495
Total	0.0136	6.8100e-003	0.0877	2.4000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6700e-003		24.2343	24.2343	6.0000e-004		24.2495

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Destination Accessibility

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/day										lb/day					

Mitigated	0.8488	2.2691	8.0022	0.0233	2.0388	0.0194	2.0582	0.5446	0.0181	0.5627		2,351.6318	2,351.6318	0.1553	
Unmitigated	0.8621	2.3614	8.4852	0.0249	2.1899	0.0207	2.2105	0.5850	0.0193	0.6043		2,514.4585	2,514.4585	0.1628	2,518.5281

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4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	349.28	352.98	316.35	1,011,041	941,280
Total	349.28	352.98	316.35	1,011,041	941,280

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.537300	0.200000	0.167100	0.054200	0.001400	0.000900	0.009000	0.020600	0.000000	0.004400	0.002600	0.000900	0.001600

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

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
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Category	lb/day										lb/day					
	NaturalGas Mitigated	0.0286	0.2443	0.1039	1.5600e-003		0.0198	0.0198		0.0198	0.0198		311.8046	311.8046	5.9800e-003	5.7200e-003
NaturalGas Unmitigated	0.0286	0.2443	0.1039	1.5600e-003		0.0198	0.0198		0.0198	0.0198		311.8046	311.8046	5.9800e-003	5.7200e-003	313.6575

5.2 Energy by Land Use - NaturalGas
Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	2650.34	0.0286	0.2443	0.1039	1.5600e-003		0.0198	0.0198		0.0198	0.0198		311.8046	311.8046	5.9800e-003	5.7200e-003	313.6575
Total		0.0286	0.2443	0.1039	1.5600e-003		0.0198	0.0198		0.0198	0.0198		311.8046	311.8046	5.9800e-003	5.7200e-003	

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	2.65034	0.0286	0.2443	0.1039	1.5600e-003		0.0198	0.0198		0.0198	0.0198		311.8046	311.8046	5.9800e-003	5.7200e-003	313.6575
Total		0.0286	0.2443	0.1039	1.5600e-003		0.0198	0.0198		0.0198	0.0198		311.8046	311.8046	5.9800e-003	5.7200e-003	

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use only Natural Gas Hearths

	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/day										lb/day					
Mitigated	1.7369	0.6489	3.2983	4.0800e-003		0.0664	0.0664		0.0664	0.0664	0.0000	788.9763	788.9763	0.0203	0.0144	793.7637
Unmitigated	1.9323	0.6491	3.3204	4.0800e-003		0.0665	0.0665		0.0665	0.0665	0.0000	789.0259	789.0259	0.0203	0.0144	793.8151

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	0.3425					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Consumer Products	1.4252				0.0000	0.0000		0.0000	0.0000			0.0000				
Hearth	0.0718	0.6138	0.2612	3.9200e-003	0.0496	0.0496		0.0496	0.0496	0.0000	783.5294	783.5294	0.0150	0.0144	788.1855	
Landscaping	0.0927	0.0353	3.0592	1.6000e-004	0.0169	0.0169		0.0169	0.0169		5.4964	5.4964	5.3300e-003		5.6296	
Total	1.9323	0.6491	3.3204	4.0800e-003	0.0665	0.0665		0.0665	0.0665	0.0000	789.0259	789.0259	0.0204	0.0144	793.8151	

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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/day										lb/day					
Architectural Coating	0.1484					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4252					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0718	0.6138	0.2612	3.9200e-003	0.0496	0.0496		0.0496	0.0496	0.0000	783.5294	783.5294	0.0150	0.0144	788.1855	
Landscaping	0.0914	0.0351	3.0371	1.6000e-004	0.0167	0.0167		0.0167	0.0167		5.4469	5.4469	5.2500e-003		5.5782	
Total	1.7369	0.6489	3.2983	4.0800e-003		0.0664	0.0664		0.0664	0.0664	0.0000	788.9763	788.9763	0.0203	0.0144	793.7637

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Granville - Tracts 6239 and 6264 2021 - Fresno County, Annual

Granville - Tracts 6239 and 6264 2021
Fresno County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	199.00	Dwelling Unit	50.00	358,200.00	569

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics - Renewable Portfolio Standard
- Land Use - Tract Maps
- Construction Phase - Operational only
- Off-road Equipment - operational only
- Trips and VMT - Operational only
- Architectural Coating - Rule 4601 Average Architectural Coating VOC Content
- Vehicle Trips - TIS, ITE Trip Generation Manual 10th Edition, Land Use 210
- Woodstoves - No woodburning devices
- Energy Use -

Mobile Land Use Mitigation -

Area Mitigation - Rule 4601 Average VOC content

Energy Mitigation - Assumed 5 kW solar systems for residences

Water Mitigation - Model Water Efficient Landscape Ordinance, Green Building Code

Waste Mitigation - 75 percent statewide diversion/recycling mandate

Fleet Mix - SJVAPCD Residential Fleet Mix

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	65.00
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	65
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	150	65
tblFireplaces	NumberGas	109.45	199.00
tblFireplaces	NumberNoFireplace	89.55	0.00
tblFleetMix	HHD	0.12	0.02
tblFleetMix	LDA	0.49	0.54
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.02	1.4000e-003
tblFleetMix	LHD2	4.7320e-003	9.0000e-004
tblFleetMix	MCY	5.1540e-003	2.6000e-003
tblFleetMix	MDV	0.12	0.05
tblFleetMix	MH	6.2900e-004	1.6000e-003
tblFleetMix	MHD	0.03	9.0000e-003
tblFleetMix	OBUS	2.3660e-003	0.00
tblFleetMix	SBUS	1.0970e-003	9.0000e-004
tblFleetMix	UBUS	1.5900e-003	4.4000e-003
tblLandUse	LotAcreage	64.61	50.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	14.00	0.00
tblVehicleTrips	ST_TR	9.91	9.54

tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	9.52	9.44

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	1.4569	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	1.4569	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	1.4569	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	1.4569	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	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
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Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	AGENDA ITEM NO. 9.
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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-3-2019	9-2-2019	1.4190	1.4190
		Highest	1.4190	1.4190

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.7959	0.1524	1.5384	9.4000e-004		0.0191	0.0191		0.0191	0.0191	0.0000	159.1559	159.1559	5.3400e-003	2.8700e-003	160.1459
Energy	0.0281	0.2397	0.1020	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	784.8181	784.8181	0.0283	9.8300e-003	788.4552
Mobile	0.6373	2.3308	7.2418	0.0220	2.0404	0.0198	2.0602	0.5462	0.0185	0.5647	0.0000	2,019.5834	2,019.5834	0.1398	0.0000	2,023.0773
Waste						0.0000	0.0000		0.0000	0.0000	41.5807	0.0000	41.5807	2.4574	0.0000	103.0144
Water						0.0000	0.0000		0.0000	0.0000	4.1134	28.7322	32.8456	0.4238	0.0102	46.4931
Total	2.4613	2.7230	8.8822	0.0245	2.0404	0.0583	2.0986	0.5462	0.0570	0.6032	45.6941	2,992.2896	3,037.9836	3.0545	0.0229	3,121.1858

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6047	0.1523	1.5277	9.4000e-004		0.0190	0.0190		0.0190	0.0190	0.0000	159.1342	159.1342	5.3100e-003	2.8700e-003	160.1233

Energy	0.0281	0.2397	0.1020	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	296.1438	296.1438	6.1600e-003	5.2600e-003	
Mobile	0.6255	2.2372	6.8600	0.0206	1.8996	0.0186	1.9182	0.5085	0.0174	0.5259	0.0000	1,889.1476	1,889.1476	0.1336	0.0000	1,892.4876
Waste						0.0000	0.0000		0.0000	0.0000	10.3952	0.0000	10.3952	0.6143	0.0000	25.7536
Water						0.0000	0.0000		0.0000	0.0000	3.2907	24.1426	27.4333	0.3391	8.2100e-003	38.3559
Total	2.2583	2.6293	8.4898	0.0230	1.8996	0.0570	1.9566	0.5085	0.0558	0.5643	13.6859	2,368.5682	2,382.2541	1.0985	0.0163	2,414.5866

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	8.25	3.44	4.42	5.81	6.90	2.18	6.77	6.90	2.11	6.45	70.05	20.84	21.58	64.04	28.77	22.64

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/3/2019	8/16/2019	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 725,355; Residential Outdoor: 241,785; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors		6.00	78	0.48

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
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.4569					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.4569	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.4569					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.4569	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

- Improve Destination Accessibility
- 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	tons/yr										MT/yr					
Mitigated	0.6255	2.2372	6.8600	0.0206	1.8996	0.0186	1.9182	0.5085	0.0174	0.5259	0.0000	1,889.1476	1,889.1476	0.1336	0.0000	1,892.4876
Unmitigated	0.6373	2.3308	7.2418	0.0220	2.0404	0.0198	2.0602	0.5462	0.0185	0.5647	0.0000	2,019.5834	2,019.5834	0.1398	0.0000	2,023.0773

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	1,878.56	1,898.46	1701.45	5,437,764	5,062,558
Total	1,878.56	1,898.46	1,701.45	5,437,764	5,062,558

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.537300	0.200000	0.167100	0.054200	0.001400	0.000900	0.009000	0.020600	0.000000	0.004400	0.002600	0.000900	0.001600

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	18.4971	18.4971	8.4000e-004	1.7000e-004	18.5696
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	507.1713	507.1713	0.0229	4.7400e-003	509.1586
NaturalGas Mitigated	0.0281	0.2397	0.1020	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	277.6467	277.6467	5.3200e-003	5.0900e-003	279.2966
NaturalGas Unmitigated	0.0281	0.2397	0.1020	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	277.6467	277.6467	5.3200e-003	5.0900e-003	279.2966

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	5.2029e+06	0.0281	0.2397	0.1020	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	277.6467	277.6467	5.3200e-003	5.0900e-003	279.2966
Total		0.0281	0.2397	0.1020	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	277.6467	277.6467	5.3200e-003	5.0900e-003	279.2966

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Land Use	kBTU/yr	tons/yr										MT/yr				AGENDA ITEM NO. 9.	
Single Family Housing	5.2029e+06	0.0281	0.2397	0.1020	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	277.6467	277.6467	5.3200e-003	5.0900e-003	279.2966
Total		0.0281	0.2397	0.1020	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	277.6467	277.6467	5.3200e-003	5.0900e-003	279.2966

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.74339e+006	507.1713	0.0229	4.7400e-003	509.1586
Total		507.1713	0.0229	4.7400e-003	509.1586

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	63583.3	18.4971	8.4000e-004	1.7000e-004	18.5696
Total		18.4971	8.4000e-004	1.7000e-004	18.5696

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.6047	0.1523	1.5277	9.4000e-004		0.0190	0.0190		0.0190	0.0190	0.0000	159.1342	159.1342	5.3100e-003	2.8700e-003	160.1233
Unmitigated	1.7959	0.1524	1.5384	9.4000e-004		0.0191	0.0191		0.0191	0.0191	0.0000	159.1559	159.1559	5.3400e-003	2.8700e-003	160.1459

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3362					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Consumer Products	1.3990					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Hearth	0.0158	0.1353	0.0576	8.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	156.7423	156.7423	3.0000e-003	2.8700e-003	157.6738
Landscaping	0.0449	0.0171	1.4808	8.0000e-005		8.1600e-003	8.1600e-003		8.1600e-003	8.1600e-003	0.0000	2.4136	2.4136	2.3400e-003	0.0000	2.4721
Total	1.7959	0.1524	1.5384	9.4000e-004		0.0191	0.0191		0.0191	0.0191	0.0000	159.1559	159.1559	5.3400e-003	2.8700e-003	160.1459

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Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1457					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3990					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0158	0.1353	0.0576	8.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	156.7423	156.7423	3.0000e-003	2.8700e-003	157.6738
Landscaping	0.0442	0.0170	1.4701	8.0000e-005		8.1000e-003	8.1000e-003		8.1000e-003	8.1000e-003	0.0000	2.3919	2.3919	2.3100e-003	0.0000	2.4495
Total	1.6047	0.1523	1.5277	9.4000e-004		0.0190	0.0190		0.0190	0.0190	0.0000	159.1342	159.1342	5.3100e-003	2.8700e-003	160.1233

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
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Category	MT/yr			
	Mitigated	27.4333	0.3391	8.2100e-003
Unmitigated	32.8456	0.4238	0.0102	46.4931

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	12.9657 / 8.174	32.8456	0.4238	0.0102	46.4931
Total		32.8456	0.4238	0.0102	46.4931

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	10.3725 / 7.67538	27.4333	0.3391	8.2100e-003	38.3559
Total		27.4333	0.3391	8.2100e-003	38.3559

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	10.3952	0.6143	0.0000	25.7536
Unmitigated	41.5807	2.4574	0.0000	103.0144

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	204.84	41.5807	2.4574	0.0000	103.0144
Total		41.5807	2.4574	0.0000	103.0144

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	51.21	10.3952	0.6143	0.0000	25.7536
Total		10.3952	0.6143	0.0000	25.7536

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Granville - Tracts 6239 and 6264 2021 - Fresno County, Winter

Granville - Tracts 6239 and 6264 2021
Fresno County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	199.00	Dwelling Unit	50.00	358,200.00	569

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics - Renewable Portfolio Standard
- Land Use - Tract Maps
- Construction Phase - Operational only
- Off-road Equipment - operational only
- Trips and VMT - Operational only
- Architectural Coating - Rule 4601 Average Architectural Coating VOC Content
- Vehicle Trips - TIS, ITE Trip Generation Manual 10th Edition, Land Use 210
- Woodstoves - No woodburning devices
- Energy Use -

Mobile Land Use Mitigation -

Area Mitigation - Rule 4601 Average VOC content

Energy Mitigation - Assumed 5 kW solar systems for residences

Water Mitigation - Model Water Efficient Landscape Ordinance, Green Building Code

Waste Mitigation - 75 percent statewide diversion/recycling mandate

Fleet Mix - SJVAPCD Residential Fleet Mix

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	65.00
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	65
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	150	65
tblFireplaces	NumberGas	109.45	199.00
tblFireplaces	NumberNoFireplace	89.55	0.00
tblFleetMix	HHD	0.12	0.02
tblFleetMix	LDA	0.49	0.54
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.02	1.4000e-003
tblFleetMix	LHD2	4.7320e-003	9.0000e-004
tblFleetMix	MCY	5.1540e-003	2.6000e-003
tblFleetMix	MDV	0.12	0.05
tblFleetMix	MH	6.2900e-004	1.6000e-003
tblFleetMix	MHD	0.03	9.0000e-003
tblFleetMix	OBUS	2.3660e-003	0.00
tblFleetMix	SBUS	1.0970e-003	9.0000e-004
tblFleetMix	UBUS	1.5900e-003	4.4000e-003
tblLandUse	LotAcreage	64.61	50.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	14.00	0.00
tblVehicleTrips	ST_TR	9.91	9.54

tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	9.52	9.44

AGENDA ITEM NO. 9.

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	52.9773	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	52.9773	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	lb/day										lb/day					
2019	52.9773	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	52.9773	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	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
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Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	AGENDA ITEM NO. 9.
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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/day										lb/day					
Area	10.3925	3.4910	17.8581	0.0219		0.3576	0.3576		0.3576	0.3576	0.0000	4,243.6796	4,243.6796	0.1094	0.0773	4,269.4381
Energy	0.1537	1.3137	0.5590	8.3900e-003		0.1062	0.1062		0.1062	0.1062		1,677.0033	1,677.0033	0.0321	0.0308	1,686.9689
Mobile	3.2544	13.4505	41.0398	0.1195	11.7779	0.1119	11.8898	3.1461	0.1046	3.2507		12,095.4846	12,095.4846	0.8848		12,117.6040
Total	13.8006	18.2552	59.4569	0.1498	11.7779	0.5757	12.3536	3.1461	0.5684	3.7145	0.0000	18,016.1674	18,016.1674	1.0263	0.1080	18,074.0110

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/day										lb/day					
Area	9.3415	3.4898	17.7395	0.0219		0.3569	0.3569		0.3569	0.3569	0.0000	4,243.4133	4,243.4133	0.1090	0.0773	4,269.1616
Energy	0.1537	1.3137	0.5590	8.3900e-003		0.1062	0.1062		0.1062	0.1062		1,677.0033	1,677.0033	0.0321	0.0308	1,686.9689
Mobile	3.1894	12.8986	39.0215	0.1118	10.9652	0.1051	11.0703	2.9291	0.0983	3.0273		11,313.2985	11,313.2985	0.8474		11,334.4831
Total	12.6847	17.7020	57.3200	0.1421	10.9652	0.5682	11.5334	2.9291	0.5614	3.4904	0.0000	17,233.7151	17,233.7151	0.9885	0.1080	17,290.6136

	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
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Percent Reduction	8.09	3.03	3.59	5.16	6.90	1.30	6.64	6.90	1.24	6.03	0.00	4.34	4.34	3.68	0.0	AGENDA ITEM NO. 9.
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3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/3/2019	8/16/2019	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 725,355; Residential Outdoor: 241,785; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48

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
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2019

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/day										lb/day						
Archit. Coating	52.9773					0.0000	0.0000			0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000			0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	52.9773	0.0000	0.0000	0.0000		0.0000	0.0000			0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

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	lb/day										lb/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
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
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

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/day										lb/day						
Archit. Coating	52.9773					0.0000	0.0000			0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Total	52.9773	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		AGENDA ITEM NO. 9.
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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	lb/day										lb/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
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
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Destination Accessibility

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/day										lb/day					
Mitigated	3.1894	12.8986	39.0215	0.1118	10.9652	0.1051	11.0703	2.9291	0.0983	3.0273		11,313.2985	11,313.2985	0.8474		11,334.4831

Unmitigated	3.2544	13.4505	41.0398	0.1195	11.7779	0.1119	11.8898	3.1461	0.1046	3.2507		12,095.48	12,095.484	0.8848	
												46	6		

AGENDA ITEM NO. 9.

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	1,878.56	1,898.46	1701.45	5,437,764	5,062,558
Total	1,878.56	1,898.46	1,701.45	5,437,764	5,062,558

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.537300	0.200000	0.167100	0.054200	0.001400	0.000900	0.009000	0.020600	0.000000	0.004400	0.002600	0.000900	0.001600

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

Category	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
	lb/day										lb/day					

NaturalGas Mitigated	0.1537	1.3137	0.5590	8.3900e-003		0.1062	0.1062		0.1062	0.1062		1,677.0033	1,677.0033	0.0321	0.0308	AGENDA ITEM NO. 9.	
NaturalGas Unmitigated	0.1537	1.3137	0.5590	8.3900e-003		0.1062	0.1062		0.1062	0.1062		1,677.0033	1,677.0033	0.0321	0.0308		

5.2 Energy by Land Use - NaturalGas
Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	14254.5	0.1537	1.3137	0.5590	8.3900e-003		0.1062	0.1062		0.1062	0.1062		1,677.0033	1,677.0033	0.0321	0.0308	1,686.9689
Total		0.1537	1.3137	0.5590	8.3900e-003		0.1062	0.1062		0.1062	0.1062		1,677.0033	1,677.0033	0.0321	0.0308	1,686.9689

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	14.2545	0.1537	1.3137	0.5590	8.3900e-003		0.1062	0.1062		0.1062	0.1062		1,677.0033	1,677.0033	0.0321	0.0308	1,686.9689
Total		0.1537	1.3137	0.5590	8.3900e-003		0.1062	0.1062		0.1062	0.1062		1,677.0033	1,677.0033	0.0321	0.0308	1,686.9689

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use only Natural Gas Hearths

	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/day										lb/day					
Mitigated	9.3415	3.4898	17.7395	0.0219		0.3569	0.3569		0.3569	0.3569	0.0000	4,243.4133	4,243.4133	0.1090	0.0773	4,269.1616
Unmitigated	10.3925	3.4910	17.8581	0.0219		0.3576	0.3576		0.3576	0.3576	0.0000	4,243.6796	4,243.6796	0.1094	0.0773	4,269.4381

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	1.8422					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.6655					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.3863	3.3011	1.4047	0.0211		0.2669	0.2669		0.2669	0.2669	0.0000	4,214.1177	4,214.1177	0.0808	0.0773	4,239.1600

Landscaping	0.4985	0.1899	16.4534	8.7000e-004		0.0907	0.0907		0.0907	0.0907		29.5619	29.5619	0.0287				AGENDA ITEM NO. 9.
Total	10.3925	3.4910	17.8581	0.0219		0.3576	0.3576		0.3576	0.3576	0.0000	4,243.6796	4,243.6796	0.1094	0.0773	4,269.4381		

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/day										lb/day					
Architectural Coating	0.7983					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.6655					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.3863	3.3011	1.4047	0.0211		0.2669	0.2669		0.2669	0.2669	0.0000	4,214.1177	4,214.1177	0.0808	0.0773	4,239.1600
Landscaping	0.4915	0.1887	16.3348	8.6000e-004		0.0900	0.0900		0.0900	0.0900		29.2956	29.2956	0.0282		30.0016
Total	9.3415	3.4898	17.7395	0.0219		0.3569	0.3569		0.3569	0.3569	0.0000	4,243.4133	4,243.4133	0.1090	0.0773	4,269.1616

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Granville - Tracts 6239 and 6264 2021 - Fresno County, Summer

Granville - Tracts 6239 and 6264 2021
Fresno County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	199.00	Dwelling Unit	50.00	358,200.00	569

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics - Renewable Portfolio Standard
- Land Use - Tract Maps
- Construction Phase - Operational only
- Off-road Equipment - operational only
- Trips and VMT - Operational only
- Architectural Coating - Rule 4601 Average Architectural Coating VOC Content
- Vehicle Trips - TIS, ITE Trip Generation Manual 10th Edition, Land Use 210
- Woodstoves - No woodburning devices
- Energy Use -

Mobile Land Use Mitigation -

Area Mitigation - Rule 4601 Average VOC content

Energy Mitigation - Assumed 5 kW solar systems for residences

Water Mitigation - Model Water Efficient Landscape Ordinance, Green Building Code

Waste Mitigation - 75 percent statewide diversion/recycling mandate

Fleet Mix - SJVAPCD Residential Fleet Mix

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	65.00
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	65
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	150	65
tblFireplaces	NumberGas	109.45	199.00
tblFireplaces	NumberNoFireplace	89.55	0.00
tblFleetMix	HHD	0.12	0.02
tblFleetMix	LDA	0.49	0.54
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.02	1.4000e-003
tblFleetMix	LHD2	4.7320e-003	9.0000e-004
tblFleetMix	MCY	5.1540e-003	2.6000e-003
tblFleetMix	MDV	0.12	0.05
tblFleetMix	MH	6.2900e-004	1.6000e-003
tblFleetMix	MHD	0.03	9.0000e-003
tblFleetMix	OBUS	2.3660e-003	0.00
tblFleetMix	SBUS	1.0970e-003	9.0000e-004
tblFleetMix	UBUS	1.5900e-003	4.4000e-003
tblLandUse	LotAcreage	64.61	50.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	14.00	0.00
tblVehicleTrips	ST_TR	9.91	9.54

tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	9.52	9.44

AGENDA ITEM NO. 9.

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	52.9773	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	52.9773	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	lb/day										lb/day					
2019	52.9773	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	52.9773	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	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
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Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	AGENDA ITEM NO. 9.
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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/day										lb/day					
Area	10.3925	3.4910	17.8581	0.0219		0.3576	0.3576		0.3576	0.3576	0.0000	4,243.6796	4,243.6796	0.1094	0.0773	4,269.4381
Energy	0.1537	1.3137	0.5590	8.3900e-003		0.1062	0.1062		0.1062	0.1062		1,677.0033	1,677.0033	0.0321	0.0308	1,686.9689
Mobile	4.6368	12.7005	45.6368	0.1338	11.7779	0.1111	11.8890	3.1461	0.1038	3.2499		13,523.7092	13,523.7092	0.8755		13,545.5972
Total	15.1830	17.5052	64.0540	0.1641	11.7779	0.5749	12.3528	3.1461	0.5676	3.7137	0.0000	19,444.3920	19,444.3920	1.0171	0.1080	19,502.0043

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/day										lb/day					
Area	9.3415	3.4898	17.7395	0.0219		0.3569	0.3569		0.3569	0.3569	0.0000	4,243.4133	4,243.4133	0.1090	0.0773	4,269.1616
Energy	0.1537	1.3137	0.5590	8.3900e-003		0.1062	0.1062		0.1062	0.1062		1,677.0033	1,677.0033	0.0321	0.0308	1,686.9689
Mobile	4.5652	12.2042	43.0390	0.1251	10.9652	0.1043	11.0695	2.9291	0.0975	3.0265		12,647.9654	12,647.9654	0.8352		12,668.8442
Total	14.0605	17.0077	61.3376	0.1554	10.9652	0.5674	11.5326	2.9291	0.5606	3.4896	0.0000	18,568.3820	18,568.3820	0.9763	0.1080	18,624.9747

	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
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Percent Reduction	7.39	2.84	4.24	5.28	6.90	1.30	6.64	6.90	1.24	6.03	0.00	4.51	4.51	4.01	0.0	AGENDA ITEM NO. 9.
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3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/3/2019	8/16/2019	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 725,355; Residential Outdoor: 241,785; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48

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
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2019

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/day										lb/day					
Archit. Coating	52.9773					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	52.9773	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

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	lb/day										lb/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
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
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

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/day										lb/day					
Archit. Coating	52.9773					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Total	52.9773	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			AGENDA ITEM NO. 9.
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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	lb/day										lb/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
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
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Destination Accessibility

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/day										lb/day					
Mitigated	4.5652	12.2042	43.0390	0.1251	10.9652	0.1043	11.0695	2.9291	0.0975	3.0265		12,647.9654	12,647.9654	0.8352		12,668.8442

Unmitigated	4.6368	12.7005	45.6368	0.1338	11.7779	0.1111	11.8890	3.1461	0.1038	3.2499		13,523.70	13,523.709	0.8755	
												92	2		

AGENDA ITEM NO. 9.

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	1,878.56	1,898.46	1701.45	5,437,764	5,062,558
Total	1,878.56	1,898.46	1,701.45	5,437,764	5,062,558

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.537300	0.200000	0.167100	0.054200	0.001400	0.000900	0.009000	0.020600	0.000000	0.004400	0.002600	0.000900	0.001600

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

Category	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
	lb/day										lb/day					

NaturalGas Mitigated	0.1537	1.3137	0.5590	8.3900e-003		0.1062	0.1062		0.1062	0.1062		1,677.0033	1,677.0033	0.0321	0.0308	AGENDA ITEM NO. 9.	
NaturalGas Unmitigated	0.1537	1.3137	0.5590	8.3900e-003		0.1062	0.1062		0.1062	0.1062		1,677.0033	1,677.0033	0.0321	0.0308		

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	14254.5	0.1537	1.3137	0.5590	8.3900e-003		0.1062	0.1062		0.1062	0.1062		1,677.0033	1,677.0033	0.0321	0.0308	1,686.9689
Total		0.1537	1.3137	0.5590	8.3900e-003		0.1062	0.1062		0.1062	0.1062		1,677.0033	1,677.0033	0.0321	0.0308	1,686.9689

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	14.2545	0.1537	1.3137	0.5590	8.3900e-003		0.1062	0.1062		0.1062	0.1062		1,677.0033	1,677.0033	0.0321	0.0308	1,686.9689
Total		0.1537	1.3137	0.5590	8.3900e-003		0.1062	0.1062		0.1062	0.1062		1,677.0033	1,677.0033	0.0321	0.0308	1,686.9689

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use only Natural Gas Hearths

	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/day										lb/day					
Mitigated	9.3415	3.4898	17.7395	0.0219		0.3569	0.3569		0.3569	0.3569	0.0000	4,243.4133	4,243.4133	0.1090	0.0773	4,269.1616
Unmitigated	10.3925	3.4910	17.8581	0.0219		0.3576	0.3576		0.3576	0.3576	0.0000	4,243.6796	4,243.6796	0.1094	0.0773	4,269.4381

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	1.8422					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.6655					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.3863	3.3011	1.4047	0.0211		0.2669	0.2669		0.2669	0.2669	0.0000	4,214.1177	4,214.1177	0.0808	0.0773	4,239.1600

Landscaping	0.4985	0.1899	16.4534	8.7000e-004		0.0907	0.0907		0.0907	0.0907		29.5619	29.5619	0.0287				AGENDA ITEM NO. 9.
Total	10.3925	3.4910	17.8581	0.0219		0.3576	0.3576		0.3576	0.3576	0.0000	4,243.6796	4,243.6796	0.1094	0.0773	4,269.4381		

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/day										lb/day					
Architectural Coating	0.7983					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.6655					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.3863	3.3011	1.4047	0.0211		0.2669	0.2669		0.2669	0.2669	0.0000	4,214.1177	4,214.1177	0.0808	0.0773	4,239.1600
Landscaping	0.4915	0.1887	16.3348	8.6000e-004		0.0900	0.0900		0.0900	0.0900		29.2956	29.2956	0.0282		30.0016
Total	9.3415	3.4898	17.7395	0.0219		0.3569	0.3569		0.3569	0.3569	0.0000	4,243.4133	4,243.4133	0.1090	0.0773	4,269.1616

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Granville - Tracts 6239 and 6264 2020 - Fresno County, Annual

Granville - Tracts 6239 and 6264 2020
Fresno County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	199.00	Dwelling Unit	50.00	358,200.00	569

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	CH4 Intensity (lb/MWhr)	0.022	N2O Intensity (lb/MWhr)	0.005

1.3 User Entered Comments & Non-Default Data

- Project Characteristics - Renewable Portfolio Standard
- Land Use - Tract Maps
- Construction Phase - Operational only
- Off-road Equipment - operational only
- Trips and VMT - Operational only
- Architectural Coating - Rule 4601 Average Architectural Coating VOC Content
- Vehicle Trips - TIS, ITE Trip Generation Manual 10th Edition, Land Use 210
- Woodstoves - No woodburning devices
- Energy Use -

Mobile Land Use Mitigation -

Area Mitigation - Rule 4601 Average VOC content

Energy Mitigation - Assumed 5 kW solar systems for residences

Water Mitigation - Model Water Efficient Landscape Ordinance, Green Building Code

Waste Mitigation - 75 percent statewide diversion/recycling mandate

Fleet Mix - SJVAPCD Residential Fleet Mix

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	65.00
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	65
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	150	65
tblFireplaces	NumberGas	109.45	199.00
tblFireplaces	NumberNoFireplace	89.55	0.00
tblFleetMix	HHD	0.12	0.02
tblFleetMix	LDA	0.48	0.54
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.02	1.6000e-003
tblFleetMix	LHD2	4.9970e-003	9.0000e-004
tblFleetMix	MCY	5.2610e-003	2.6000e-003
tblFleetMix	MDV	0.13	0.05
tblFleetMix	MH	6.6700e-004	1.5000e-003
tblFleetMix	MHD	0.03	9.1000e-003
tblFleetMix	OBUS	2.3690e-003	0.00
tblFleetMix	SBUS	1.1150e-003	1.1000e-003
tblFleetMix	UBUS	1.6750e-003	4.4000e-003
tblLandUse	LotAcreage	64.61	50.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	290

tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	WorkerTripNumber	14.00	0.00
tblVehicleTrips	ST_TR	9.91	9.54
tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	159.1559	159.1559	5.3600e-003	2.8700e-003	160.1462
Energy											0.0000	506.9750	506.9750	0.0227	9.0400e-003	510.2381
Mobile											0.0000	2,081.2149	2,081.2149	0.1479	0.0000	2,084.9125
Waste											41.5807	0.0000	41.5807	2.4574	0.0000	103.0144
Water											4.1134	12.9919	17.1053	0.4235	0.0102	30.7316
Total											45.6941	2,760.3376	2,806.0317	3.0568	0.0221	2,889.0428

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Area												0.0000	159.1342	159.1342	5.3200e-003	2.8700e-003	
Energy												0.0000	286.0106	286.0106	5.9600e-003	5.2300e-003	287.7193
Mobile												0.0000	1,946.6979	1,946.6979	0.1413	0.0000	1,950.2313
Waste												10.3952	0.0000	10.3952	0.6143	0.0000	25.7536
Water												3.2907	10.9166	14.2073	0.3388	8.1700e-003	25.1121
Total												13.6859	2,402.7592	2,416.4451	1.1058	0.0163	2,448.9399

AGENDA ITEM NO. 9.

	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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.05	12.95	13.88	63.83	26.41	15.23

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/3/2019	8/16/2019	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 725,355; Residential Outdoor: 241,785; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48

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
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Destination Accessibility

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	1,946.6979	1,946.6979	0.1413	0.0000	1,950.2313
Unmitigated											0.0000	2,081.2149	2,081.2149	0.1479	0.0000	2,084.9125

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	1,878.56	1,898.46	1,701.45	5,437,764	5,062,558
Total	1,878.56	1,898.46	1,701.45	5,437,764	5,062,558

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.540200	0.197200	0.166800	0.054000	0.001600	0.000900	0.009100	0.020600	0.000000	0.004400	0.002600	0.001100	0.001500

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	tons/yr										MT/yr					
Electricity Mitigated											0.0000	8.3639	8.3639	6.3000e-004	1.4000e-004	8.4227
Electricity Unmitigated											0.0000	229.3283	229.3283	0.0174	3.9500e-003	230.9415
NaturalGas Mitigated											0.0000	277.6467	277.6467	5.3200e-003	5.0900e-003	279.2966
NaturalGas Unmitigated											0.0000	277.6467	277.6467	5.3200e-003	5.0900e-003	279.2966

5.2 Energy by Land Use - NaturalGas
Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	5.2029e+006											0.0000	277.6467	277.6467	5.3200e-003	5.0900e-003	279.2966
Total												0.0000	277.6467	277.6467	5.3200e-003	5.0900e-003	279.2966

Mitigated

	Natural Gas 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		
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	5.2029e+06											0.0000	277.6467	277.6467	5.3200e-003	5.0900e-003	279.2966
Total												0.0000	277.6467	277.6467	5.3200e-003	5.0900e-003	279.2966

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.74339e+06	229.3283	0.0174	3.9500e-003	230.9415
Total		229.3283	0.0174	3.9500e-003	230.9415

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	63583.3	8.3639	6.3000e-004	1.4000e-004	8.4227
Total		8.3639	6.3000e-004	1.4000e-004	8.4227

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	159.1342	159.1342	5.3200e-003	2.8700e-003	160.1236
Unmitigated											0.0000	159.1559	159.1559	5.3600e-003	2.8700e-003	160.1462

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					

Architectural Coating												0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products												0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth												0.0000	156.7423	156.7423	3.0000e-003	2.8700e-003	157.6738
Landscaping												0.0000	2.4136	2.4136	2.3500e-003	0.0000	2.4725
Total												0.0000	159.1559	159.1559	5.3500e-003	2.8700e-003	160.1462

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Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	156.7423	156.7423	3.0000e-003	2.8700e-003	157.6738
Landscaping											0.0000	2.3919	2.3919	2.3200e-003	0.0000	2.4499
Total											0.0000	159.1342	159.1342	5.3200e-003	2.8700e-003	160.1236

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	14.2073	0.3388	8.1700e-003	25.1121
Unmitigated	17.1053	0.4235	0.0102	30.7316

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	12.9657 / 8.174	17.1053	0.4235	0.0102	30.7316
Total		17.1053	0.4235	0.0102	30.7316

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	10.3725 / 7.67538	14.2073	0.3388	8.1700e-003	25.1121
Total		14.2073	0.3388	8.1700e-003	25.1121

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	10.3952	0.6143	0.0000	25.7536
Unmitigated	41.5807	2.4574	0.0000	103.0144

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	204.84	41.5807	2.4574	0.0000	103.0144
Total		41.5807	2.4574	0.0000	103.0144

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	51.21	10.3952	0.6143	0.0000	25.7536
Total		10.3952	0.6143	0.0000	25.7536

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Granville Trqcts 6239 and 6264 2030 - Fresno County, Annual

Granville Trqcts 6239 and 6264 2030
Fresno County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	199.00	Dwelling Unit	50.00	358,200.00	569

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	240.7	CH4 Intensity (lb/MWhr)	0.018	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics - Renewable Portfolio Standard
- Land Use - Tract Maps
- Construction Phase -
- Off-road Equipment - Operational Only
- Trips and VMT - Operational only
- Vehicle Trips - TIS, ITE Trip Generation 10th Edition, Land Use 210
- Woodstoves - No woodburning devices
- Area Coating -
- Energy Use -

Mobile Land Use Mitigation -

Area Mitigation - Rule 4601 Average VOC Content

Energy Mitigation - Assumed 5 kW solar system - annual kWh generated per system = 8441

Water Mitigation - Model Water Efficient Landscape Ordinance, Green Building Code

Waste Mitigation - 75 percent statewide recycling/diversion mandate

Fleet Mix - SJVAPCD Residential Fleet Mix

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	65
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	150	65
tblFireplaces	NumberGas	109.45	199.00
tblFireplaces	NumberNoFireplace	89.55	0.00
tblFleetMix	HHD	0.13	0.02
tblFleetMix	LDA	0.52	0.51
tblFleetMix	LDT1	0.03	0.22
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LHD1	9.7000e-003	8.0000e-004
tblFleetMix	LHD2	3.4040e-003	1.0000e-003
tblFleetMix	MCY	4.5630e-003	2.5000e-003
tblFleetMix	MDV	0.09	0.06
tblFleetMix	MH	4.3600e-004	3.0000e-003
tblFleetMix	MHD	0.03	7.4000e-003
tblFleetMix	OBUS	2.3060e-003	0.00
tblFleetMix	SBUS	9.9800e-004	1.2000e-003
tblFleetMix	UBUS	1.1850e-003	4.4000e-003
tblLandUse	LotAcreage	64.61	50.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	641.35	240.7

tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblVehicleTrips	ST_TR	9.91	9.54
tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

2.1 Overall Construction
Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2029	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2030	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2029	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2030	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	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	
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.7951	0.1523	1.5313	9.4000e-004		0.0191	0.0191		0.0191	0.0191	0.0000	159.1559	159.1559	5.3000e-003	2.8700e-003	160.1449
Energy	0.0281	0.2397	0.1020	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	467.9892	467.9892	0.0196	8.2500e-003	470.9376
Mobile	0.3442	1.2275	3.8672	0.0166	2.0395	0.0112	2.0507	0.5459	0.0104	0.5564	0.0000	1,534.7014	1,534.7014	0.0769	0.0000	1,536.6242
Waste						0.0000	0.0000		0.0000	0.0000	41.5807	0.0000	41.5807	2.4574	0.0000	103.0144
Water						0.0000	0.0000		0.0000	0.0000	4.1134	10.7833	14.8967	0.4233	0.0102	28.5052
Total	2.1673	1.6196	5.5005	0.0191	2.0395	0.0497	2.0892	0.5459	0.0489	0.5949	45.6941	2,172.6297	2,218.3238	2.9824	0.0213	2,299.2262

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.6039	0.1522	1.5207	9.4000e-004		0.0191	0.0191		0.0191	0.0191	0.0000	159.1342	159.1342	5.2700e-003	2.8700e-003	160.1223

Energy	0.0281	0.2397	0.1020	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	284.5887	284.5887	5.8400e-003	5.2100e-003	
Mobile	0.3379	1.1877	3.6556	0.0156	1.8987	0.0106	1.9093	0.5083	9.8000e-003	0.5181	0.0000	1,435.4646	1,435.4646	0.0735	0.0000	1,437.3009
Waste						0.0000	0.0000		0.0000	0.0000	10.3952	0.0000	10.3952	0.6143	0.0000	25.7536
Water						0.0000	0.0000		0.0000	0.0000	3.2907	9.0608	12.3515	0.3387	8.1300e-003	23.2413
Total	1.9699	1.5796	5.2783	0.0180	1.8987	0.0490	1.9477	0.5083	0.0483	0.5565	13.6859	1,888.2483	1,901.9342	1.0376	0.0162	1,932.7040

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	9.11	2.47	4.04	5.65	6.90	1.49	6.77	6.90	1.41	6.45	70.05	13.09	14.26	65.21	23.83	15.94

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	11/1/2029	1/9/2030	5	50	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

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	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.2 Demolition - 2030

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	
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	AGENDA ITEM NO. 9.
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Destination Accessibility

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	tons/yr										MT/yr					

Mitigated	0.3379	1.1877	3.6556	0.0156	1.8987	0.0106	1.9093	0.5083	9.8000e-003	0.5181	0.0000	1,435.4646	1,435.4646	0.0735	0.0000	
Unmitigated	0.3442	1.2275	3.8672	0.0166	2.0395	0.0112	2.0507	0.5459	0.0104	0.5564	0.0000	1,534.7014	1,534.7014	0.0769	0.0000	1,536.6242

AGENDA ITEM NO. 9.

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	1,878.56	1,898.46	1701.45	5,437,764	5,062,558
Total	1,878.56	1,898.46	1,701.45	5,437,764	5,062,558

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.511000	0.223100	0.169000	0.059300	0.000800	0.001000	0.007400	0.017300	0.000000	0.004400	0.002500	0.001200	0.003000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	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
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Category	tons/yr									MT/yr							
Electricity Mitigated						0.0000	0.0000			0.0000	0.0000	0.0000	6.9420	6.9420	5.2000e-004	1.2000e-004	6.9894
Electricity Unmitigated						0.0000	0.0000			0.0000	0.0000	0.0000	190.3425	190.3425	0.0142	3.1600e-003	191.6409
NaturalGas Mitigated	0.0281	0.2397	0.1020	1.5300e-003		0.0194	0.0194			0.0194	0.0194	0.0000	277.6467	277.6467	5.3200e-003	5.0900e-003	279.2966
NaturalGas Unmitigated	0.0281	0.2397	0.1020	1.5300e-003		0.0194	0.0194			0.0194	0.0194	0.0000	277.6467	277.6467	5.3200e-003	5.0900e-003	279.2966

5.2 Energy by Land Use - NaturalGas
Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	5.2029e+06	0.0281	0.2397	0.1020	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	277.6467	277.6467	5.3200e-003	5.0900e-003	279.2966
Total		0.0281	0.2397	0.1020	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	277.6467	277.6467	5.3200e-003	5.0900e-003	279.2966

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	5.2029e+06	0.0281	0.2397	0.1020	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	277.6467	277.6467	5.3200e-003	5.0900e-003	279.2966
Total		0.0281	0.2397	0.1020	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	277.6467	277.6467	5.3200e-003	5.0900e-003	279.2966

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.74339e+006	190.3425	0.0142	3.1600e-003	191.6409
Total		190.3425	0.0142	3.1600e-003	191.6409

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	63583.3	6.9420	5.2000e-004	1.2000e-004	6.9894
Total		6.9420	5.2000e-004	1.2000e-004	6.9894

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw

Use Low VOC Paint - Residential Interior
 Use Low VOC Paint - Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.6039	0.1522	1.5207	9.4000e-004		0.0191	0.0191		0.0191	0.0191	0.0000	159.1342	159.1342	5.2700e-003	2.8700e-003	160.1223
Unmitigated	1.7951	0.1523	1.5313	9.4000e-004		0.0191	0.0191		0.0191	0.0191	0.0000	159.1559	159.1559	5.3000e-003	2.8700e-003	160.1449

6.2 Area by SubCategory
Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3362					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3990					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0158	0.1353	0.0576	8.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	156.7423	156.7423	3.0000e-003	2.8700e-003	157.6738
Landscaping	0.0441	0.0170	1.4737	8.0000e-005		8.1900e-003	8.1900e-003		8.1900e-003	8.1900e-003	0.0000	2.4136	2.4136	2.3000e-003	0.0000	2.4711
Total	1.7951	0.1523	1.5313	9.4000e-004		0.0191	0.0191		0.0191	0.0191	0.0000	159.1559	159.1559	5.3000e-003	2.8700e-003	160.1449

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1457					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3990					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0158	0.1353	0.0576	8.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	156.7423	156.7423	3.0000e-003	2.8700e-003	157.6738
Landscaping	0.0435	0.0169	1.4631	8.0000e-005		8.1300e-003	8.1300e-003		8.1300e-003	8.1300e-003	0.0000	2.3919	2.3919	2.2700e-003	0.0000	2.4486
Total	1.6039	0.1522	1.5207	9.4000e-004		0.0191	0.0191		0.0191	0.0191	0.0000	159.1342	159.1342	5.2700e-003	2.8700e-003	160.1223

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	12.3515	0.3387	8.1300e-003	23.2413
Unmitigated	14.8967	0.4233	0.0102	28.5052

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	12.9657 / 8.174	14.8967	0.4233	0.0102	28.5052
Total		14.8967	0.4233	0.0102	28.5052

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	10.3725 / 7.67538	12.3515	0.3387	8.1300e-003	23.2413
Total		12.3515	0.3387	8.1300e-003	23.2413

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	10.3952	0.6143	0.0000	25.7536
Unmitigated	41.5807	2.4574	0.0000	103.0144

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	204.84	41.5807	2.4574	0.0000	103.0144
Total		41.5807	2.4574	0.0000	103.0144

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	51.21	10.3952	0.6143	0.0000	25.7536
Total		10.3952	0.6143	0.0000	25.7536

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

Granville Tracts 6239 and 6264 BAU - Fresno County, Annual

Granville Tracts 6239 and 6264 BAU
Fresno County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	199.00	Dwelling Unit	50.00	358,200.00	569

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2005
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Tract Map
- Construction Phase -
- Off-road Equipment - Operational only
- Trips and VMT - Operational only
- Vehicle Trips - TIS, ITE 10th Edition
- Fleet Mix - SJVAPCD Fleet mix for closest year 2013
- Woodstoves - No woodburning devices
- Energy Use -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	11/7/2008	11/7/2005
tblConstructionPhase	PhaseStartDate	8/23/2008	8/23/2005
tblEnergyUse	T24E	1,243.06	1,243.06
tblEnergyUse	T24NG	28,148.14	28,148.14
tblFireplaces	NumberGas	109.45	199.00
tblFireplaces	NumberNoFireplace	89.55	0.00
tblLandUse	LotAcreage	64.61	50.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	14.00	0.00
tblVehicleTrips	ST_TR	9.91	9.54
tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	9.52	9.44
tblWoodstoves	NumberCatalytic	50.00	0.00
tblWoodstoves	NumberNoncatalytic	50.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2005											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2005											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	159.1559	159.1559	6.8700e-003	2.8700e-003	160.1840
Energy											0.0000	822.6859	822.6859	0.0278	0.0110	826.6436
Mobile											0.0000	3,755.3190	3,755.3190	0.9634	0.0000	3,779.4032
Waste											41.5807	0.0000	41.5807	2.4574	0.0000	103.0144

Water												4.1134	28.7322	32.8456	0.4238	0.0102	AGENDA ITEM NO. 9.
Total												45.6941	4,765.8931	4,811.5871	3.8791	0.0241	

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	159.1559	159.1559	6.8700e-003	2.8700e-003	160.1840
Energy											0.0000	822.6859	822.6859	0.0278	0.0110	826.6436
Mobile											0.0000	3,527.9746	3,527.9746	0.9463	0.0000	3,551.6326
Waste											41.5807	0.0000	41.5807	2.4574	0.0000	103.0144
Water											4.1134	28.7322	32.8456	0.4238	0.0102	46.4931
Total											45.6941	4,538.5487	4,584.2427	3.8621	0.0241	4,687.9677

	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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.77	4.72	0.44	0.00	4.63

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	8/23/2005	11/7/2005	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 725,355; Residential Outdoor: 241,785; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48

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
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2005

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling												0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor												0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker												0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

AGENDA ITEM NO. 9.

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Destination Accessibility

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	tons/yr										MT/yr					
Mitigated											0.0000	3,527.9746	3,527.9746	0.9463	0.0000	3,551.6326
Unmitigated											0.0000	3,755.3190	3,755.3190	0.9634	0.0000	3,779.4032

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	1,878.56	1,898.46	1,701.45	5,437,764	5,062,558
Total	1,878.56	1,898.46	1,701.45	5,437,764	5,062,558

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.415876	0.061183	0.150996	0.176036	0.035163	0.006973	0.031964	0.109874	0.002099	0.001787	0.005269	0.001212	0.001569

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

Category	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
	tons/yr										MT/yr					
Electricity Mitigated											0.0000	459.9980	459.9980	0.0208	4.3000e-003	461.8004
Electricity Unmitigated											0.0000	459.9980	459.9980	0.0208	4.3000e-003	461.8004
NaturalGas Mitigated											0.0000	362.6879	362.6879	6.9500e-003	6.6500e-003	364.8432
NaturalGas Unmitigated											0.0000	362.6879	362.6879	6.9500e-003	6.6500e-003	364.8432

5.2 Energy by Land Use - NaturalGas

Unmitigated

NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
----------------	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

Land Use	kBTU/yr	tons/yr										MT/yr						
Single Family Housing	6.79652e+006												0.0000	362.6879	362.6879	6.9500e-003	6.6500e-003	364.8432
Total													0.0000	362.6879	362.6879	6.9500e-003	6.6500e-003	364.8432

AGENDA ITEM NO. 9.

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
Single Family Housing	6.79652e+006												0.0000	362.6879	362.6879	6.9500e-003	6.6500e-003	364.8432
Total													0.0000	362.6879	362.6879	6.9500e-003	6.6500e-003	364.8432

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.58123e+006	459.9980	0.0208	4.3000e-003	461.8004
Total		459.9980	0.0208	4.3000e-003	461.8004

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.58123e+006	459.9980	0.0208	4.3000e-003	461.8004
Total		459.9980	0.0208	4.3000e-003	461.8004

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	159.1559	159.1559	6.8700e-003	2.8700e-003	160.1840
Unmitigated											0.0000	159.1559	159.1559	6.8700e-003	2.8700e-003	160.1840

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	156.7423	156.7423	3.0000e-003	2.8700e-003	157.6738
Landscaping											0.0000	2.4136	2.4136	3.8700e-003	0.0000	2.5103
Total											0.0000	159.1559	159.1559	6.8700e-003	2.8700e-003	160.1840

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	156.7423	156.7423	3.0000e-003	2.8700e-003	157.6738
Landscaping											0.0000	2.4136	2.4136	3.8700e-003	0.0000	2.5103
Total											0.0000	159.1559	159.1559	6.8700e-003	2.8700e-003	160.1840

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	32.8456	0.4238	0.0102	46.4931
Unmitigated	32.8456	0.4238	0.0102	46.4931

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	12.9657 / 8.174	32.8456	0.4238	0.0102	46.4931
Total		32.8456	0.4238	0.0102	46.4931

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			

Single Family Housing	12.9657 / 8.174	32.8456	0.4238	0.0102	46.4931
Total		32.8456	0.4238	0.0102	46.4931

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	41.5807	2.4574	0.0000	103.0144
Unmitigated	41.5807	2.4574	0.0000	103.0144

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	204.84	41.5807	2.4574	0.0000	103.0144
Total		41.5807	2.4574	0.0000	103.0144

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	204.84	41.5807	2.4574	0.0000	103.0144
Total		41.5807	2.4574	0.0000	103.0144

9.0 Operational Offroad

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



Stantec Consulting Services Inc.
7502 North Colonial Avenue Suite 101 , Fresno CA 93711-5862

August 14, 2019
File: 185704562

Attention: Drew Phelps
1396 West Herndon Avenue, Suite 101
Fresno, CA 93711

Dear Mr. Phelps,

**Reference: Update to Air Quality and Greenhouse Gas Report
Tracts 6239 and 6264**

The Air Quality and Greenhouse Gas Impact Analysis Report prepared for Tracts 6239 and 6264 found that the proposed project would have less than significant impacts with respect to all Appendix G CEQA Guidelines Checklist Questions for air quality and greenhouse gases. The summary of analysis results is provided below:

SUMMARY OF ANALYSIS RESULTS

- Impact AIR-1:** The Project would not conflict with or obstruct implementation of the applicable air quality plan. **Less Than Significant Impact.**
- Impact AIR-2:** The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard. **Less Than Significant Impact.**
- Impact AIR-3:** The Project would not expose sensitive receptors to substantial pollutant concentrations. **Less Than Significant impact.**
- Impact AIR-4:** The Project would not result in other emissions (such as those leading to odors) affecting a substantial number of people. **Less Than Significant Impact.**
- Impact GHG-1:** The Project would not generate direct and indirect greenhouse gas emissions that would result in a significant impact on the environment. **Less Than Significant Impact.**
- Impact GHG-2:** The project would not conflict with any applicable plan, policy or regulation of an agency adopted to reduce the emissions of greenhouse gases. **Less Than Significant Impact.**

Since completion of the Air Quality and Greenhouse Gas Impact Analysis Report there has been a project modification that will add eight additional housing units (lots) to Tract 6239 totaling 2.39 acres. The increase to the project represents an approximately five percent increase. The air quality and greenhouse gas emissions would increase proportionally. As shown in Table 1, the proposed project's construction

Reference: Update to Air Quality and Greenhouse Gas Report Tracts 6239 and 6264

emissions would not exceed San Joaquin Valley Air Pollution Control District thresholds regardless of which phase the eight additional units are developed.

Table 1 Summary of Construction-Generated Emissions of Criteria Air Pollutants

Year	Emissions (Tons/Year)					
	ROG	NOx	CO	SOx	PM ₁₀	PM _{2.5}
2019 – Project East – Tract 6239	0.21	1.98	1.46	<0.01	0.34	0.21
Subtotal with additional 8 units	0.22	2.08	1.53	<0.01	0.36	0.22
2020 – Project East Tract 6239	1.33	5.59	5.32	<0.01	0.75	0.51
2020 – Project West – Tract 6264	0.36	2.113	1.9076	<0.01	0.20	0.16
Subtotal for 2020	1.69	7.70	7.23	0.01	0.95	0.67
Subtotal with additional 8 units	1.77	8.09	7.59	0.01	0.99	0.70
2021 – Project East Tract 6239	0.71	0.16	0.1927	<0.01	0.01	<0.01
2021 – Project West – Tract 6264	0.15	<0.01	.00947	<0.01	<0.01	<0.01
Subtotal for 2021	0.86	0.17	0.20217	<0.01	0.01	<0.01
Subtotal with additional 8 units	0.90	0.18	0.21	<0.01	0.011	<0.01
Significance Thresholds	10	10	100	27	15	15
Any Year Exceed Significance Thresholds?	No	No	No	No	No	No

Reference: Update to Air Quality and Greenhouse Gas Report Tracts 6239 and 6264

As shown in Table 2, operational emissions would not exceed the Air District’s significance threshold with the addition of eight additional units.

Table 2 Summary of Operational Emissions of Criteria Air Pollutants

Source	Emissions (tons/year)					
	ROG	NOx	CO	SOx	PM ₁₀	PM _{2.5}
Area	1.79	0.15	1.54	<0.01	0.02	0.02
Energy	0.03	0.24	0.10	<0.01	0.02	0.02
Mobile	0.64	2.33	7.24	0.02	2.06	0.56
2021 Total	2.46	2.72	8.88	0.02	2.09	0.60
Total with additional 8 units	2.58	2.86	9.32	0.021	2.19	0.63
Significance Thresholds	10	10	100	27	15	15
Exceed Significance Thresholds?	No	No	No	No	No	No

The addition of the eight additional units would not cause a localized impact as shown in Table 3 below.

Reference: Update to Air Quality and Greenhouse Gas Report Tracts 6239 and 6264

Table 3 Localized Concentrations of PM₁₀, PM_{2.5}, CO, and NO₂ for Construction and Operation

Source	Emissions (pounds per day)			
	NOx	CO	PM ₁₀	PM _{2.5}
2019 Construction ¹	58.24	52.38	20.60	12.17
Subtotal with additional 8 units	61.15	54.99	21.63	12.77
2020 – Project East Tract 6239 (Phase 1) ¹	53.09	51.53	3.55	3.15
2020 – Project East Tract 6239 (Phase 2) ¹	53.49	51.87	20.41	11.99
2020 – Project West – Tract 6264 ¹	42.47	28.58	20.41	11.99
Subtotal 2020	95.96	80.45	40.82	23.98
Subtotal with additional 8 units	100.76	84.47	42.86	25.18
2021 – Project East Tract 6239 ¹	12.96	15.03	0.80	0.66
2021 – Project West – Tract 6264 ¹	1.53	1.89	0.12	0.10
Subtotal 2021	14.49	16.92	0.92	0.76
Subtotal with additional 8 units	15.21	17.76	0.96	0.79
Operation ¹	18.26	59.46	12.35	3.71
Total with additional 8 units	19.17	62.43	12.96	3.89
Significance Thresholds	100	100	100	100
Exceed Significance Thresholds?	No	No	No	No
Notes: 1. Maximum daily construction and operational emissions reflect emissions reported for Winter as it has higher emissions than summer. Source: Stantec Consulting Services Inc., CalEEMod 2016.3.2				

Reference: Update to Air Quality and Greenhouse Gas Report Tracts 6239 and 6264

Construction greenhouse gas emissions would increase slightly as shown in Table 4 below.

Table 4 Summary of Construction-Generated Greenhouse Gas Emissions

Construction Activity	MTCO _{2e}
2019	212
2020	994
2021	29
Total	1,235
Total with additional 8 units	1,296
Amortized over 30 years¹	43
Notes:	
1. GHG emissions are amortized over the 30-year life of the proposed project	
Source: Stantec Consulting Services Inc., CalEEMod 2016.3.2	

As shown in Table 5 and Table 6, the proposed project would still achieve the required greenhouse gas reductions.

Table 5 2020 Project Operational Greenhouse Gases

Source	Emissions (MTCO _{2e} per year)	
	Business as Usual	2020 (with Regulation and Design Features)
Subtotal	4,688	2,449
Subtotal with additional 8 units	4,922	2,571
Amortized Construction Emissions	-	43
Total	4,922	2,614
Reduction		47%
Significance Threshold		29%
Are emissions significant?		No
Notes:		
MTCO _{2e} = metric tons of carbon dioxide equivalents		

August 14, 2019
 Drew Phelps
 Page 6 of 6

Reference: Update to Air Quality and Greenhouse Gas Report Tracts 6239 and 6264

Table 6 2030 Project Operational Greenhouse Gases

Source	Emissions (MTCO _{2e} per year)	
	Business as Usual	2030 (with Regulation and Design Features)
Subtotal	4,688	1,932
Subtotal with additional 8 units	4,922	2,029
Amortized Construction Emissions	-	43
Total	4,922	2,072
Reduction	57.9%	
Significance Threshold	29%	
Are emissions significant?	No	
Notes: MTCO _{2e} = metric tons of carbon dioxide equivalents		

In summary, the impact analysis results from the original Air Quality and Greenhouse Gas Report remain valid.

Regards,

Stantec Consulting Services Inc.

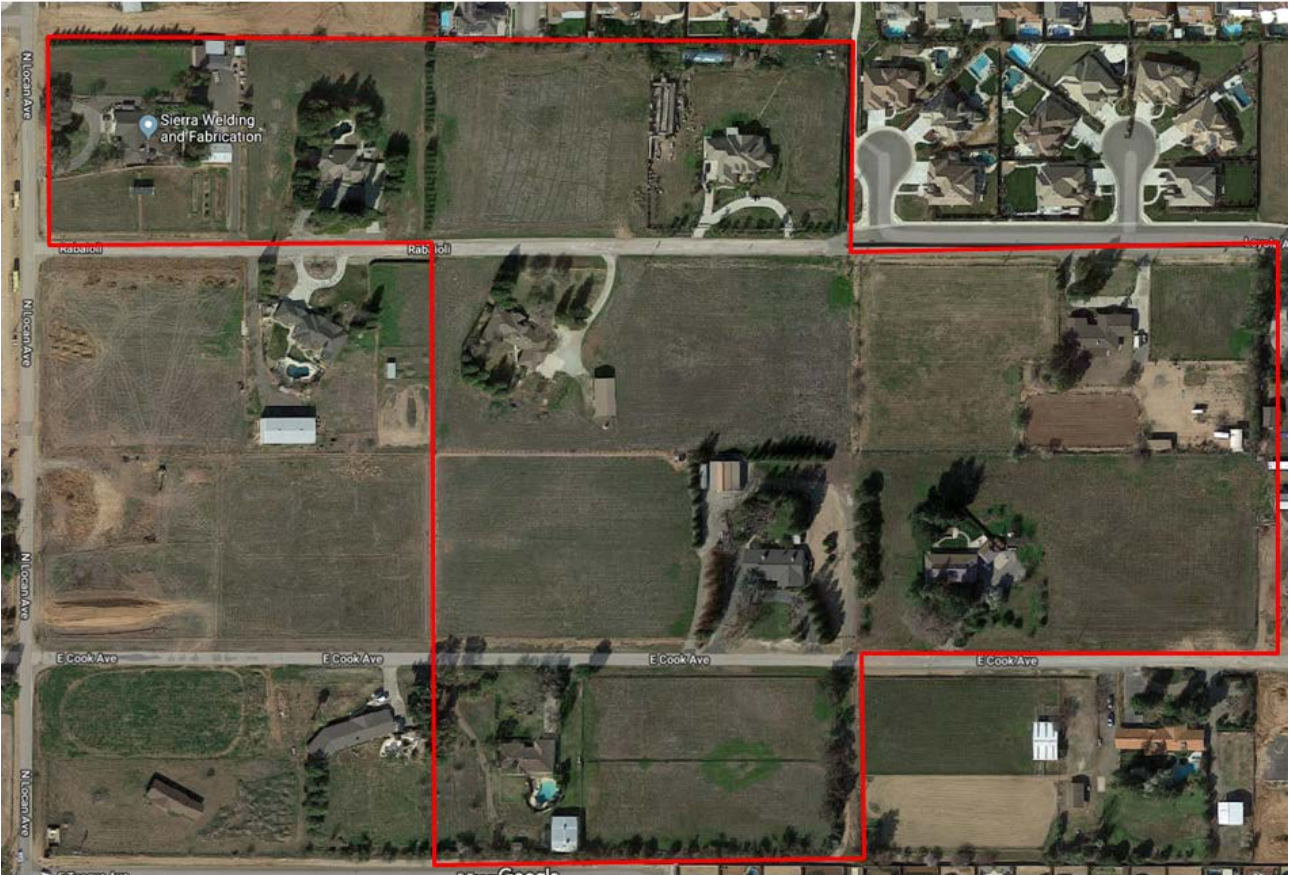


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BIOLOGICAL HABITAT ASSESSMENT

OF

Locan 35 Acres



BIOLOGICAL HABITAT ASSESSMENT

OF THE

Locan 35 Acres

Clovis, Fresno County,

California

Prepared For:

Granville Homes

Prepared By:



2377 Gold Meadow Way, Suite 100
Gold River, CA 95670

July, 2018

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Appendices

- Appendix A** Location Map and Photos
- Appendix B** CNDDDB Bios Report



Section 1

Introduction

1.1 EXECUTIVE SUMMARY

Argonaut Ecological, Inc. conducted a biological review of a 35 acre parcel located between North Locan Avenue and North De Wolf Avenue in Fresno County in the City of Clovis. This report presents the findings of a field review conducted to assess the biological resources present and potential biological impacts of site development. The results include a description of the habitat present and the likelihood for the site to support sensitive biological resources (waters, wetland, and special status species habitat) based on a literature review, database review, and a field review. Results of the field review are that the property has been in agricultural development for many years. The site does not support waters of the U.S. or wetland habitats. The site does support nesting habitat for burrowing owls although no presence of owls was observed. The project area may provide nesting habitat for raptors and migratory birds.

1.2 INTRODUCTION

Locan 35 Acres is made up of eight individual parcels that total approximately 34.48 acres. The properties are located in the City of Clovis.

The project area is located between of North Locan Avenue and North De Wolf Avenue in Fresno County, California. The project area has been developed as rural residential since at least 1998. The area to the north began to be developed into more urban housing in 2004. The following are the parcels included within the project area:

- Bracich – 558-020-19 – 2.48 acres
- Genco – 558-020-20 – 2.30 acres
- Her/Yang – 558-020-09 – 5 acres
- Stevens – 558-020-10 – 5 acres
- Nicholson – 558-290-06 – 5 acres
- Whitford – 558-020-11 & 12 – 5.15 acres
- White – 558-020-06 – 5 acres
- McKoane – 558-020-13 – 4.55 acres



1.3 STUDY OBJECTIVES

The purpose of this technical report is to present the findings of a biological habitat assessment conducted on the properties. This technical report is intended to provide an overall assessment of the biological resources potentially present, describe the biological characteristics of the area, and the likelihood of the area to support sensitive biological resources (such as wetlands or creeks/drainages). This review relied heavily on the review of available information, aerial photography review, and a field review to verify the aerial photography and determine the potential for the project area to support habitat that may be used or occupied by special status species. The study also is designed to determine the approximate extent of potential wetland habitat on the site. “Wetland habitat” includes those areas that may be considered both “Waters of the U.S., as defined by the U.S. Army Corps of Engineers, and/or wetlands as defined by the Army Corps and the State of California. As described in Section 1.2.1, wetlands are a subset of “Waters of the U.S.” under the Federal Clean Water Act.

This report can be used to assess the potential effects on biological resources if the current land use changes. The specific type of land use change would dictate the type of regulatory approvals or permits required. This review focused on the extent of the Waters of the U.S., including any wetlands that would potentially be subject to regulation under Section 404 of the Clean Water Act or by the State of California Wetland Policy (Resolution 2008-0026) which is designed to protect all waters of the State, including wetlands dredge and fill discharges. These reviews also focused on assessing and identifying any potential impacts site development may have on species protected by the Federal Endangered Species Act or protected under the California Environmental Quality Act.

1.3.1 Regulatory Jurisdiction and Background

Regulatory jurisdiction over biological resources within the project area is shared by several agencies. The following is a brief description of the primary agencies and their respective jurisdiction.

Wetland Protection

U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers (Army Corps) and the U.S. Environmental Protection Agency regulates placement of fill into the Waters of the U.S under Section 404 of the Federal Clean Water Act and Section 10 of the Rivers and Harbor Act. The term “Waters of the U.S.”

Include wetlands, special aquatic sites, and other non-wetland waters such as bays, rivers, and lakes. The jurisdictional limit of tidal Waters of the U.S. under Section 10 of the Rivers and Harbor Act is the Mean High-Water line. However, Section 404 of the Federal Clean Water Act



extends the jurisdictional limit to the High Tide line. The High Tide Line is the highest elevation of the tide in a normal year, excluding storm events. Wetlands adjacent to the Mean High-Water line or High Tide Line are also under the USACE jurisdiction. For purposes of this document, the term “Waters of the U.S.” is legally defined under Section 404 of the Federal Clean Water Act. It includes seasonal drainages that have a defined channel and support wetland species, but lack positive indicators of wetland soils.

As previously stated Waters of the U.S. includes wetlands. The Army Corps defines wetland as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (Environmental Laboratory 1987). Seasonally inundated areas that meet the criteria of all three wetland parameters as defined in the recently issued Wetland Delineation Manual for the Arid West (USACE 2006) are also considered jurisdictional wetlands. However, drainage ditches excavated on dry land that do not convey flows from historical streams and/or channels are usually considered non-jurisdictional as defined in Title 33 CFR Part 328.3 (a). A determination of whether any particular area is considered non-jurisdictional varies on a case-by-case basis.

Since 2001, the U.S. Supreme Court found in several court rulings that regulation of isolated intrastate waters by the Army Corps under the Migratory Bird Rule and other arguments is unconstitutional and impinges on state rights to regulate intrastate commerce. The decisions, which include both *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (SWANCC) and *Rapanos v. United States* (Rapanos) limited the scope of federal jurisdiction under the Federal Clean Water Act and excluded many California wetlands from federal regulation.

In May 2015 the U.S. Environmental Protection Agency and the U.S. Army finalized the “Clean Water Rule” “with the intent of clarifying what constitutes a waters of the U.S., and presumably, acts to more precisely define and making permitting more predictable, thus less costly and easier. The rule was not intended to create any new permitting requirements for agriculture and maintains all previous exemptions and exclusions. The new Clean Water Rule went in effect at the end of August, 2015. On October 9, 2015 the Sixth U.S. Circuit Court of Appeals issued a nationwide stay of the rule pending further court action. Therefore, currently, application of the Clean Water Rule is not enforced and the current regulatory definition of waters of the U.S. remains unchanged.

Executive Order 11990

Executive Order 11990 (signed May 24, 1977) directs all federal agencies to refrain from assisting in or giving financial support to projects that encroach on publicly or privately-owned wetlands. It further requires that federal agencies support a policy to minimize the destruction, loss, or degradation of wetlands. A federal project that encroaches on wetlands may not be undertaken unless the agency in question has determined that: (1) there are no practicable alternatives to such construction; (2) the project includes all practicable measures to minimize harm to wetlands that would be affected by the project; and (3) the resulting impact will be minor.



The Executive Order, does not apply to issuance by Federal Agencies of permits, licenses, or allocation to private parties for activities involving wetland on non-Federal property. Executive Order 1190 is also not intended to be applied on a project by project basis. Section 1 of the order states the following: “*This Order does not apply to the issuance by Federal agencies of permits, licenses, or allocations to private parties for activities involving wetlands on non-Federal property.*”

California State Water Resources Control Board

Since 1993, California has had a Wetlands Conservation Policy (a.k.a., the Executive Order W-51 59-93). Commonly referred to as the *No Net Loss Policy* for wetlands, this order establishes for the State the mandate that it develops and adopts a policy framework and strategy to protect the State’s wetland ecosystems.

The State Water Board’s Policy is only proposed and no new regulatory authority has been granted to the State of California to regulate wetlands other than what currently exists. The order is intended to bring a uniform regulatory approach between the State Water Resources Control Board, other agencies involved in aquatic resource protection, and the Federal Clean Water Act Section 404 program for dredge and fill discharges by establishing procedures and criteria for the application, review and approval of permits to discharge dredged or fill material to waters of the State.

Under the State’s 401 Water Quality Certification and Wetland Program, the state provides certification for any proposed fill of waters of the U.S. Although the State has not historically regulated fills of wetlands/waters of the state, they have boldly asserted they have the regulatory authority to regulate fills of isolated wetlands/waters under the Porter-Cologne Water Quality Control Act.

Under California's Porter-Cologne Water Quality Control Act (Porter-Cologne), the regional boards regulate the "discharge of waste" to "waters of the state". All parties proposing to discharge waste that could affect waters of the state must file a report of waste discharge with the appropriate regional board. The regional board will then respond to the report of waste discharge by issuing waste discharger requirements (WDRs) in a public hearing, or by waiting WDRs for the proposed discharge.

Both of the terms "discharge of waste" and "waters of the state" are broadly defined in Porter-Cologne, such that discharges of waste include fill, any material resulting from human activity, or any other "discharge" that may directly or indirectly impact "waters of the state". While all "waters of the United States" that are within the borders of California are also "waters of the state", the converse is not true - "waters of the United States" is a subset of "waters of the state." However, a recent court case has provided clarity with respect to the limit to the Regional Boards jurisdiction. The California Superior Court in December 2017 (*John D. Sweeney and Point Duck Club, LLC vs. San Francisco Bay Conservation and Development Commission and the San Francisco Regional Water Quality Control Board, FCS048136*). In that case the court found that “the California Water Code (Porter-Cologne) §13304 does not give the State the authority (in this case the California Regional Water Quality Control Board) to regulate discharges into areas



that are not “waters of the State” and found that “waters of the State” are not areas that are considered dry land (defined as an area that does not have perennial, ephemeral, or intermittent surface waters). The court ruling also made clear that vegetation removal from a waters is not “fill” or “discharge” that can be regulated by the State. At this time, it is unknown how this court ruling will, or will not, change how the Regional Boards proceed with respect to wetland regulation.

It is important to note that, while Section 404 permits and 401 certifications are required when the activity results in fill or discharge directly below the ordinary high water line of waters of the United States, any activity that results or may result in a discharge that directly or indirectly impacts waters of the state or the beneficial uses of those waters are subject to waste discharge requirements (WDRs). In practice, most regional boards rely on applications for 401 certification to determine whether WDRs need also be issued for a proposed project.

Listed Protected Species and Habitat Protection

U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service (USFWS) implements the Migratory Bird Treaty Act (16 USC Section 703-711), Bald and Golden Eagle Protection Act (16 United States Code [USC] Section 668), and Federal Endangered Species Act (FESA; 16 USC § 153 *et seq.*). Projects that would result in “take” of any federally-listed threatened or endangered species are required to obtain authorization from the USFWS through either Section 7 (interagency consultation) or Section 10(a) (incidental take permit) of FESA, depending on whether the federal government is involved in permitting or funding the project. The authorization process is used to determine if a project would jeopardize the continued existence of a listed species and what mitigation measures would be required to avoid jeopardizing the species.

“Take” under the federal definition means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. “Candidate species” do not have the full protection of FESA. However, the USFWS advises project applicants that it is prudent to address these species since they could be elevated to “listed status” prior to completion of projects with long planning or development schedules.

The **Migratory Bird Treaty Act (MBTA)** was first enacted in 1916 in order to implement the convention for protection of migratory birds between the United States and Great Britain (acting on behalf of Canada). The MBTA makes it illegal for anyone to take, possess, import, transport, purchase, barter or offer for sale or purchase any migratory birds, its nests or eggs unless a permit has been issued by the federal agency. The USFWS has statutory authority and responsibility for enforcing the MBTA. In accordance with the MBTA Reform Act (MBTARA) of 2004 all species native to the U.S. or its territories which occur as a result of natural biological or ecological processes (70 FR 12710, March 15, 2005) and does not include nonnative species whose occurrences in the US are solely the result of intentional or unintentional human introduction. The USFWS maintains a list of bird species protected under the MCTA and the MBTRA. However, on December 22, 2017 the Deputy Solicitor General issued an opinion



(Order 3345) that the MBTA does not prohibit “incidental take” of a migratory bird as the result of an otherwise lawful activity.

California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW), formally known as the California Department of Fish and Game, is a Trustee Agency with responsibility under the CEQA for commenting on projects that could impact plant and wildlife resources. In addition, pursuant to the Fish and Game Code Section 1802, the CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of those species. The California Fish and Game Code also provide authority for the CDFW to regulate projects that could result in the “take” of any species listed by the State as threatened or endangered (Section 2081).

Perennial and intermittent streams also fall under the jurisdiction of CDFW pursuant to Sections 1601-1603 of the Fish and Game Code (Streambed Alteration Agreements). The CDFW’s jurisdiction over work within the stream zone includes, but is not limited to, the diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream or lake. Prior to issuing a 1601 or 1603 Streambed Alteration Agreement, the CDFW must demonstrate compliance with CEQA. In most cases, CDFW relies on the CEQA review performed by the local lead agency. However, in cases where no CEQA review was required for the project, CDFW would act as the lead agency under CEQA.

The CDFW also has authority for protection state-listed species issues Section 2081 Incidental Take Permit if a project has the potential to negatively affect state-protected plant or animal species or their habitats, either directly or indirectly. Protected species include those “listed” by the state as endangered or threatened. Besides listed species, there are other categories of species protection, including “fully protected” and California Species of Special Concern (CSC). Adverse impacts to species that have the “fully protected” designation is prohibited.

Under current California Fish & Game Code (FGC Section 3503) “it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird...” Birds of prey (falcons, hawks, owls, and eagles) get extra protection under the law (FGC Section 3503.5).

California Endangered Species Act

The California Endangered Species Act (CESA) provides protection for candidate plants and animal species as well as those listed as rare, threatened, or endangered by the California Department of Fish and Game (CDFG). This act prohibits the take of any such species unless authorized. Section 2081 authorizes the state to issue incidental take permits. The state definition of take applies only to acts that result in the death of or adverse impacts to protected species.

California Environmental Quality Act

The CEQA Guidelines require review of projects to determine their environmental effects and to identify mitigation for significant effects. The Guidelines state an effect may be significant if it affects rare and endangered species. Section 15380 of the Guidelines defines *rare* to include



listed species, and allows agencies to consider rare species other than those designated as State or Federal threatened or endangered, but that meet the standards for rare under the Federal or State endangered species acts. On this basis, plants designated as rare by non-regulatory organizations (e.g., California Native Plant Society), species of special concern as defined by CDFW, candidate species as defined by USFWS and other designations may need to be considered in CEQA analyses.

City of Clovis

The project area falls within the City of Clovis, California. The City is responsible for all local land use decisions within its jurisdictional boundary.



Section 2

Methods

The following section describes the methods used to assess the project area, which includes a combination of data review and evaluation, field studies, and aerial photograph interpretations.

2.1 DATA AND LITERATURE REVIEW

The approximately 34.8 acre project area is located in a historically rural residential (including some agricultural, livestock grazing, and equestrian) in Clovis, California. The following documents and/or sources were used in preparing this report.

- U.S. Department of Agricultural, Natural Resources Conservation Service, Soil Survey of Fresno Area (Soils mapper).
- Aerial photography (Google Earth®, Bing®, and historic aerials dating back to 1983).
- The California Department of Fish and Game, California Natural Diversity Database (CNDDDB/RareFind - Recent version with updates).
- U.S. Fish and Wildlife Service National Wetland Inventory Map
- U.S. Fish and Wildlife Service Information for Planning and Conservation (IPaC)
- U.S. Geologic Survey, Historic topographic Map, Clovis Quadrangle, 1919, University of Texas, Austin, Perry-Castañeda Map Collection
- Previous experience with biological studies, CEQA reviews, and wetland delineation work on lands adjacent to the Project area.

2.1.1 Aerial Photography and Wetland Mapping

A series of aerial photographs of the project area were reviewed to assess changes in land use over time, dating back to 1998. Specifically, black and white and color aerial photographs ranging in resolution from 0.5 meters to 1.0 meter. We also reviewed wetland mapping and the aerials to determine if the project area recently supported wetlands.

2.1.2 Field Reconnaissance

Prior to conducting a site review, we reviewed the California Natural Diversity Database/Rarefind (CNDDDB/Rarefind). The CNDDDB includes records of reported observations for special status plant and animal species. A search radius that included up to nine USGS quadrangles was employed. The results of the CNDDDB/RareFind were reviewed to identify which species would present the greatest likelihood of being present on the site based on the distance of the site from known records and the similarity in habitats between the project area and the habitats that the species required and/or preferred. Also prior to the field work, high resolution aerials photographs were reviewed to determine if there are any areas on the site that appear to support waters of the U.S., or other water features.



A field review was conducted on June 6, 2018. The field review included walking throughout the project area looking for evidence or any indication of sensitive habitats. Photographs were taken and are included in Appendix A.



Section 3

Results

The following section describes the physical (i.e., topography, drainage, and soils) and the biological resources present, or potentially present, within the project area. Section 3.1 describes the physical components (i.e., soils, hydrology, etc.) of the project area. The physical components strongly influence the types of plants and animals present. Section 3.2 is an overview of the resources and habitats present within the project area, including descriptions of the specific biological resources observed.

The information presented is not an exhaustive inventory of plants or animals present. Rather it is designed to provide sufficient information to identify what, if any, biological resources are present that may be considered unique, sensitive, or protected by current law and the potential impacts to those resources if the site is developed.

3.1 PHYSICAL RESOURCES AND ELEMENTS

3.1.1 Land Use and Habitat Types

Based on aerial photographs obtained from Google Earth, the site has been developed as rural agricultural since at least 1998. In 2004 the property to the north and northwest began to be developed into housing. Similar housing was developed in 2006 northeast and east of the property. More recently in 2017 housing has been developed south of the property. There is little change to the property itself between 1998 to present, remaining as rural agricultural habitat. Appendix A includes photographs taken of the site showing the habitat within the project site.

The properties within the project area are developed with rural residential homes and associated outbuildings. The properties include several large homes and expansive pastures, gardens, swimming pools, barns, and other out buildings. There is some active grazing land (primarily goats, horses, etc.). The area immediately surrounding the parcels is actively under construction with high-density residential and infrastructure construction (sewer, water, etc.).

The parcels within the project area are nearly the last remaining rural residential parcels within this immediate area. Although not shown on the aerial map, all the property fronting N. Locan have homes being built. The same is true of the property along De Wolf Avenue. Access to the rural residential parcels is through high density development. During the field review, we spoke with several owners of the parcels and they said the noise, dust, and traffic surrounding them as a result of the active construction and intense development makes it difficult to access their property or enjoy their rural lifestyle. For that reason, the owners within the project area have chosen to sell their property.

There are numerous large trees within the project area that could provide suitable nesting habitat for raptors. No active nests were observed but occupation of nests may occur during the nest breeding season. Along the northern portion of the project area, there are several mounds of dirt



that ground squirrel have occupied. The mounds are located on a vacant parcel. The presence of ground squirrels could also provide suitable nesting habitat for burrowing owls although no evidence of owl occupation was observed. According to several residence, there are red fox residing under a barn within the project area. The residence has contact the City and the City will relocate the fox. Since so much construction is occurring surrounding the project area, this is the last remaining habitat for urban wildlife.

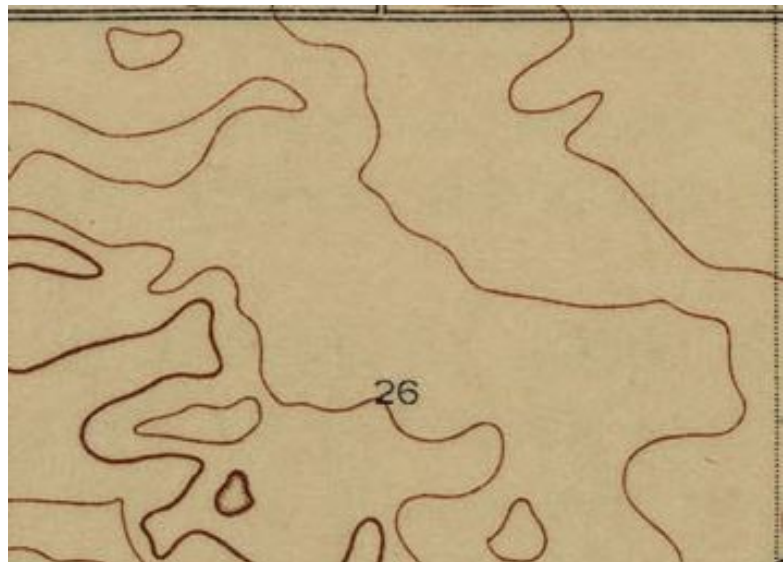
3.1.2 Site Topography

The property lies within the Central Valley and is fairly flat with very little change in elevation, remaining around 400-405 meters above sea level throughout the site.



USGS Topographic Map

The project area has historically not had any drainages on or near it. However, based on the increased elevation to the west the site likely historically drained to the east. The topographic map from 1921 (right) shows the general vicinity of the project area.



USGS Historical Topographic Map (1921)



A query of the National Wetland Inventory Map shows no wetlands, ponds, or rivers on the site. There is one pond southeast of the site. The National Wetland Inventory Map code is “PUBHx” which correlates to “palustrine, unconsolidated bottom, permanently flooded, excavated.”



**U.S. Fish and Wildlife Service
National Wetland Inventory Map**

3.1.3 Climate/Soils

Climate in the project area is typical of the central San Joaquin Valley with summers that are long, hot, and dry and winters that are cool and mild. Rainfall in the winter averages approximately 10.9 inches per year, falling mainly between November and April (Western Regional Climate Center, 2004).

The Natural Resources Conservation Service (NRCS) soil survey mapped four soil types within the project area. One soil type, alamo clay, is hydric. Hydric soil is readily formed under ponded condition and is a strong indicator of areas experiencing prolonged ponding (e.g., wetlands). The presence of mapped hydric soils may indicate that the soils could support wetlands; but, there is not a direct correlation. Wetlands can occur in areas where no hydric soil are mapped and may be absent in areas mapped as hydric soils. The following is a summary of the soil type present.



**Table 1
Project Area Soil Units**

Map Unit Symbol	Map Unit Name	Hydric		Approximate Acres in Area of Interest	Percent of Area of Interest
		Yes	No		
An	Alamo Clay	✓		1.9	5.4%
CzcB	Cometa-San Joaquin sandy loams, 3 to 9 percent slopes		✓	0.8	2.2%
SdA	San Joaquin sandy loam, shallow, 0 to 3 percent slopes		✓	1.9	5.4%
SgA	San Joaquin loam, shallow, 0 to 3 percent		✓	30.1	87.0%
Totals for Area of Interest				34.6	100.0%

3.2 RESULTS OF SITE INVESTIGATION

3.2.1 Habitats and Waters of the U.S. and Waters of the State

The entire project area is rural residential agricultural land with suburban housing surrounding. There are no Waters of the State or Waters of the U.S. on the site. There was one area located toward the south end of the project area that was investigated in detail because it appeared on the aerial as a potential wetland. However, upon inspection we determined the area is surrounding a leaking sprinkler head that created a patch of lush grass. This area is located within a livestock pasture and does not meet any criteria as a wetland.

3.2.2 Special Status Species

A search of the California Natural Diversity Database (CNDDDB) was reviewed to determine which special status species could be present within the project area (Appendix B). There is no critical habitat for any listed species within or near the project area. Table 2 provides a summary of the species identified in the CNDDDB and by the U.S. Fish and Wildlife Service that would have the highest likelihood of being present based on habitat requirements. Although the database did not include all migratory birds/ and raptors, such species could use the site to forage for food or nest the trees. The CNDDDB BIOS map shows the nearest records of listed species. The nearest records, the large California tiger salamander boundary and Greene's tuctoria (*Tuctoria greenei*), are roughly 1 mile away from the site. Other species records located near the site include the western pond turtle (*Emys marmorata*) and succulent owl's-clover (*Castilleja campestris var. succulenta*).

California Tiger Salamander

California tiger salamander (*Ambystoma californiense*) is both federally and state listed as endangered. CTS are endemic to California and the historical presence of it likely includes



grassland habitats that are found throughout the state. The primary cause for decline in populations has been habitat loss and fragmentation due to urban and agricultural development, land conversion, and other human-caused factors. California tiger salamander occupy different habitats depending on the state of their life cycle and breeding cycle. CTS require seasonal ponds that retain water until at least May or June in order to successfully breed and the young to mature. Once the aquatic larvae have matured, they relocate to the dry upland habitat to aestivate (oversummer) during the hot dry summers, seeking shelter in underground burrows. Once the winter rains return and suitable ponding has occurred, the adults return to the seasonal ponds to breed. During years of low rainfall the males may migrate into the seasonal ponds but the females may remain in their upland habitat. There appears to be a strong association between grazed communities, burrowing mammals, and the presence of CTS. Adults will find burrows dug by California ground squirrels (*Otospermophilus beecheyi*) and pocket gophers (*Thomomys bottaeto*) to aestivate (Barry and Shaffer 1994, Trenham 2001).

Typically CTS breed in seasonal wetlands, ponds (including some farm ponds) or in slow moving portions of creeks. The upland habitat they use is typically grassland or ruderal habitat that has friable soils and supports a burrowing rodent. CTS have been reported to travel up to 1.3 miles between breeding habitat and upland habitat.

There are two occurrences of CTS within a 1.3 mile radius of the study site. Occurrence #613 is a large boundary but is from 1974 and CTS is now considered extirpated from this area. Occurrence #888 is northwest of the site. At this location there were two CTS larvae observed there in February 2006. CTS is considered extant on this site.

The project area supports some ground burrowing mammals; however because of the marginal quality of habitat and distance from the closest CTS breeding habitat, it is highly unlikely this site provides suitable CTS aestivation habitat. The lands surrounding the site are dense residential and the amount of ongoing construction on the roadways and parcels surrounding would preclude CTS migration into the area. In addition, there are larger roadways within the 1.32 mile radius of the site that could cause significant barriers to CTS. Nonetheless CTS will readily cross roads and other barriers to reach their breeding ponds, which is a major cause for mortality in CTS (Barry and Shaffer 1994). However, the project area does not support any aquatic habitat that can support the CTS. Table 2 shows a summary of species found or potentially found in the site.



Table 2
Summary of Potential Special Status Species Impacts

<i>Common Name</i>	<i>Scientific Name</i>	<i>Status¹</i>	<i>Effects²</i>	<i>Occurrence in the Project Area³</i>
Birds				
Burrowing owl	<i>Athene cunicularia</i>	BCC	ME	Absent. No individuals observed in area of effect but possible habitat for burrows is present
Tricolored blackbird	<i>Agelaius tricolor</i>	CT	NE	Absent. No individuals in area of effect but suitable foraging habitat is present
Swainson's hawk	<i>Buteo swainsoni</i>	BCC	ME	Absent. No individuals in area of effect. No nests observed but suitable nesting habitat (large trees) present within project area.
Mammals				
Fresno kangaroo rat	<i>Dipodomys nitratooides</i>	CE, FE	NE	Absent. No individuals in area of effect
San Joaquin kit fox	<i>Vulpes macrotis mutica</i>	CT, FE	NE	Absent. No individuals in area of effect. No suitable habitat present to support species, no dens
Amphibians				
California tiger salamander	<i>Ambystoma californiense</i>	CE, FE	NE	Absent. No individuals in area of effect

1 Status= Listing of special status species, unless otherwise indicated

CE: California listed as Endangered

CT: California listed as Threatened

FE: Federally listed as Endangered

FT: Federally listed as Threatened

BCC: Bird of Conservation Concern in

USFWS = U.S. Fish and Wildlife Service

2 Effects = Effect determination

NE: No Effect

ME: May effect, not likely to adversely affect

3 Definition Of Occurrence Indicators

Present: Species recorded in area

Absent/Likely Absent: Species not recorded in project area and/or

CNDDDB = California Natural Diversity Database provided by CDFG

CNPS Categories for Plant Species:

1A - Presumed extinct in California

1B - Rare or endangered in California and elsewhere;





Figure. CNDDDB Bio Mapping Showing Record of Known Species

Swainson's hawk

Swainson's hawk (*Buteo swainsoni*) is state threatened and is a migrant species that spends much of the spring, summer, and early fall in California's Central Valley. Their foraging habitat consists of grasslands, plains, and farmland. They have been observed more frequently in recent years within the Central Valley. Due to the recent expansion of their population, it is possible that agricultural, grassland, and rural residential areas may support foraging and possibly nesting hawks.

Burrowing Owl

Burrowing owl (*Athene cunicularia*) is a species of concern in California. It is a small owl that lives in grassland habitats of the Central Valley region that also support California ground squirrels. The owl seeks shelter in the ground squirrel burrows from February to July. Although the numbers of owls have declined in some parts of California over the past 20 years, their numbers have increased greatly in some agricultural areas. In Fresno County, the species mostly occurs on the valley floor. The project site may provide suitable foraging and nesting habitat (within the area occupied by ground squirrels) for the species but there is no critical habitat in the site. Prior to any future ground disturbance associated with land conversion (from any existing use), habitat assessments and, if needed, pre-construction surveys for burrowing owl should be performed.



Other Migratory Nesting Birds

There are several species of migratory and resident nesting birds that could potentially use the project site for nesting area. The USFWS lists 11 migratory bird species in the area however the project site does not support the habitat needed by every species for breeding or wintering. The following selected species are representative of the variety of species identified in the CNDDDB and USFWS list.

The tricolored blackbird (*Agelaius tricolor*) was recently listed as state threatened. It uses marshy areas for breeding; however their foraging habitat includes open fields and farmland. The project area does provide this habitat.

3.3 CONCLUSION

Conclusions and Recommendations

The project area has been developed as rural residential since at least 1998 however the project area is surrounded by ongoing high density residential construction. The site does not support any wetland habitat or waters of the State or U.S. The potential for the property to support any species of concern is extremely low because of the lack of habitat diversity. However, the large trees present could provide suitable nesting habitat for raptors, and burrowing owls could take up residence within the project area given the presence of ground squirrels. No other species of special concern could occur within the project area.

A preconstruction survey for nesting migratory birds and birds should be conducted prior to tree removal, unless tree removal occurs outside the nesting period (i.e., tree removal should occur between Sept 1 – Feb 1). A preconstruction survey for burrowing owl should be conducted in the northern portion of the project area to confirm no burrowing owls have taken up residence for either overwintering or nesting in the spring/summer.



Section 4

References

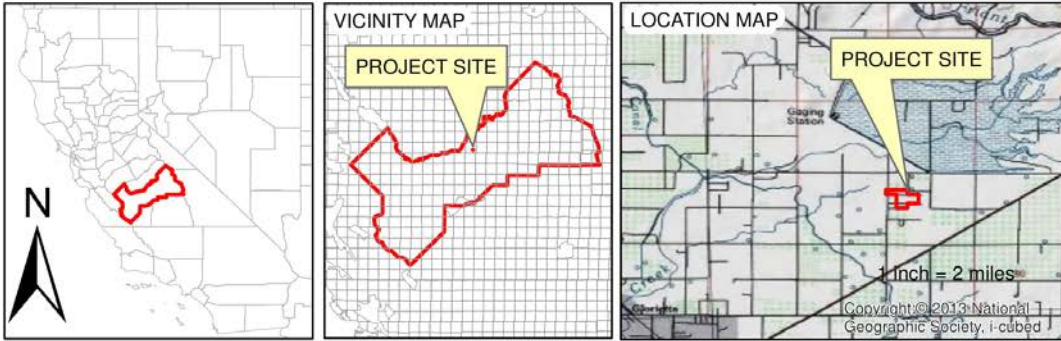
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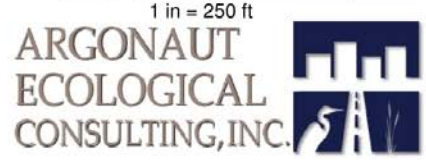
APPENDIX A Location Map and Photos

VICINITY AND LOCATION MAP

PROJECT NAME: Clovis Property Granville
PROJECT LOCATION: Section 26, T.12S., R.22E.,
Mount Diablo Base and Meridian, Fresno County California,



Legend
 Approximate boundary(+/-34.8AC.)



Date: 6/12/2018





Photograph 1

View of the property facing north



Photograph 2

View of the property facing west





Photograph 3

View of vegetation on the property facing northeast



Photograph 4

View of a fence line on property facing east



Photograph 5

View of a fence line and farmland facing south



Photograph 6

View of a fence line on the property facing east



Photograph 7

View of a fenced in area facing east



Photograph 8

View of a fence line facing northeast



Photograph 9

View of a fence line and outbuildings facing southwest



Photograph 10

View from a fenced in area facing northeast





Photograph 11

Ground squirrel burrow on the property



Photograph 12

Wider view of the ground squirrel burrow



Photograph 13

View of a metal and wooden fence line on the property



Photograph 14

View of an open grassy area along tree lines on the property



**Photograph
15**

View of an
outbuilding and
building
materials



**Photograph
16**

View from a
fenced in area



APPENDIX B CNDDDB BIOS REPORT





Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Query Criteria: Quad IS (Clovis (3611976))
 AND Taxonomic Group IS (Dune OR Scrub OR Herbaceous OR Marsh OR Riparian OR Woodland OR Forest OR Alpine OR Inland Waters OR Marine OR Estuarine OR Riverine OR Palustrine OR Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Crustaceans OR Insects OR Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes OR Fungi
 AND (Federal Listing Status IS (Endangered OR Threatened) OR State Listing Status IS (Endangered OR Threatened))

Ambystoma californiense		Element Code: AAAAA01180	
California tiger salamander			
Listing Status:	Federal: Threatened	CNDDB Element Ranks:	Global: G2G3
	State: Threatened		State: S2S3
	Other: CDFW_WL-Watch List, IUCN_VU-Vulnerable		
Habitat:	General: CENTRAL VALLEY DPS FEDERALLY LISTED AS THREATENED. SANTA BARBARA AND SONOMA COUNTIES DPS FEDERALLY LISTED AS ENDANGERED.		
	Micro: NEED UNDERGROUND REFUGES, ESPECIALLY GROUND SQUIRREL BURROWS, AND VERNAL POOLS OR OTHER SEASONAL WATER SOURCES FOR BREEDING.		

Occurrence No.	583	Map Index: 46277	EO Index: 46277	Element Last Seen:	1936-05-16
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	1936-05-16
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2002-08-20
Quad Summary:	Malaga (3611966), Fresno South (3611967), Clovis (3611976), Fresno North (3611977)				
County Summary:	Fresno				
Lat/Long:	36.77388 / -119.77951		Accuracy:	5 miles	
UTM:	Zone-11 N4073392 E251931		Elevation (ft):	300	
PLSS:	T13S, R20E, Sec. 27 (M)		Acres:	0.0	
Location:	FRESNO.				
Detailed Location:					
Ecological:					
General:	1879 RECORD FROM THE USNM (#11794), NO OTHER INFORMATION GIVEN. CORNELL UNIVERSITY MUSEUM OF VERTEBRATES #3017 (2 SPECIMENS) COLLECTED 16 MAY 1936 BY L.F. HADSELL. JENNINGS CONSIDERS THIS SITE EXTIRPATED.				
Owner/Manager:	UNKNOWN				



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Occurrence No.	613	Map Index: 46427	EO Index: 46427	Element Last Seen:	1974-05-03
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	1974-05-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2001-11-07
Quad Summary:	Clovis (3611976)				
County Summary:	Fresno				
Lat/Long:	36.85063 / -119.68563		Accuracy:	1 mile	
UTM:	Zone-11 N4081669 E260551		Elevation (ft):	380	
PLSS:	T12S, R21E, Sec. 33 (M)		Acres:	0.0	
Location:	WEST SIDE OF THE FRIANT-KERN CANAL, 1.5 MILES NORTHWEST OF HWY 168. NORTH OF CLOVIS.				
Detailed Location:					
Ecological:	VERNAL POOL.				
General:	OBSERVATION BY L.G. DUNN (DFG) DURING 1-3 MAY 1974 SURVEY. JENNINGS CONSIDERS THIS SITE EXTIRPATED.				
Owner/Manager:	UNKNOWN				
Occurrence No.	888	Map Index: 66458	EO Index: 66562	Element Last Seen:	2006-02-26
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2006-02-26
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2007-02-20
Quad Summary:	Clovis (3611976)				
County Summary:	Fresno				
Lat/Long:	36.87369 / -119.67091		Accuracy:	80 meters	
UTM:	Zone-11 N4084192 E261935		Elevation (ft):	400	
PLSS:	T12S, R21E, Sec. 22, NW (M)		Acres:	0.0	
Location:	NORTH SIDE OF A CONSTRUCTED FLOOD CONTROL CHANNEL, 0.25 MILE DOWNSTREAM OF BIG CREEK DAM, 3.5 MILES NE OF CLOVIS.				
Detailed Location:	THE SWALE THAT CONTAINED THE LARVAE WAS IMMEDIATELY ADJACENT TO A CHANNEL THAT FRESNO METROPOLITAN FLOOD CONTROL DISTRICT CONSTRUCTED AND USES TO RELEASE WATER DOWNSTREAM. SURROUNDING AREA CONTAINS SEASONAL WETLANDS AND VERNAL POOLS.				
Ecological:	HABITAT CONSISTS OF A SWALE CONTAINING ~3" OF WATER; SWALE APPEARS TO BE PART OF THE ORIGINAL CREEK MEANDER THAT WAS CUT OFF WHEN BIG CREEK DAM WAS CONSTRUCTED IN 1948. THE ADJACENT FLOOD CONTROL CHANNEL CONTAINS FISH AND BULLFROGS.				
General:	2 CTS LARVAE OBSERVED ON 26 FEB 2006.				
Owner/Manager:	UNKNOWN				



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<i>Buteo swainsoni</i>		Element Code: ABNKC19070	
Swainson's hawk			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G5
	State: Threatened		State: S3
	Other: BLM_S-Sensitive, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern		
Habitat:	General: BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.		
	Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.		

Occurrence No.	2583	Map Index:	46277	EO Index:	91594	Element Last Seen:	1956-05-04
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1956-05-04	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-09-26	

Quad Summary: Malaga (3611966), Fresno South (3611967), Clovis (3611976), Fresno North (3611977)
County Summary: Fresno

Lat/Long:	36.77388 / -119.77951	Accuracy:	5 miles
UTM:	Zone-11 N4073392 E251931	Elevation (ft):	300
PLSS:	T13S, R20E, Sec. 27 (M)	Acres:	0.0

Location: FRESNO.
Detailed Location: MAPPED GENERALLY TO GIVEN LOCALITY "NEAR FRESNO," EXACT DETECTION LOCATIONS UNKNOWN.
Ecological:
General: ACTIVE NEST(S) OBSERVED BY MINTURN ON 23 APR 1956 AND 4 MAY 1956, AS REPORTED IN BLOOM (1979).
Owner/Manager: UNKNOWN

<i>Coccyzus americanus occidentalis</i>		Element Code: ABNRB02022	
western yellow-billed cuckoo			
Listing Status:	Federal: Threatened	CNDDDB Element Ranks:	Global: G5T2T3
	State: Endangered		State: S1
	Other: BLM_S-Sensitive, NABCI_RWL-Red Watch List, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern		
Habitat:	General: RIPARIAN FOREST NESTER, ALONG THE BROAD, LOWER FLOOD-BOTTOMS OF LARGER RIVER SYSTEMS.		
	Micro: NESTS IN RIPARIAN JUNGLES OF WILLOW, OFTEN MIXED WITH COTTONWOODS, WITH LOWER STORY OF BLACKBERRY, NETTLES, OR WILD GRAPE.		

Occurrence No.	87	Map Index:	14944	EO Index:	25589	Element Last Seen:	1902-07-10
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		1902-07-10	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1989-08-10	

Quad Summary: Sanger (3611965), Malaga (3611966), Round Mountain (3611975), Clovis (3611976)
County Summary: Fresno

Lat/Long:	36.75271 / -119.63986	Accuracy:	1 mile
UTM:	Zone-11 N4070690 E264333	Elevation (ft):	345
PLSS:	T13S, R21E, Sec. 36, SW (M)	Acres:	0.0

Location: FANCHER CREEK, 6 MI NE OF FRESNO.
Detailed Location:
Ecological:
General: REPORTED AS UNCOMMON BUT NESTING BY TYLER (1913).
Owner/Manager: PVT



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<i>Vireo bellii pusillus</i>		Element Code: ABPBW01114	
least Bell's vireo			
Listing Status:	Federal: Endangered	CNDDB Element Ranks:	Global: G5T2
	State: Endangered		State: S2
	Other: IUCN_NT-Near Threatened, NABCI_YWL-Yellow Watch List		
Habitat:	General: SUMMER RESIDENT OF SOUTHERN CALIFORNIA IN LOW RIPARIAN IN VICINITY OF WATER OR IN DRY RIVER BOTTOMS; BELOW 2000 FT.		
	Micro: NESTS PLACED ALONG MARGINS OF BUSHES OR ON TWIGS PROJECTING INTO PATHWAYS, USUALLY WILLOW, BACCHARIS, MESQUITE.		

Occurrence No.	505	Map Index:	91510	EO Index:	92586	Element Last Seen:	1912-05-16
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:		1912-05-16	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-02-10	

Quad Summary: Clovis (3611976)
County Summary: Fresno

Lat/Long:	36.78960 / -119.69871	Accuracy:	1 mile
UTM:	Zone-11 N4074931 E259193	Elevation (ft):	345
PLSS:	T13S, R21E, Sec. 21 (M)	Acres:	0.0

Location: VICINITY OF TARPEY, SOUTH OF CLOVIS, NORTHEAST OF FRESNO.
Detailed Location: MAPPED GENERALLY TO TARPEY. PROVIDED LOCATION DESCRIPTION WAS "TARPEY, GOVED DITCH." GOVED DITCH MAY REFER TO GOULD CANAL, WHICH RUNS ALONG THE WESTERN AND NORTHERN EDGE OF TAPEY (1923 CLOVIS 7.5 MIN TOPO MAP).
Ecological: AREA IS HEAVELY DEVELOPED BASED ON AERIAL IMAGES FROM 1998-2013. GOULD CANAL STILL PRESENT BUT LACKS VEGETATION AND IS SURROUNDED BY RESIDENTIAL AND COMMERCIAL BUILDINGS.
General: EGG SET CONSISTING OF 4 EGGS COLLECTED (WFVZ #33084) BY J. TYLER ON 16 MAY 1912; INCUBATION CONSIDERED "WELL BEGUN." A BIRD WAS ALSO OBSERVED ON THE NEST.
Owner/Manager: UNKNOWN

Occurrence No.	506	Map Index:	91511	EO Index:	92587	Element Last Seen:	1906-05-25
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:		1906-05-25	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-02-10	

Quad Summary: Clovis (3611976)
County Summary: Fresno

Lat/Long:	36.82290 / -119.70690	Accuracy:	1 mile
UTM:	Zone-11 N4078646 E258567	Elevation (ft):	360
PLSS:	T13S, R21E, Sec. 08 (M)	Acres:	0.0

Location: CLOVIS, NORTHEAST OF FRESNO.
Detailed Location: PROVIDED LOCATION DESCRIPTION WAS "CLOVIS." MAPPED GENERALLY TO CLOVIS POST OFFICE. MAY HAVE COME FROM CLOVIS DITCH NEAR NORTH END OF TOWN WHICH APPEARS ON 1947 TOPO.
Ecological: NEST WAS CONSTRUCTED IN A WILLOW TREE. AREA IS HEAVELY DEVELOPED BASED ON AERIAL IMAGES FROM 1998-2013 AND IS SURROUNDED BY RESIDENTIAL AND COMMERCIAL BUILDINGS.
General: EGG SET CONSISTING OF 4 EGGS COLLECTED (WFVZ #33083) BY J. TYLER ON 25 MAY 1906; EGG INCUBATION CLASSIFIED AS BEING "FRESH." A VIREO WAS ALSO OBSERVED PERCHED NEAR NEST.
Owner/Manager: UNKNOWN



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Branchinecta lynchi		Element Code: ICBRA03030	
vernal pool fairy shrimp			
Listing Status:	Federal: Threatened	CNDDB Element Ranks:	Global: G3
	State: None		State: S3
	Other: IUCN_VU-Vulnerable		
Habitat:	General: ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MOUNTAINS, AND SOUTH COAST MOUNTAINS, IN ASTATIC RAIN-FILLED POOLS.		
	Micro: INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.		

Occurrence No.	148	Map Index:	33666	EO Index:	30639	Element Last Seen:	1993-03-12
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1993-03-12		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	1997-03-17		

Quad Summary: Round Mountain (3611975), Clovis (3611976)
County Summary: Fresno

Lat/Long: 36.81407 / -119.63591 **Accuracy:** 3/5 mile
UTM: Zone-11 N4077489 E264873 **Elevation (ft):** 385
PLSS: T13S, R21E, Sec. 12 (M) **Acres:** 0.0

Location: EAST OF DE WOLF AVE AND SOUTH OF BULLARD AVE, EAST OF CLOVIS.
Detailed Location: 1 FEATURE INSPECTED SOMEWHERE IN SECTION 12. BRANCHINECTA LYNCHI OBSERVED. NO LEPIDURUS PACKARDI OBSERVED.
Ecological: NATURAL VERNAL POOL.
General: SUGNET RECORD NUMBER 98.
Owner/Manager: UNKNOWN

Occurrence No.	404	Map Index:	64752	EO Index:	64831	Element Last Seen:	2006-02-03
Occ. Rank:	Poor	Presence:	Presumed Extant	Site Last Seen:	2006-02-03		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2015-01-07		

Quad Summary: Clovis (3611976)
County Summary: Fresno

Lat/Long: 36.83107 / -119.63998 **Accuracy:** 1/10 mile
UTM: Zone-11 N4079385 E264562 **Elevation (ft):** 395
PLSS: T13S, R21E, Sec. 01, NW (M) **Acres:** 0.0

Location: EAST SIDE OF ENTERPRISE CANAL, 0.3 MILE EAST OF DE WOLF AVENUE AND 0.4 MILE SOUTH OF HERNDON AVENUE, ENE OF CLOVIS.
Detailed Location: COORDINATES GIVEN FOR SPECIMEN COLLECTED IN 2003 AND LOCATION PROVIDED ON 2006 FIELD SURVEY FORM FALL WITHIN RESIDENTIAL LOT; THOUGH LOCATION DESCRIPTIONS INDICATE THE DETECTIONS WERE TO THE WEST, WITHIN THE CANAL EASEMENT.
Ecological: 2006: 2X10 FOOT (1-2 INCH DEPTH) PUDDLE; LIKELY A REMNANT OF VERNAL POOLS THAT ONCE WERE FOUND AT THIS SITE; PUDDLE CONTAINED A MUD SUBSTRATE AND WAS SLIGHTLY MURKY.
General: 3 COLLECTED ON 3 FEB 2003. 3 ADULTS OBSERVED ON 3 FEB 2006.
Owner/Manager: PVT, FRESNO FLOOD CONTROL DIST



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California Natural Diversity Database



<i>Caulanthus californicus</i>		Element Code: PDBRA31010	
California jewelflower			
Listing Status:	Federal: Endangered	CNDDB Element Ranks:	Global: G1
	State: Endangered		State: S1
	Other: Rare Plant Rank - 1B.1		
Habitat:	General: CHENOPOD SCRUB, VALLEY AND FOOTHILL GRASSLAND, PINYON AND JUNIPER WOODLAND.		
	Micro: SANDY SOILS. 65-1860 M.		

Occurrence No.	38	Map Index:	46277	EO Index:	63230	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		Record Last Updated:	2016-04-18
Occ. Type:	Natural/Native occurrence		Trend:	Unknown			

Quad Summary: Malaga (3611966), Fresno South (3611967), Clovis (3611976), Fresno North (3611977)
County Summary: Fresno

Lat/Long:	36.77388 / -119.77951	Accuracy:	5 miles
UTM:	Zone-11 N4073392 E251931	Elevation (ft):	
PLSS:	T13S, R20E, Sec. 27 (M)	Acres:	0.0

Location: FRESNO.
Detailed Location: EXACT LOCATION UNKNOWN, MAPPED IN THE GENERAL VICINITY OF FRESNO.
Ecological:
General: SITE IS BASED ON AN UNDATED DAVIDSON COLLECTION, POSSIBLY MADE IN THE LATE 1890'S OR EARLY 1900'S. NO HABITAT REMAINS IN VICINITY OF FRESNO ACCORDING TO TAYLOR (1986).
Owner/Manager: UNKNOWN



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California Natural Diversity Database



<i>Tuctoria greenei</i>		Element Code: PMPOA6N010	
Greene's tuctoria			
Listing Status:	Federal: Endangered	CNDDDB Element Ranks:	Global: G1
	State: Rare		State: S1
	Other: Rare Plant Rank - 1B.1		
Habitat:	General: VERNAL POOLS.		
	Micro: VERNAL POOLS IN OPEN GRASSLANDS. 25-1325 M.		

Occurrence No.	22	Map Index:	14941	EO Index:	22344	Element Last Seen:	1937-05-27
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		1987-06-01	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1995-07-19	

Quad Summary: Clovis (3611976)
County Summary: Fresno

Lat/Long:	36.85300 / -119.64264	Accuracy:	1/5 mile
UTM:	Zone-11 N4081825 E264392	Elevation (ft):	405
PLSS:	T12S, R21E, Sec. 26, SE (M)	Acres:	0.0

Location: 5 MILES NORTHEAST OF CLOVIS.
Detailed Location: EXACT LOCATION UNKNOWN, MAPPED IN THE VICINITY OF TOLLHOUSE ROAD AND NEES AVENUE.
Ecological:
General: SITE KNOWN FROM 1937 COLLECTION BY HOOVER. AREA SEARCHED IN 1981 AND 1987 BUT NO PLANTS SEEN. ACC TO BIOSYSTEMS ANALYSIS, 1988, NO VERNAL POOL HABITAT REMAINS IN THIS AREA; HABITAT ELIMINATED, SITE EXTIRPATED.
Owner/Manager: PVT

x

TECHNICAL MEMORANDUM

DATE: August 14, 2019
TO: Mr. Drew Phelps, Granville Homes

SUBJECT: ADDENDUM TO THE BIOLOGICAL HABITAT ASSESSMENT OF THE LOCAN 35 ACRES STUDY LOCATED EAST OF N. LOCAN ACENUE NEAR COOK ROAD, CITY OF FRESNO, CALIFORNIA

This technical memorandum is an addendum to a previously prepared Biological Habitat Assessment prepared by Argonaut Ecological Consulting, Inc., for the subject project. Since preparation of our report, dated July 2019, Granville Homs has added an additional 2.39 acre parcel to the Study Area as shown in Figure 1.



Figure 1 - June 2019 Study Area and Additional 2.39 Parcel

The objective of this technical study is as follows:

- Evaluate and additional study area (see figure below) and determine if the 2.39 acre parcel to be added to the study area has any biological resources of concern or if inclusion of the 2.39 acre parcel would change the previously made biological findings in our July 2019 Biological Habitat Assessment.

Numerous sources of information were used for this evaluation. In general resources included: available resources data bases (state and federal), National Wetland Inventory Map, aerial photography, a previous site review of the adjacent parcels, historic topographic maps, and the California Natural Diversity Database.

The findings of our July 2019 Biological Habitat Assessment were as follows:

“The project area has been developed as rural residential since at least 1998 however the project area is surrounded by ongoing high density residential construction. The site does not support any wetland habitat or waters of the State or U.S. The potential for the property to support any species of concern is extremely low because of the lack of habitat diversity. However, the large trees present could provide suitable nesting habitat for raptors, and burrowing owls could take up residence within the project area given the presence of ground squirrels. No other species of special concern could occur within the project area.

A preconstruction survey for nesting migratory birds and birds should be conducted prior to tree removal, unless tree removal occurs outside the nesting period (i.e., tree removal should occur between Sept 1 – Feb 1). A preconstruction survey for burrowing owl should be conducted in the northern portion of the project area to confirm no burrowing owls have taken up residence for either overwintering or nesting in the spring/summer.”

Conclusions and Recommendations:

Based on our review of the additional 2.39 acre parcel, the findings of the previously Biological Habitat Study remains the same and no new environmental issues were found. The Study Area supports identical habitat as the remainder of the larger study area and the site does not support any sensitive habitat (wetlands, waters) or known habitat for special status species.



Kathy R. Kinsland, Sr. Scientist

BIOLOGICAL EVALUATION
OF THE
MARTIN PROPERTY
FRESNO, CALIFORNIA
APN: 559 051 014



October 24, 2016

BIOLOGICAL EVALUATION

OF THE

MARTIN PROPERTY

FRESNO, CALIFORNIA

APN: 559 051 014

Prepared For:

Valley Coastal Development, LLC.

Prepared By:



2377 Gold Meadow Way, Suite 100
Gold River, CA 95670

October 24, 2016

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SECTION 1

INTRODUCTION

Argonaut Ecological, Inc. conducted a biological review of the Martin Property, APN 559 051 014, located in Part of Section 7, T. 12S., R.14E., Mount Diablo Base and Meridian. The property is located northeast of Clovis, California between Shepherd Avenue on the North and N. Locan Avenue on the East. The parcel totals approximately 4.9 acres (See Figure 1). This report presents the findings of a field review conducted to assess the biological resources present and potential biological impacts of site development.

1.1 STUDY OBJECTIVES

This review identifies biological resources within the Study Area and describes the suitability of the Study Area to support species of special concern. This review does not, nor was it designed to include exhaustive surveys for special status plant and animal species. Instead the review included a field survey designed to determine the potential for the site to support habitat that may be used or occupied by special status plant and animals species. The study also is designed to determine the approximate extent of potential wetland habitat on the site. “Wetland habitat” includes those areas that may be considered both “Waters of the U.S., as defined by the U.S. Army Corps of Engineers, and/or wetlands as defined by the Army Corps and the State of California. As described in Section 1.2, wetlands are a subset of “Waters of the U.S.” under the Federal Clean Water Act.

This report can be used to assess the potential effects on biological resources if the current land use changes. The specific type of land use change would dictate the type of regulatory approvals or permits required. This review focused on the extent of the Waters of the U.S., including any wetlands that would potentially be subject to regulation under Section 404 of the Clean Water Act or by the State of California Wetland Policy (Resolution 2008-0026) which is designed to protect all waters of the State, including wetlands dredge and fill discharges. These reviews also focused on assessing and identify any potential impacts site development may have on species protected by the Federal Endangered Species Act or protected under the California Environmental Quality Act.

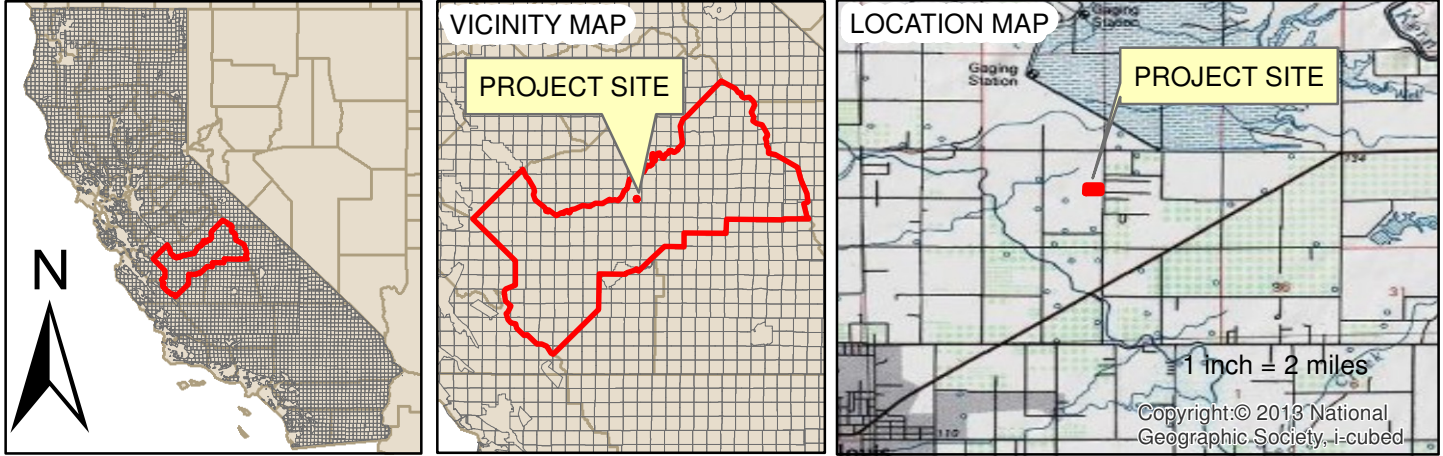
1.2 REGULATORY JURISDICTION AND BACKGROUND

Regulatory jurisdiction over biological resources within the Study Area is shared by several agencies. The following is a brief description of the primary agencies and their respective jurisdiction.


VICINITY AND LOCATION MAP

CLIENT NAME: Valley Coastal Development, LLC PROJECT NAME: Mar
 PROJECT LOCATION: APN 559 051 14, Section 27, T. 12S., R.21E., Mount Diablo Ba
 City of Clovis, Fresno County California,

AGENDA ITEM NO. 9.



Legend

 Approximate boundary (+/-4.9AC)

ARGONAUT
 ECOLOGICAL
 CONSULTING, INC.



Wetland Protection

U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers (Army Corps) and the U.S. Environmental Protection Agency regulates placement of fill into the Waters of the U.S under Section 404 of the Federal Clean Water Act and Section 10 of the Rivers and Harbor Act. The term “Waters of the U.S.” include wetlands, special aquatic sites, and other non-wetland waters such as bays, rivers, and lakes. The jurisdictional limit of tidal Waters of the U.S. under Section 10 of the Rivers and Harbor Act is the Mean High Water line. However, Section 404 of the Federal Clean Water Act extends the jurisdictional limit to the High Tide line. The High Tide Line is the highest elevation of the tide in a normal year, excluding storm events. Wetlands adjacent to the Mean High Water line or High Tide Line are also under the USACE jurisdiction. For purposes of this document, the term “Waters of the U.S.” is legally defined under Section 404 of the Federal Clean Water Act. It includes seasonal drainages that have a defined channel and support wetland species, but lack positive indicators of wetland soils.

As previously stated, Waters of the U.S. includes wetlands. The Army Corps defines wetland as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (Environmental Laboratory 1987). Seasonally inundated areas that meet the criteria of all three wetland parameters as defined in the recently issued Wetland Delineation Manual for the Arid West (USACE 2006) are also considered jurisdictional wetlands. However, drainage ditches excavated on dry land that do not convey flows from historical streams and/or channels are usually considered non-jurisdictional as defined in Title 33 CFR Part 328.3 (a). A determination of whether any particular area is considered non-jurisdictional varies on a case-by-case basis.

Since 2001, the U.S. Supreme Court found in several court rulings that regulation of isolated intrastate waters by the Army Corps under the Migratory Bird Rule and other arguments is unconstitutional and impinges on state rights to regulate intrastate commerce. The decisions, which include both *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (SWANCC) and *Rapanos v. United States* (Rapanos) limited the scope of federal jurisdiction under the Federal Clean Water Act and excluded many California wetlands from federal regulation.

In May 2015 the U.S. Environmental Protection Agency and the U.S. Army finalized the “Clean Water Rule “ with the intent of clarifying what constitutes a waters of the U.S., and presumably, acts to more precisely define and making permitting more predictable, thus less costly and easier. According to the U.S. EPA, the rule was not intended to create any new permitting requirements for agriculture and maintains all previous exemptions and exclusions. However, many individuals in the regulated community disagree. The new Clean Water Rule went in effect at the end of August 2015. On October 9, 2015 the Sixth U.S. Circuit Court of Appeals issued a nationwide stay of the rule pending further court action. Therefore, currently, application of the Clean Water Rule is not enforced and the current regulatory definition of waters of the U.S. remains.



Executive Order 11990

Executive Order 11990 (signed May 24, 1977) directs all federal agencies to refrain from assisting in or giving financial support to projects that encroach on publicly or privately owned wetlands. It further requires that federal agencies support a policy to minimize the destruction, loss, or degradation of wetlands. A project that encroaches on wetlands may not be undertaken unless the agency in question has determined that: (1) there are no practicable alternatives to such construction; (2) the project includes all practicable measures to minimize harm to wetlands that would be affected by the project; and (3) the resulting impact will be minor.

The Executive Order, the Order does not apply to issuance by Federal Agencies of permits, licenses, or allocation to private parties for activities involving wetland on non-Federal property. Executive Order 1190 is also not intended to be applied on a project-by-project basis. Section 1 of the order states the following: “*This Order does not apply to the issuance by Federal agencies of permits, licenses, or allocations to private parties for activities involving wetlands on non-Federal property.*”

California State Water Resources Control Board

Since 1993, California has had a Wetlands Conservation Policy (a.k.a., the Executive Order W-51 59-93). Commonly referred to as the *No Net Loss Policy* for wetlands, this order establishes for the State the mandate that it develops and adopts a policy framework and strategy to protect the State’s wetland ecosystems.

The State Water Board’s Policy is only proposed and no new regulatory authority has been granted to the State of California to regulate wetlands other than what currently exists. Bring a uniform regulatory approach between the State Water Resources Control Board, other agencies involved in aquatic resource protection and the federal Clean Water Act Section 404 program for dredge and fill discharges by establishing procedures and criteria for the application, review and approval of permits to discharge dredged or fill material to waters of the State.

Under the State’s 401 Water Quality Certification and Wetland Program, the state provides certification for any proposed fill of waters of the U.S. Although the State has not historically regulated fills of wetlands/waters of the state, they have boldly asserted they have the regulatory authority to regulate fills of isolated wetlands/waters under the Porter-Cologne Water Quality Control Act.

Under California's Porter-Cologne Water Quality Control Act (Porter-Cologne), the regional boards regulate the "discharge of waste" to "waters of the state". All parties proposing to discharge waste that could affect waters of the state must file a report of waste discharge with the appropriate regional board. The regional board will then respond to the report of waste discharge by issuing waste discharge requirements (WDRs) in a public hearing, or by waiving WDRs (with or without conditions) for that proposed discharge.

Both of the terms "discharge of waste" and "waters of the state" are broadly defined in Porter-Cologne, such that discharges of waste include fill, any material resulting from human activity, or any other "discharge" that may directly or indirectly impact "waters of the state". While all "waters of the United States" that are within the borders of California are also "waters of the



state", the converse is not true - "waters of the United States" is a subset of "waters of the state."

It is important to note that, while Section 404 permits and 401 certifications are required when the activity results in fill or discharge directly below the ordinary high water line of waters of the United States, any activity that results or may result in a discharge that directly or indirectly impacts waters of the state or the beneficial uses of those waters are subject to waste discharge requirements (WDRs). In practice, most regional boards rely on applications for 401 certification to determine whether WDRs need also be issued for a proposed project.

Listed Protected Species and Habitat Protection

U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service (USFWS) implements the Migratory Bird Treaty Act (16 USC Section 703-711), Bald and Golden Eagle Protection Act (16 United States Code [USC] Section 668), and Federal Endangered Species Act (FESA; 16 USC § 153 *et seq.*). Projects that would result in “take” of any federally-listed threatened or endangered species are required to obtain authorization from the USFWS through either Section 7 (interagency consultation) or Section 10(a) (incidental take permit) of FESA, depending on whether the federal government is involved in permitting or funding the project. The authorization process is used to determine if a project would jeopardize the continued existence of a listed species and what mitigation measures would be required to avoid jeopardizing the species.

“Take” under the federal definition means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. “Candidate species” do not have the full protection of FESA. However, the USFWS advises project applicants that it is prudent to address these species since they could be elevated to “listed status” prior to completion of projects with long planning or development schedules.

California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW), formally known as the California Department of Fish and Game, is a Trustee Agency with responsibility under the CEQA for commenting on projects that could impact plant and wildlife resources. In addition, pursuant to the Fish and Game Code Section 1802, the CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of those species. The California Fish and Game Code also provide authority for the CDFW to regulate projects that could result in the “take” of any species listed by the State as threatened or endangered (Section 2081).

Perennial and intermittent streams also fall under the jurisdiction of CDFW pursuant to Sections 1601-1603 of the Fish and Game Code (Streambed Alteration Agreements). The CDFW’s jurisdiction over work within the stream zone includes, but is not limited to, the diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream or lake. Prior to issuing a 1601 or 1603 Streambed Alteration Agreement, the CDFW must demonstrate compliance with CEQA. In most cases, CDFW relies on the CEQA review performed by the local lead agency. However, in cases where no CEQA review was required for the project, CDFW would act as the lead agency under CEQA.



The CDFW also has authority for protection state-listed species issues Section 2081 Incidental Take Permit if a project has the potential to negatively affect state-protected plant or animal species or their habitats, either directly or indirectly. Protected species include those “listed” by the state as endangered or threatened. Besides listed species, there are other categories of species protection, including “fully protected” and California Species of Special Concern (CSC). Adverse impacts to species that have the “fully protected” designation are prohibited.

Under current California Fish & Game Code (FGC Section 3503) “it is unlawful to take, possess or needlessly destroys the nest or eggs of any bird...” Birds of prey (falcons, hawks, owls and eagles) get extra protection under the law (FGC Section 3503.5). To help clarify the state nesting bird laws, California Department of Fish and Wildlife (CDFW) proposed to “clarify” its regulations, and in doing so, would expand regulatory reach to all nesting birds. Following a lengthy comment period, on August 5, 2016 CDFW issued a notice that they were not going to proceed with this proposed regulation (Notice of Decision Not Proceed for Proposed Nest Regulations (Section 681, Title 14, CCR).

California Endangered Species Act

The California Endangered Species Act (CESA) provides protection for candidate plants and animal species as well as those listed as rare, threatened, or endangered by the California Department of Fish and Game (CDFG). This act prohibits the take of any such species unless authorized. Section 2081 authorizes the state to issue incidental take permits. The state definition of take applies only to acts that result in the death of or adverse impacts to protected species.

California Environmental Quality Act

The CEQA Guidelines require review of projects to determine their environmental effects and to identify mitigation for significant effects. The Guidelines state an effect may be significant if it affects rare and endangered species. Section 15380 of the Guidelines defines *rare* to include listed species, and allows agencies to consider rare species other than those designated as State or federal threatened or endangered, but that meet the standards for rare under the federal or State endangered species acts. On this basis, plants designated as rare by non-regulatory organizations (e.g., California Native Plant Society), species of special concern as defined by CDFW, candidate species as defined by USFWS and other designations may need to be considered in CEQA analyses.

City of Fresno

The Study Area falls within the limits of the City of Fresno, California. The City is responsible for all local land use decisions within its jurisdictional boundary. For any project review, the City would serve as the local land use agency as defined by CEQA.



SECTION 2

METHODS

The following section describes the methods used to assess the Study Area, which includes a combination of data review and evaluation, field studies, and aerial photograph interpretations.

2.1 DATA AND LITERATURE REVIEW

The approximately 4.9-acre project area is located within a historically agricultural area. The following documents and/or sources were used in preparing this report.

- Aerial photography (Google Earth®, Bing®, and historic aerials dating back to 1998).
- The California Department of Fish and Game, California Natural Diversity Database (CNDDDB/RareFind - Recent version with updates).
- U.S. Fish and Wildlife Service National Wetland Inventory Map
- U.S. Geologic Survey, Historic topographic Map, Clovis Quadrangle, 1919, University of Texas, Austin, Perry-Castañeda Map Collection

2.2 AERIAL PHOTOGRAPHY AND WETLAND MAPPING

A series of aerial photographs of the Study Area were reviewed to assess changes in land use over time, dating back to 1998. Specifically, black & white and color aerial photographs ranging in resolution from 0.5 meter to 1.0 meter. We also reviewed wetland mapping and the aerials to determine if the Study Area recently supported wetlands.

2.3 FIELD RECONNAISSANCE

Prior to conducting a site review, we reviewed the California Natural Diversity Database/Rarefind (CNDDDB/Rarefind). The CNDDDB includes records of reported observations for special status plant and animal species. A search radius that included two USGS quadrangles was performed. The results of the CNDDDB/RareFind were reviewed to identify which species would present the greatest likelihood of being present on the site based on the distance of the site from known records and the similarity in habitats between the Study Area and the habitats that the species required and/or preferred. Also prior to the field work, a high resolution aerial was reviewed to determine if there are any areas on the site that appear to support waters of the U.S., or other water features.

On October 18, 2016, a site review was conducted. The site was walked for full coverage. The primary objective of the field work was to identify any areas on the site, or immediately adjacent to the site, that potentially supports habitat for sensitive species or aquatic habitat. The property owner who still resides on the property was able to provide information with respect to the property history and land use.



SECTION 3

RESULTS

The following section describes the physical (i.e., topography and drainage) and the biological resources present, or potentially present, within the Study Area based on data reviewed. The physical components strongly influence the types of plants and animals present. Section 3.2, is an overview of the resources and habitats present within the Study Area, including descriptions of the specific biological resources observed. The information presented is not an exhaustive inventory of plants or animals present. Rather it is designed to provide sufficient information to identify what, if any, biological resources are present that may be considered unique, sensitive, or protected by current law and the potential impacts to those resources if the site is developed.

3.1 PHYSICAL RESOURCES AND ELEMENTS

Land Use and Habitat Types

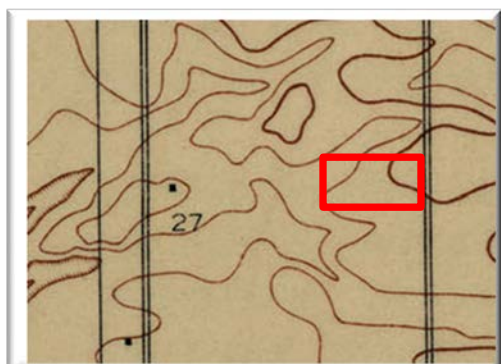
The property is located within an area of Clovis that has historically been used for agricultural uses and rural residential. Most of the homes in the area are located on large parcels of 2-5 acre minimum size. The Martin property has a single family home on it that was likely built in the 1970 or 1980s. An aerial from 1989 shows the home, swimming pool, land scape areas and the back portion of the property appeared to be used as pasture land. There appears to be a depression in the back of the property. Aerials from 1989 to 2015 showed the property in the same condition with little to no changes. Some additional landscaping and outbuildings appeared over time. There also appeared to be an access road created around the property.



Martin Property 1999

Site Topography

The property lies within the Central Valley just north of the City of Merced. The Study Area site has historically been nearly level. Historically elevations within the area ranged from 375 to 400 ft MSL. According to the 1919 topographic map, the nearest drainage is Dry Creek located north of Shepherd Avenue. There are no drainages on or near the Martin Property. Current conditions do not appear to have significantly changed.



1919 USGS Topographic Map



Drainage, Watershed, and Wetlands

The project site historically drained to the southwest. There are no mapped wetland identified in the U.S. Fish and Wildlife Services' National Wetland Inventory Map and there are no identified drainages or waters of the U.S or riparian. The USFWS wetland map is provided below.



3.2 RESULTS OF SITE INVESTIGATION

Our field investigation confirmed the accuracy of the U.S. Fish and Wildlife Service's Wetland Inventory Map. No wetlands, waters, or any aquatic habitat is present within the Study Area. The western half of the site is dominated by an upland plant community that is indicative of non-native grassland/agricultural land. The east side of the property is planted in urban landscaping plants (cypress, cedar, oleander, and grass).

Habitats and Waters of the U.S. and Waters of the State

From at least 1989, the property has been the same condition and developed as a rural residence. The western half of the property is non-native grassland that has been used as pasture. Toward the west edge of the property, it there is a depression that appears to have been excavated as a stock pond or recreational pond because the pond is roughly 8 feet in depth and the excavated soils were mounded toward the center of the pond. It appears that some years this pond was filled with water but based on the aerial it appears since 1998 the pond was only filled for a couple of years. Some vegetation was observed in the deepest portion of the pond, which isn't surprising given the pond likely ponds some rainfall. However, wetlands are not defined by just the presence of wetland vegetation and evidence of ponding. The area also has to support hydric soils. We excavated a soil test pit and there was no evidence of hydric soils. The pond was not excavated in a historic drainage and thus is not a waters of the U.S.

According to the property owner they currently raise goats but in the past they had various types of livestock. Sometime in the mid 1990s, the owner excavated the pond as a water feature he could stock with fish for his grandchildren to fish. He confirmed that the pond only held water on and off for a few years.

Based on a review of historical records, readily available wetland mapping databases, and a site review, there are no waters of the U.S., including wetlands or waters of the state within the Study Area.

Special Status Species

A search of the California Natural Diversity Database (CNDDDB, 2016) was reviewed to determine which special status species could be present within the Study Area. Figure 1 shows the location of known records of special status species as found in the CNDDDB Bios Map. The nearest recorded species is California tiger salamander and two plant species associated with vernal pools. Suitable habitat is not present on site for these species. California tiger salamander require aquatic breeding habitat that remains ponded for several weeks in order for the species to complete its breeding cycle. The man made pond on site may pond for a brief period annually but not long enough for the species to successfully breed. In addition, the pond is within a residential yard with pets and livestock and recurring disturbance, which would limit species occupation.

There are no burrowing mammals, thus ground nesting birds; such as Western burrowing owl could not occupy the site. While there are shrubs and trees that could support migratory bird nesting, impacts to migratory birds could be avoided if the landscape vegetation is removed prior to February 1 when breeding typically begins.



Table 1
Summary of Potential Special Status Species Impacts

<i>Common Name</i>	<i>Scientific Name</i>	<i>Status</i> ¹	<i>Habitat Present</i> ²	<i>Occurrence in the Study Area</i> ³
Birds				
Western burrowing owl	<i>Athene cunicularia</i>	MB	No	Absent. Suitable habitat not present
Mammals				
San Joaquin kit fox	<i>Vulpes macrotis mutica</i>	FE, ST	No	Absent. No suitable habitat presents to support species, no dens.
Amphibians				
California tiger salamander	<i>Amboystoma californiense</i>	FT	No	Absent. Species breeds in natural vernal or ephemeral ponds but will breed in artificial ponds. Requires suitable upland habitat for summer aestivation. Suitable habitat not present.
Invertebrates				
Valley elderberry longhorn beetle	<i>Desocerus californicus dimorphus</i>	FT	No	Absent. There are no elderberry plants within the Study Area or immediately adjacent to the site.
Conservancy fairy shrimp	<i>Branchinecta conservatia</i>	FE	No	Absent. Inhabits large vernal pools with, moderately clear and that persists until June. Potential suitable habitat not present.
Vernal pool fairy shrimp	<i>Branchineta lynchi</i>	FT	No	Absent. This species of shrimp occurs in vernal pools within the Central Valley. Suitable habitat potentially present.
Plants				
Hartweg's golden sunburst	<i>Pseudobahia bahiifolia</i>	FE, CE	No	Likely Absent. Occurs in grasslands. Suitable habitat not present.
San Joaquin adobe sunburst	<i>Pseudobahia peirsonii</i>	FT, CE	No	Likely Absent. Occurs in grasslands. No suitable habitat present.
Green's tuctoria	<i>Tuctoria greenei</i>	1B.1	No	Absent: Vernal pools.

1 Status= Listing of special status species, unless otherwise indicated

- CE: California listed as Endangered
- CT: California listed as Threatened
- FE: Federally listed as Endangered
- FT: Federally listed as Threatened
- 1B.1 California Native Plant Society List of Native Plants, list 1B.

3 Definition of Occurrence Indicators

Potentially Present: Species recorded in area and suitable habitat appears to be present.

Absent/Likely Absent: Species not recorded in study area and/or habitat requirements not met

CNDDDB = California Natural Diversity Database provided by CDFG 2016

There may be numerous migratory birds present within the Study Area at any given time. Suitable nesting habitat is present for a variety of migratory bird species not included in this table because they are not listed species.



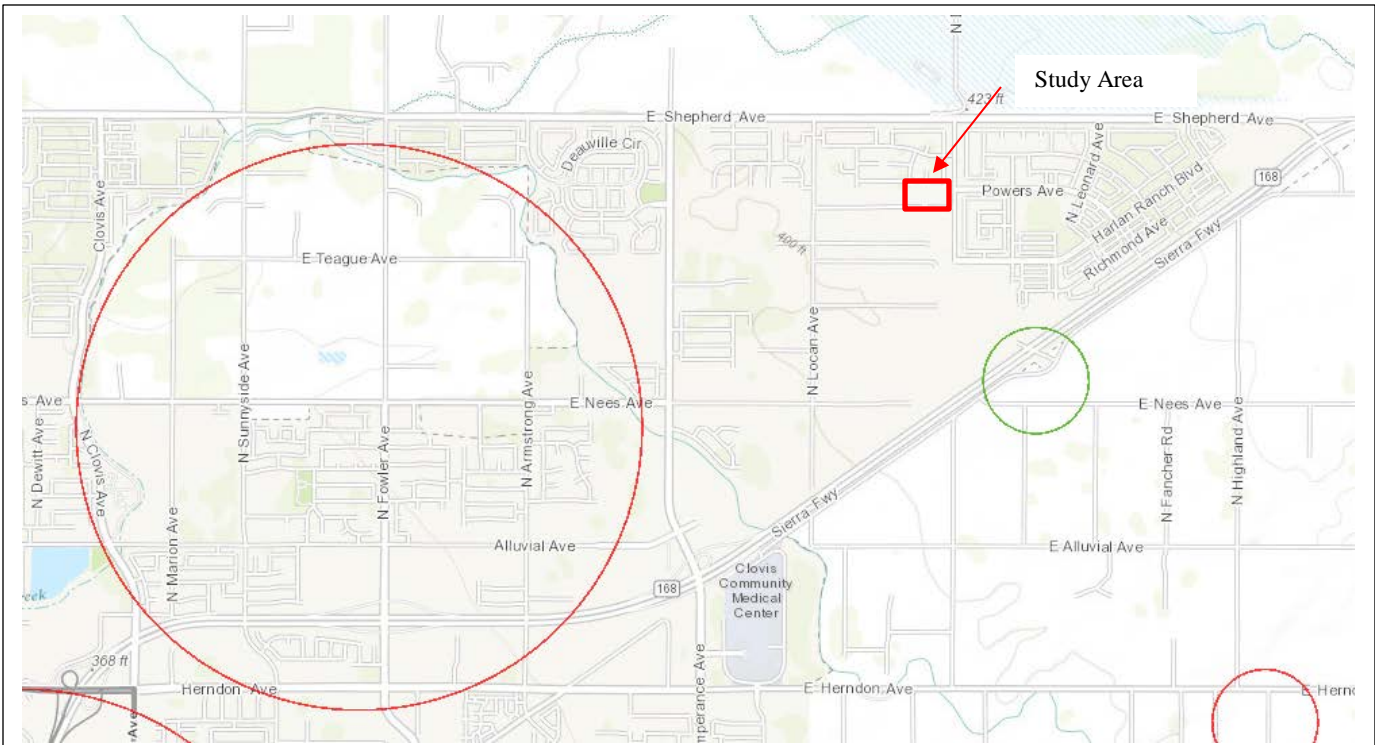




FIGURE 2
California Natural Diversity Database (CNDDDB)
BIOS Map of Special Status Species Records

Legend

-  California tiger salamander
-  Green's tuctoria (plant)



3.3 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The Martin property was historically used as rural residential land since at least the 1970s. Since then the site has been graded, disturbed, and used home site. There are no waters of the U.S., nor is there any historical evidence to suggest the property supported any waters of the U.S. and/or wetland habitat. There is a topographic depression on the site but it is not waters of the U.S. nor does it support jurisdictional wetlands. The site has no viable wildlife habitat given the recurring disturbance over the years, the small habitat unit, and the ongoing activity on the property.

The site supports trees or shrubs that could provide nesting habitat for raptors or other migratory birds. We recommend that the trees and shrubs be removed prior to or after the nesting season which runs from roughly February 1 – August 31.

The findings represent my findings and research and are based on a field investigation performed on October 18, 2016.



Kathy Kinsland, CISEC, QSP
Senior Scientist/Biologist





TABLE MOUNTAIN RANCHERIA

TRIBAL GOVERNMENT OFFICE

August 29, 2019

Jeff Roberts
Assemi Group, Inc.
1396 W. Herndon Suite 110
Fresno, California 93711

Leanne Walker-Grant
Tribal Chairperson

Beverly J. Hunter
Tribal Vice-Chairperson

Craig Martinez
Tribal Secretary/Treasurer

Matthew W. Jones
Tribal Council Member

Richard L. Jones
Tribal Council Member

RE: City of Clovis Tentative Tract No. 6239

Dear Mr. Roberts,

On Monday July 15, 2019, Sara Barnett and Venessa Jimenez, professional archeologists from the Cultural Resources Department at Table Mountain Rancheria, performed a pedestrian archeological survey of the Granville properties outlined and identified on the attached map, figure 1.

No cultural artifacts or human remains were identified on the surface during the pedestrian survey of the property. However, given the property's proximity to natural waterways, there is a remote possibility of Native American artifacts and/or human remains buried sub-surface. It is our understanding that Granville is requesting to change the property from low density housing to high density housing.

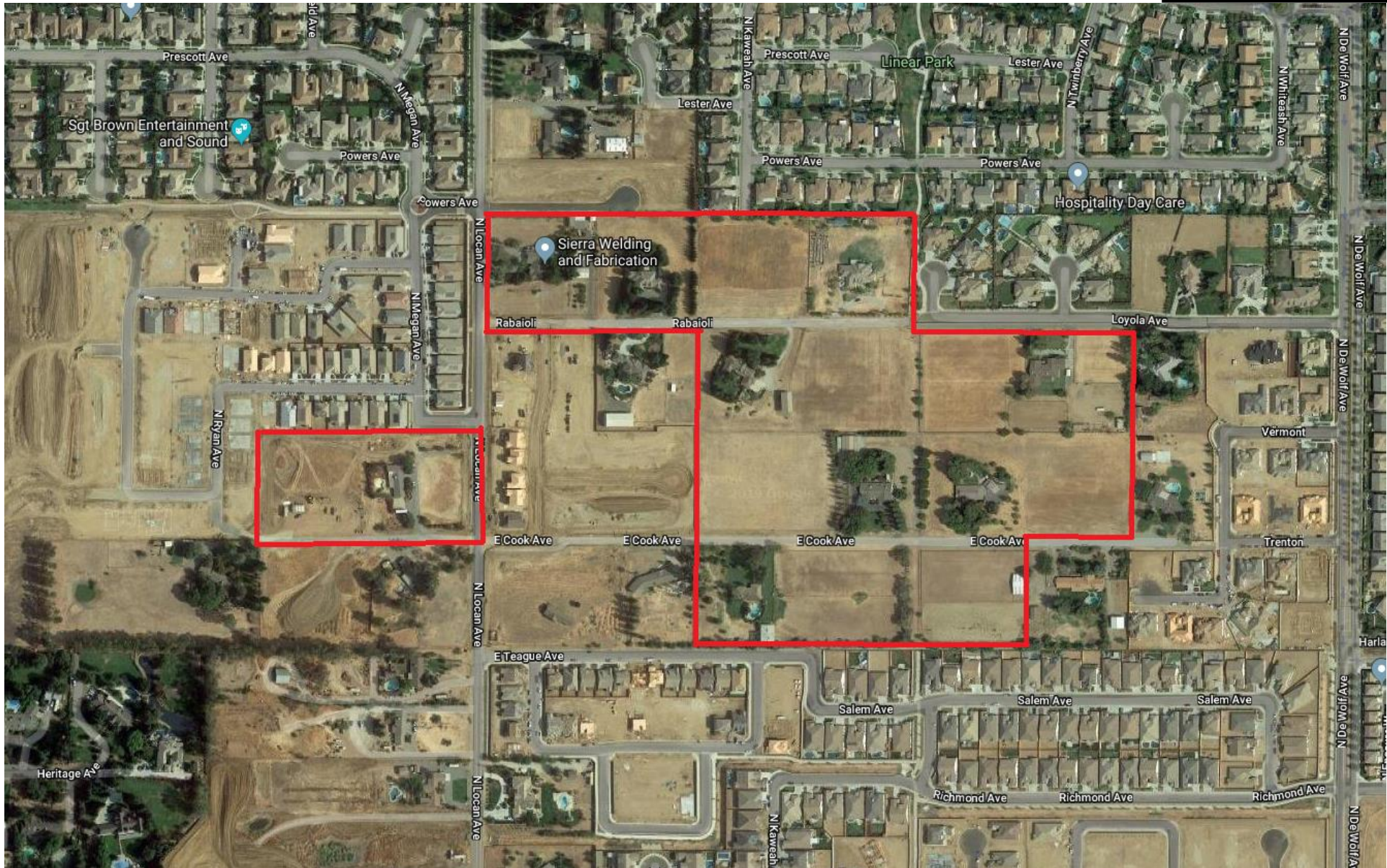
Table Mountain Rancheria has no objections to this zoning change. In the event of any ground disturbance, Table Mountain Rancheria would like to be notified so they can have a qualified archaeological monitor present. If you have any questions feel free to contact me at the Table Mountain Rancheria Cultural Resources Offices at 559-325-0351.

23736
Sky Harbour Road
Post Office
Box 410
Friant
California
93626
(559) 822-2587
Fax
(559) 822-2693

Sincerely,

Robert Pennell
Cultural Resources Director
Table Mountain Rancheria

Figure 1.



Draft Traffic Impact Analysis

Locan 35

Located on the Northeast Quadrant of
Locan Avenue and Teague Avenue

In the City of Clovis, California

Prepared for:

Valley Coastal Development, LLC
1396 West Herndon Avenue, Suite 101
Fresno, CA 93711

April 12, 2019

Project No. 006-027



Traffic Engineering, Transportation Planning, & Parking Solutions

1300 E. Shaw Ave., Ste. 103

Fresno, CA 93710

Phone: (559) 570-8991

www.JLBtraffic.com



Traffic Engineering, Transportation Planning, & Parking Solutions

Draft Traffic Impact Analysis

For Locan 35 located on the Northeast Quadrant of Locan Avenue and Teague Avenue

In the City of Clovis, CA

April 12, 2019

This Draft Traffic Impact Analysis has been prepared under the direction of a licensed Traffic Engineer. The licensed Traffic Engineer attests to the technical information contained therein and has judged the qualifications of any technical specialists providing engineering data from which recommendations, conclusions, and decisions are based.

Prepared by:

Jose Luis Benavides, PE, TE
President



Traffic Engineering, Transportation Planning, & Parking Solutions
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Introduction and Summary

Introduction

This report describes a Traffic Impact Analysis (TIA) prepared by JLB Traffic Engineering, Inc. (JLB) for the proposed Locan 35 (Project) located in the City of Clovis. The Project includes the development of two (2) distinct areas – Project (West) and Project (East). Project (West) is located on the northwest corner of Locan Avenue and Cook Avenue and proposes to develop up to 37 single-family detached housing units. Project (East) is located on the northeast quadrant of Locan Avenue and Teague Avenue and proposes to develop up to 171 single-family detached housing units. Based on information provided to JLB, the Project will undergo a General Plan Amendment through the City of Clovis to modify the existing land use designation from Low Density Residential to Medium Density Residential. Figure 1 shows the location of the proposed Project (West) and Project (East) sites relative to the surrounding roadway network.

The purpose of the TIA is to evaluate the potential on-site and off-site traffic impacts, identify short-term roadway and circulation needs, determine potential mitigation measures, and identify any critical traffic issues that should be addressed in the on-going planning process. The TIA primarily focused on evaluating traffic conditions at study intersections that may potentially be impacted by the proposed Project. The Scope of Work was prepared via consultation with City of Clovis, City of Fresno, County of Fresno and Caltrans staff.

Summary

The potential traffic impacts of the proposed Project were evaluated in accordance with the standards set forth by the Level of Service (LOS) policy of the City of Clovis, County of Fresno and Caltrans.

Existing Traffic Conditions

- At present, all study intersections operate at an acceptable LOS during both peak periods.

Existing plus Project Traffic Conditions

- JLB analyzed the location of the proposed access points relative to the existing local roads and driveways in the Project's vicinity. A review of the Project's local streets to be constructed indicates that they are located at points that minimize traffic operational impacts to the existing roadway network.
- At buildout, the proposed Project (West) is estimated to generate a maximum of 349 daily trips, 27 AM peak hour trips and 37 PM peak hour trips.
- At buildout, the proposed Project (East) is estimated to generate a maximum of 1,529 daily trips, 120 AM peak hour trips and 160 PM peak hour trips.
- It is recommended that the Project implement and retain the Class II Bike Lanes along its frontage to Locan Avenue.
- It is recommended that a high visibility crosswalk be installed across De Wolf Avenue along the south side of Powers Avenue. The high visibility crosswalk should include appropriate signage and markings pursuant to the California Manual on Uniform Traffic Control Devices (CA MUTCD).



- Under this scenario, the intersection of De Wolf Avenue and Owens Mountain Parkway is projected to exceed its LOS threshold during the AM peak period. To improve the LOS at this intersection, it is recommended that a southbound left-right lane be added with a receiving lane on Owens Mountain Parkway east of De Wolf Avenue. Additional details as to the recommended improvements for this intersection are presented later in this report.

Near Term plus Project Traffic Conditions

- The total trip generation for the Near Term Projects is 62,256 daily trips, 4,980 AM peak hour trips and 6,419 PM peak hour trips.
- Under this scenario, the intersections of Locan Avenue and Shepherd Avenue and De Wolf Avenue and Owens Mountain Parkway are projected to exceed their LOS threshold during both peak periods. To improve the LOS at these intersections, it is recommended that these intersections be signalized. Additional details as to the recommended improvements for these intersections are presented later in this report.

Cumulative Year 2039 No Project Traffic Conditions

- Under this scenario, intersections of Locan Avenue and Shepherd Avenue, De Wolf Avenue and Powers Avenue, and De Wolf Avenue and Owens Mountain Parkway are projected to exceed their LOS threshold during one or both peak periods. To improve the LOS at these intersections, the addition of lanes and modification of traffic control mechanisms are recommended. Additional details as to the recommended improvements for these intersections are presented later in this report.

Cumulative Year 2039 plus Project Traffic Conditions

- Under this scenario, all study intersections are projected to exceed their LOS threshold during one or both peak periods. To improve the LOS at these intersections, the addition of lanes and modification of traffic control mechanisms are recommended. Additional details as to the recommended improvements for these intersections are presented later in this report.

Queuing Analysis

- It is recommended that the City consider left-turn and right-turn lane storage lengths as indicated in the Queuing Analysis.

Project's Equitable Fair Share

- It is recommended that the Project (West) and Project (East) contribute their equitable fair share as listed in Tables X and XI, respectively, for the future improvements necessary to maintain an acceptable LOS.



Scope of Work

The TIA primarily focused on evaluating traffic conditions at study intersections that may potentially be impacted by the proposed Project. On January 17, 2019, a Draft Scope of Work for the preparation of a Traffic Impact Analysis for this Project was provided to the City of Clovis, City of Fresno, County of Fresno and Caltrans for their review and comment. The Draft Scope of Work was based on communication with City of Clovis staff. Any comments to the proposed Scope of Work were to be provided by February 7, 2019.

On January 23, 2019, Caltrans responded to the Draft Scope of Work. Caltrans requested that the Project Only Trips to the State Route 168 and Temperance Avenue interchange be presented in the TIA. On January 31, 2019, the City of Clovis responded and approved the Draft Scope of Work as presented. On February 19, 2019, the County of Fresno responded and approved the Draft Scope of Work as presented. On February 21, 2019, the City of Fresno responded and approved the Draft Scope of Work as presented.

Based on the comments received, this TIA includes the Project Only Trips to the State Route 168 and Temperance Avenue interchange as requested by Caltrans. The Draft Scope of Work and the comments received from the lead agency and responsible agencies are included in Appendix A.

Study Facilities

The existing peak hour turning movement volume counts were conducted at the study intersections in February 2019, while schools in the vicinity of the proposed Project were in session. The intersection turning movement counts included pedestrian volumes. The traffic counts for the existing study intersections are contained in Appendix B. The existing intersection turning movement volumes, intersection geometrics and traffic controls are illustrated in Figure 2.

Study Intersections

1. Locan Avenue / Shepherd Avenue
2. De Wolf Avenue / Powers Avenue
3. De Wolf Avenue / Owens Mountain Parkway
4. Locan Avenue / Nees Avenue

Project Only Trips to State Facilities

1. State Route 168 / Owens Mountain Parkway
2. State Route 168 / Temperance Avenue



Study Scenarios

Existing Traffic Conditions

This scenario evaluates the Existing Traffic Conditions based on existing traffic volumes and roadway conditions from traffic counts and field surveys conducted in February 2019.

Existing plus Project Traffic Conditions

This scenario evaluates total traffic volumes and roadway conditions based on the Existing plus Project Traffic Conditions. The Existing plus Project traffic volumes were obtained by adding the Project Only Trips (West) and Project Only Trips (East) to the Existing Traffic Conditions scenario. The Project Only Trips to the study facilities were developed based on existing travel patterns, the Fresno COG Project Select Zones, the existing roadway network, engineering judgment, data provided by the developer, knowledge of the study area, existing residential and commercial densities, and the City of Clovis 2035 General Plan Circulation Element in the vicinity of the Project. The Fresno COG Models for the Project Select Zones are contained in Appendix C.

Near Term plus Project Traffic Conditions

This scenario evaluates total traffic volumes and roadway conditions based on the Near Term plus Project Traffic Conditions. The Near Term plus Project traffic volumes were obtained by adding the Near Term related trips to the Existing plus Project Traffic Conditions scenario.

Cumulative Year 2039 No Project Traffic Conditions

This scenario evaluates total traffic volumes and roadway conditions based on the Cumulative Year 2039 No Project Traffic Conditions. The Cumulative Year 2039 No Project traffic volumes were obtained by subtracting Project Only Trips (West) and Project Only Trips (East) from the Cumulative Year 2039 plus Project traffic volumes.

Cumulative Year 2039 plus Project Traffic Conditions

This scenario evaluates total traffic volumes and roadway conditions based on the Cumulative Year 2039 plus Project Traffic Conditions. At the time of the preparation of this TIA, Fresno COG did not have a regional model for the year 2039. Therefore, JLB utilized the Fresno COG traffic model runs for Base Year 2019 and Cumulative Year 2035 along with existing traffic counts to determine the increment in traffic volumes. Furthermore, JLB utilized Base Year 2019 and Cumulative Year 2035 volumes along Shepherd Avenue, Locan Avenue and De Wolf Avenue near the vicinity of the proposed Project sites to determine an average annual growth rate of 5.6 percent. However, JLB recognized that this average annual growth rate may be too high, especially considering that the Near Term plus Project Traffic Conditions scenario accounts for the majority of any future development in the surrounding area. For this reason, JLB utilized a lower average annual growth rate of 3.0 percent to expand the 2035 increment volumes by four (4) years to arrive at the Cumulative Year 2039 plus Project traffic volumes. The Fresno COG Models are contained in Appendix C.



Level of Service Analysis Methodology

Level of Service (LOS) is a qualitative index of the performance of an element of the transportation system. LOS is a rating scale running from “A” to “F”, with “A” indicating no congestion of any kind and “F” indicating unacceptable congestion and delays. LOS in this study describes the operating conditions for signalized and unsignalized intersections.

The *Highway Capacity Manual* (HCM) 6th Edition is the standard reference published by the Transportation Research Board and contains the specific criteria and methods to be used in assessing LOS. U-turn movements were analyzed using HCM 2000 methodologies and would yield more accurate results for the reason that HCM 6th Edition methodologies do not allow the analysis of U-turns. Synchro software was used to define LOS in this study. Details regarding these calculations are included in Appendix D.

Criteria of Significance

The City of Clovis 2035 General Plan has established LOS D as the acceptable level of traffic congestion on most major streets. Therefore, LOS D is used to evaluate the potential significance of LOS impacts to City of Clovis roadway facilities pursuant to the City of Clovis 2035 General Plan.

The County of Fresno has established LOS C as the acceptable level of traffic congestion on county roads and streets that fall entirely outside the Sphere of Influence (SOI) of a City. For those areas that fall within the SOI of a City, the LOS criteria of the City are the criteria of significance used in this report. LOS C is used to evaluate the potential significance of LOS impacts to Fresno County intersections that fall outside the City of Clovis SOI. In this case, all study facilities fall within the City of Clovis SOI, therefore, the City of Clovis LOS thresholds are utilized.

Caltrans endeavors to maintain a target LOS at the transition between LOS C and D on State highway facilities consistent with the *Caltrans Guide for the Preparation of Traffic Impact Studies* dated December 2002. However, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. In this TIA, however, all study facilities fall within the City of Clovis. Therefore, the City of Clovis LOS thresholds are utilized.



Operational Analysis Assumptions and Defaults

The following operational analysis values, assumptions and defaults were used in this study to ensure a consistent analysis of LOS among the various scenarios.

- Yellow time consistent with the California Manual of Uniform Traffic Control Devices (CA MUTCD) based on approach speeds
- Yellow time of 3.2 seconds for left-turn phases
- All-red clearance intervals of 1.0 second for all phases
- Walk intervals of 7.0 seconds
- Flashing Don't Walk based on 3.5 feet/second walking speed with yellow plus all-red clearance subtracted and 2.0 seconds added
- All new or modified signals utilize protective left-turn phasing, unless otherwise noted
- A 3 percent heavy vehicle factor
- The number of observed pedestrians at existing intersections was utilized under all study scenarios
- An average of 3 pedestrian calls per hour at signalized intersections
- At existing intersections, the observed approach Peak Hour Factor (PHF) is utilized in the Existing, Existing plus Project, and Near Term plus Project scenarios.
- For the Cumulative Year 2039 scenario, the following PHF's were utilized to reflect school traffic operations and an increase in future traffic volumes. As roadways start to reach their saturated flow rates, PHF's tend to increase to 0.90 or higher. The PHF's were established based on historical traffic counts collected by JLB for intersections in proximity of school sites.
 - For the intersection of De Wolf Avenue and Powers Avenue the following PHF's were utilized:
 - A PHF of 0.86, or the existing PHF if higher, is utilized during the AM peak
 - A PHF of 0.90, or the existing PHF if higher, is utilized during the PM peak
 - A PHF of 0.92, or the existing PHF if higher, is utilized for all other intersections



Existing Traffic Conditions

Roadway Network

The Project site and surrounding study area are illustrated in Figure 1. Important roadways serving the Project are discussed below.

Locan Avenue is an existing north-south two-lane undivided rural collector adjacent to the proposed Project. In this area, Locan Avenue exists as a two-lane undivided rural collector south of Shepherd Avenue for approximately 1.30 miles. The City of Clovis 2035 General Plan Circulation Element designates Locan Avenue as a collector south of Shepherd Avenue for approximately 1.30 miles.

De Wolf Avenue is an existing north-south predominantly two-lane divided arterial adjacent to the proposed Project. In this area, De Wolf Avenue exists as a three-lane divided arterial between Shepherd Avenue and Powers Avenue and a two-lane divided arterial between Powers Avenue and Owens Mountain Parkway. The City of Clovis 2035 General Plan Circulation Element designates De Wolf Avenue as an arterial between Shepherd Avenue and Owens Mountain Parkway.

Shepherd Avenue is an existing east-west three- to four-lane divided expressway in the vicinity of the proposed Project. In this area, Shepherd Avenue exists as an arterial between Willow Avenue and Clovis Avenue, a rural arterial between Clovis Avenue and Fowler Avenue, and an expressway between Clovis Avenue and State Route 168. The City of Clovis 2035 General Plan Circulation Element designates Shepherd Avenue as an arterial between Willow Avenue and Clovis Avenue and an expressway between Clovis Avenue and State Route 168.

Powers Avenue is an existing east-west two-lane divided collector in the vicinity of the proposed Project. In this area, Powers Avenue exists as a two-lane divided collector between De Wolf Avenue and Leonard Avenue. The City of Clovis 2035 General Plan Circulation Element designates Powers Avenue as a collector between De Wolf Avenue and Leonard Avenue.

Owens Mountain Parkway is an existing northeast-southwest two-lane divided arterial in the vicinity of the proposed Project. In this area, Owens Mountain Parkway exists as a two-lane divided arterial between Tollhouse Road Avenue and Nees Avenue. The City of Clovis 2035 General Plan Circulation Element designates Owens Mountain Parkway as an arterial east of Temperance Avenue through the City of Clovis SOI.

Nees Avenue is an existing east-west two-lane undivided arterial in the vicinity of the proposed Project. In this area, Nees Avenue exists as an arterial between Willow Avenue and Locan Avenue and a private roadway between Locan Avenue and Owens Mountain Parkway. The City of Clovis 2035 General Plan Circulation Element designates Nees Avenue as an arterial between Willow Avenue and Temperance Avenue and a collector between Temperance Avenue and Owens Mountain Parkway.

State Route (SR) 168 is an existing four-lane freeway in the vicinity of the proposed Project. The City of Clovis relies primarily on State Route 168 for regional travel as it connects the City of Clovis to the City of Fresno via its connection to State Route 180, which also connects to State Route 41 and State Route 99.



Traffic Signal Warrants

Peak hour traffic signal warrants, as appropriate, were prepared for the unsignalized intersections in the Existing Traffic Conditions scenario. These warrants are found in Appendix J. The effects of right-turning traffic from the minor approach onto the major approach were taken into account using engineering judgement pursuant to the CA MUTCD guidelines for the preparation of traffic signal warrants. Under this scenario, the intersection of De Wolf Avenue and Owens Mountain Parkway satisfies the peak hour signal warrant during the PM peak period only.

Based on the signal warrant and engineering judgement, signalization of the intersection of De Wolf Avenue and Owens Mountain Parkway is not recommended, especially since this intersection operates at an acceptable LOS during both peak periods. It is worth noting that the CA MUTCD states “satisfaction of a signal warrant or warrants shall not in itself require the installation of a traffic signal.” Therefore, it is recommended that prior to the installation of a traffic signal, investigation of CA MUTCD warrants 4 and 7, as applicable, be conducted for this intersection.

Results of Existing Level of Service Analysis

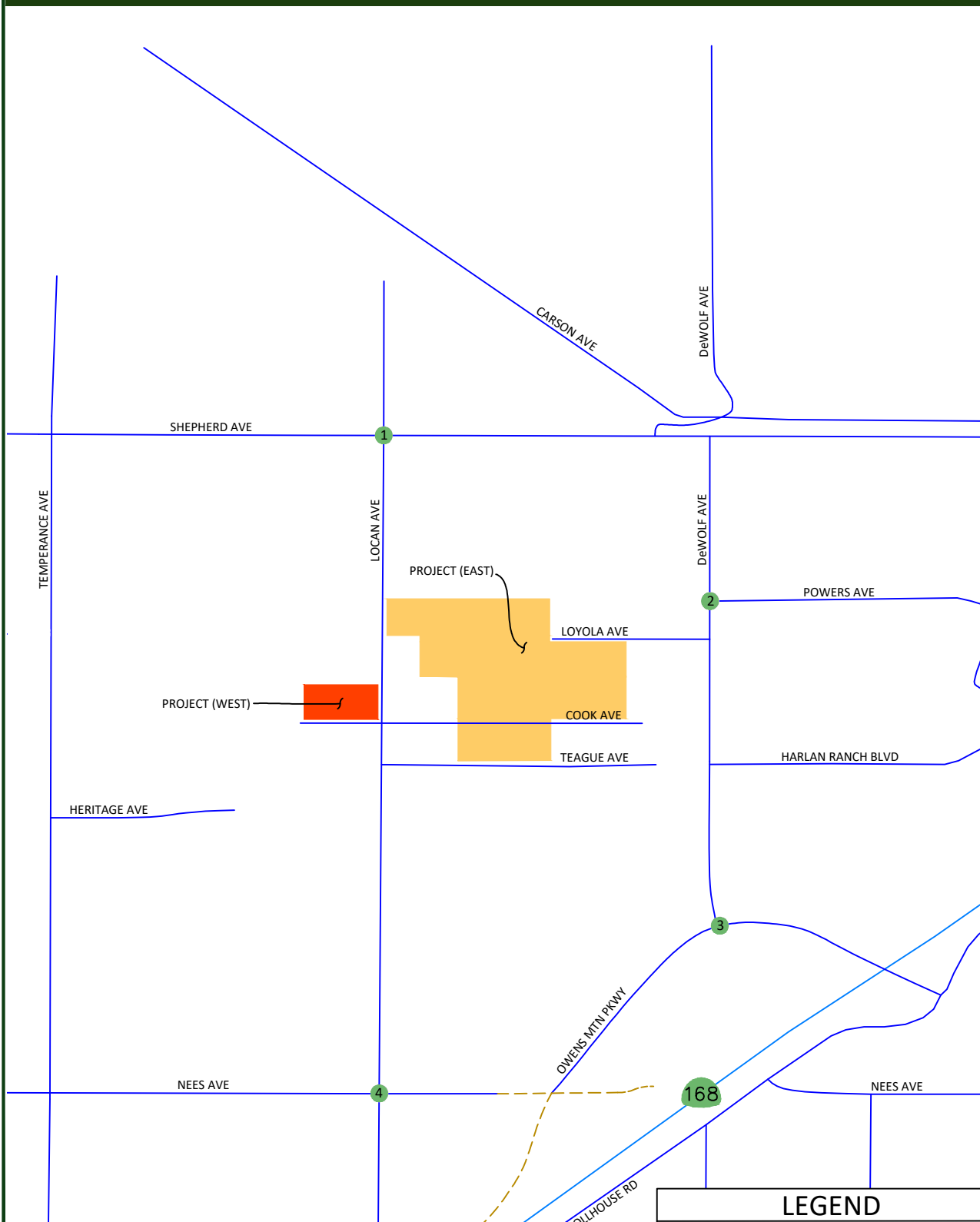
Figure 2 illustrates the Existing Traffic Conditions turning movement volumes, intersection geometrics and traffic controls. LOS worksheets for the Existing Traffic Conditions scenario are provided in Appendix E. Table I presents a summary of the Existing peak hour LOS at the study intersections.

At present, all study intersections operate at an acceptable LOS during both peak periods.

Table I: Existing Intersection LOS Results

ID	Intersection	Intersection Control	AM Peak Hour		PM Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	Locan Avenue / Shepherd Avenue	Two-Way Stop	25.6	D	15.9	C
2	De Wolf Avenue / Powers Avenue	One-Way Stop	15.0	C	11.1	B
3	De Wolf Avenue / Owens Mountain Parkway	All-Way Stop	30.2	D	15.9	C
4	Locan Avenue / Nees Avenue	All-Way Stop	7.9	A	8.2	A

Note: LOS = Level of Service based on average delay on signalized intersections and All-Way STOP Controls
 LOS for two-way and one-way STOP controlled intersections are based on the worst approach/movement of the minor street.



LEGEND

- # = STUDY INTERSECTION
- - - = FUTURE ROADWAY



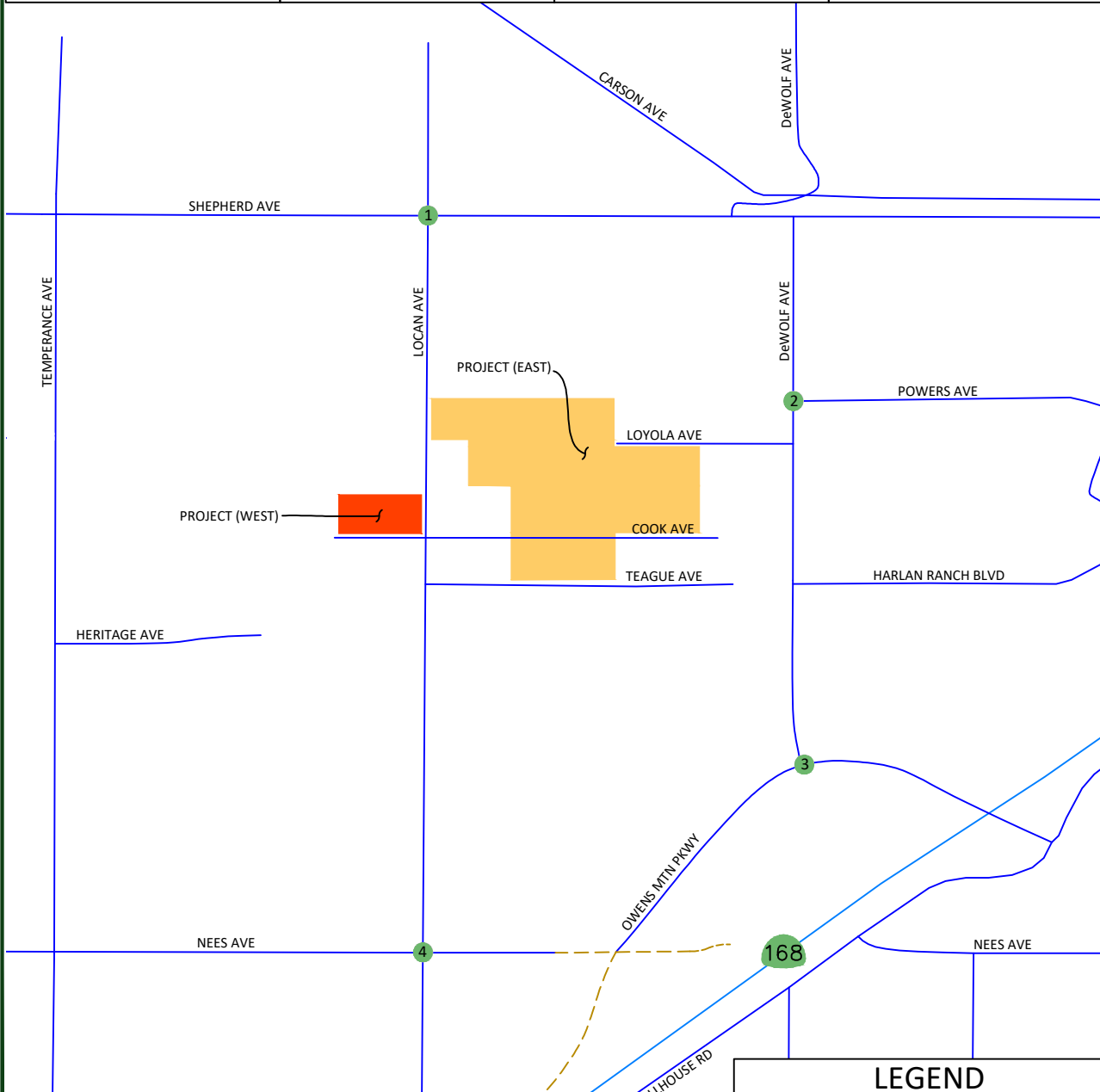
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Locan 35 - City of Clovis Existing - Traffic Volumes, Geometrics and Controls

Figure 2

AGENDA ITEM NO. 9.

<p>1. Locan Ave & Shepherd Ave</p>	<p>2. De Wolf Ave & Powers Ave</p>	<p>3. De Wolf Ave & Owens Mtn Pkwy</p>	<p>4. Locan Ave & Nees Ave</p>
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LEGEND

- # = STUDY INTERSECTION
- = FUTURE ROADWAY
- XX = AM PEAK HOUR TRIPS
- (XX) = PM PEAK HOUR TRIPS
- = STOP SIGN

Not To Scale



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Existing plus Project Traffic Conditions

Project Description

The Project includes the development of two (2) distinct areas – Project (West) and Project (East). Project (West) is located on the northwest corner of Locan Avenue and Cook Avenue and proposes to develop up to 37 single-family detached housing units. Project (East) is located on the northeast quadrant of Locan Avenue and Teague Avenue and proposes to develop up to 171 single-family detached housing units. Based on information provided to JLB, the Project will undergo a General Plan Amendment through the City of Clovis to modify the existing land use designation from Low Density Residential to Medium Density Residential. Figures 3 and 4 illustrate the latest Project Site Plans for Project (West) and Project (East), respectively.

Project Access

Based on information provided by the developer, access to and from the Project (West) site will be from one (1) point located along the west side of Locan Avenue approximately 175 feet north of Cook Avenue. Furthermore, access to and from the Project (East) site will be from a total of four (4) points. Two (2) of the access points are located along the east side of Locan Avenue. These include existing full access points to Rabaioli Avenue and Cook Avenue. The remaining two (2) access points are located along the west side of De Wolf Avenue. These include existing limited access points (right-in, right-out only) to Loyola Avenue and Trenton Lane. JLB analyzed the location of the proposed access points relative to the existing local roads and driveways in the Project's vicinity. A review of the Project's local streets to be constructed indicates that they are located at points that minimize traffic operational impacts to the existing roadway network.

Trip Generation

Trip generation rates for the proposed Project at buildout were obtained from the 10th Edition of the Trip Generation Manual published by the Institute of Transportation Engineers (ITE). Table II presents the trip generation for the proposed Project (West) site with trip generation rates for 37 Single-Family Detached Housing units. At buildout, the proposed Project (West) is estimated to generate a maximum of 349 daily trips, 27 AM peak hour trips and 37 PM peak hour trips. While the Project (East) proposes to develop the site with up to 171 units, the Project (East) site will replace nine (9) existing and occupied single-family detached housing units. Therefore, JLB subtracted these from the proposed units to yield a total of 162 units (171 proposed - 9 existing = 162 net new units). Therefore, Table III presents the trip generation for the proposed Project (East) site with trip generation rates for 162 Single-Family Detached Housing units. At buildout, the proposed Project (East) is estimated to generate a maximum of 1,529 daily trips, 120 AM peak hour trips and 160 PM peak hour trips.



Table II: Proposed Project Trip Generation (West)

Land Use (ITE Code)	Size	Unit	Daily		AM Peak Hour						PM Peak Hour					
			Rate	Total	Trip Rate	In	Out	In	Out	Total	Trip Rate	In	Out	In	Out	Total
						%						%				
Single-Family Detached Housing (210)	37	d.u.	9.44	349	0.74	25	75	7	20	27	0.99	63	37	23	14	37
Total Project Trips				349				7	20	27				23	14	37

Note: d.u. = Dwelling Units

Table III: Proposed Project Trip Generation (East)

Land Use (ITE Code)	Size	Unit	Daily		AM Peak Hour						PM Peak Hour					
			Rate	Total	Trip Rate	In	Out	In	Out	Total	Trip Rate	In	Out	In	Out	Total
						%						%				
Single-Family Detached Housing (210)	162	d.u.	9.44	1,529	0.74	25	75	30	90	120	0.99	63	37	101	59	160
Total Project Trips				1,529				30	90	120				101	59	160

Note: d.u. = Dwelling Units

Trip Distribution

The trip distribution assumptions were developed based on existing travel patterns, the Fresno COG Project Select Zones, the existing roadway network, engineering judgment, data provided by the developer, knowledge of the study area, existing residential and commercial densities, and the City of Clovis 2035 General Plan Circulation Element in the vicinity of the Project. Figures 5 and 6 illustrate the Project Only Trips (West) and Project Only Trips (East), respectively, to the study intersections.

Bikeways

Currently, Class II Bike Lanes exist in the vicinity of the proposed Project site along Shepherd Avenue, Locan Avenue and De Wolf Avenue. The City of Clovis 2035 General Plan recommends that Class II Bike Lanes be implemented on: 1) Shepherd Avenue west of State Route 168 through the City of Clovis SOI, 2) Locan Avenue south of Shepherd Avenue, 3) De Wolf Avenue south of Shepherd Avenue, 4) Owens Mountain Parkway west of State Route 168, and 5) Nees Avenue west of Owens Mountain Parkway through the City of Clovis SOI. Furthermore, the City of Clovis 2035 General Plan recommends that a Class III Bike Route be implemented on Powers Avenue between De Wolf Avenue and Harlan Ranch Boulevard. Therefore, it is recommended that the Project implement and retain the Class II Bike Lanes along its frontage to Locan Avenue.



Transit

Clovis Transit Stageline is the transit operator in the City of Clovis. At present, there are no Stageline Routes that operate in the vicinity of the proposed Project. The closest is Route 50, which runs on Temperance Avenue and Alluvial Avenue, approximately 1.25 miles southwest of the proposed Project. Route 50 operates at 60-minute intervals Monday through Saturday and its nearest stop to the Project is located on the west side of Temperance Avenue approximately 225 feet south of Alluvial Avenue. This Route provides a direct connection to Clovis Community Medical Center, Kaiser Medical Center, Mickey Cox Elementary School, Clovis Civic Center, Clark Junior High School, Clovis High School, Sierra Vista Mall, CART (Center for Applied Research and Technology), and Cal Skate. Retention of the existing and expansion of future transit routes is dependent on transit ridership demand and available funding.

Traffic Signal Warrants

Peak hour traffic signal warrants, as appropriate, were prepared for the unsignalized intersections in the Existing plus Project Traffic Conditions scenario. These warrants are found in Appendix J. The effects of right-turning traffic from the minor approach onto the major approach were taken into account using engineering judgement pursuant to the CA MUTCD guidelines for the preparation of traffic signal warrants. Under this scenario, the intersection of De Wolf Avenue and Owens Mountain Parkway is projected to satisfy the peak hour signal warrant during the PM peak period only.

Based on the signal warrant and engineering judgement, signalization of the intersection of De Wolf Avenue and Owens Mountain Parkway is not recommended. It is worth noting that the CA MUTCD states "satisfaction of a signal warrant or warrants shall not in itself require the installation of a traffic signal." Therefore, it is recommended that prior to the installation of a traffic signal, investigation of CA MUTCD warrants 4 and 7, as applicable, be conducted for this intersection.

Safe Routes to School

Kindergarten through 12th grade students from the Project will be served by the Clovis Unified School District (CUSD). The Clovis Unified School District provides transportation for students who live in excess of an established radius zone. The zone is a radius of 1.00 mile for grades Kindergarten through 6th and 2.50 miles for grades 7th through 12th.

Based on the attendance area boundaries at the time of the preparation of this TIA, elementary school students residing within the Project (West) site would attend Dry Creek Elementary School located on the northwest corner of Armstrong Avenue and Nees Avenue. Dry Creek Elementary School is located 1.00 and 1.13 miles from the nearest and farthest future home on the Project (West) site. Therefore, it is anticipated that elementary school students residing within the Project (West) site will be bussed to school.



Based on the attendance area boundaries at the time of the preparation of this TIA, middle school students residing within the Project (West) site would attend Alta Sierra Intermediate School located on the southeast corner of Peach Avenue and Teague Avenue. Alta Sierra Intermediate School is located 3.29 and 3.41 miles from the nearest and farthest future home on the Project (West) site. Therefore, it is anticipated that middle school students residing within the Project (West) site will be bussed to school.

Based on the attendance area boundaries at the time of the preparation of this TIA, high school students residing within the Project (West) site would attend Buchanan High School located on the southwest corner of Minnewawa Avenue and Teague Avenue. Buchanan High School is located 3.04 and 3.16 miles from the nearest and farthest future home on the Project (West) site. Therefore, it is anticipated that high school students residing within the Project (West) site will be bussed to school.

Based on the attendance area boundaries at the time of the preparation of this TIA, elementary school students residing within the Project (East) site would attend Bud Rank Elementary School located on the southwest corner of Leonard Avenue and Powers Avenue. Bud Rank Elementary School is located 0.51 and 0.88 miles from the nearest and farthest future home on the Project (East) site. Therefore, it is anticipated that elementary school students will need to walk, bike or be driven to school.

The most direct path from the Project (East) site to the Bud Rank Elementary School campus can begin from the intersection of De Wolf Avenue and Loyola Avenue. The intersection of De Wolf Avenue and Loyola Avenue is controlled by a one-way stop on Loyola Avenue and contains unmarked crosswalks on all approaches. Students may proceed to cross Loyola Avenue along the west side of De Wolf Avenue and proceed north along the west side of De Wolf Avenue toward the intersection of De Wolf Avenue and Powers Avenue. The intersection of De Wolf Avenue and Powers Avenue is controlled by a one-way stop on Powers Avenue and contains unmarked crosswalk on all approaches. Students may proceed to cross De Wolf Avenue along the south side of Powers Avenue and proceed east along the south side of Powers Avenue toward the intersection of Sanders Avenue and Powers Avenue. The intersection of Sanders Avenue and Powers Avenue is controlled by an all-way stop and contains marked crosswalks on all approaches. Students may proceed to cross Sanders Avenue along the south side of Powers Avenue and proceed east along the south side of Powers Avenue until reaching a campus entrance. While this area is well-developed with walkways and intersection controls, it is recommended that a high visibility crosswalk be installed across De Wolf Avenue along the south side of Powers Avenue. The high visibility crosswalk should include appropriate signage and markings pursuant to the California Manual on Uniform Traffic Control Devices (CA MUTCD).

Based on the attendance area boundaries at the time of the preparation of this TIA, middle school students residing within the Project (East) site would attend Granite Ridge Intermediate School located along the north side of International Avenue between Chestnut Avenue and Willow Avenue. Granite Ridge Intermediate School is located 4.63 and 5.04 miles from the nearest and farthest future home on the Project (East) site. Therefore, it is anticipated that middle school students residing within the Project (East) site will be bussed to school.



Based on the attendance area boundaries at the time of the preparation of this TIA, high school students residing within the Project (East) site would attend Clovis North High School located along the north side of International Avenue between Chestnut Avenue and Willow Avenue. Clovis North High School is located 4.63 and 5.04 miles from the nearest and farthest future home on the Project (East) site. Therefore, it is anticipated that high school students residing within the Project (East) site will be bussed to school.

Results of Existing plus Project Level of Service Analysis

The Existing plus Project Traffic Conditions scenario assumes the same roadway geometrics and traffic controls as those assumed in the Existing Traffic Conditions scenario. Figure 7 illustrates the Existing plus Project turning movement volumes, intersection geometrics and traffic controls. LOS worksheets for the Existing plus Project Traffic Conditions scenario are provided in Appendix F. Table IV presents a summary of the Existing plus Project peak hour LOS at the study intersections.

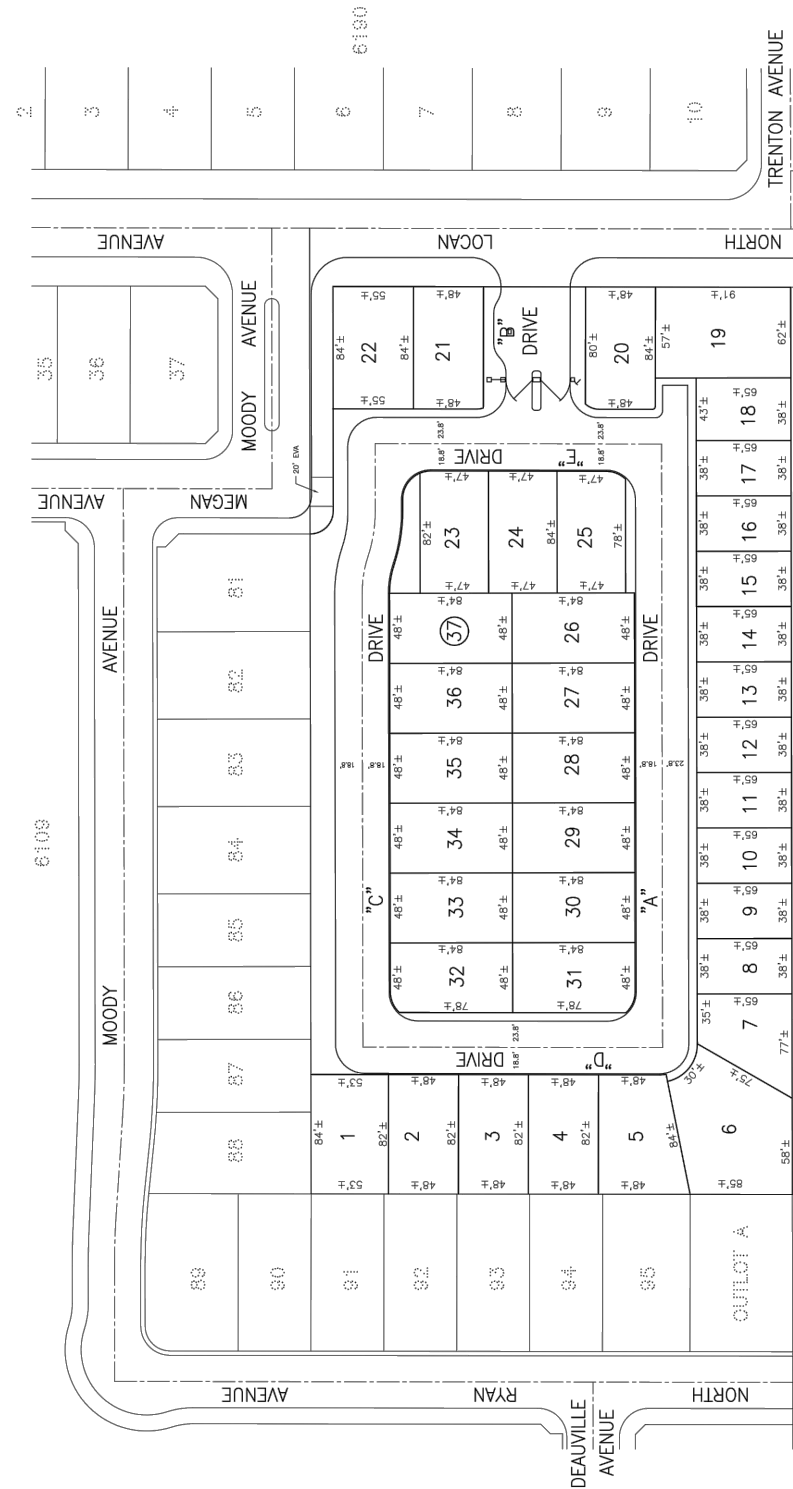
Under this scenario, the intersection of De Wolf Avenue and Owens Mountain Parkway is projected to exceed its LOS threshold during the AM peak period. To improve the LOS at this intersection, it is recommended that the following improvements be implemented.

- De Wolf Avenue / Owens Mountain Parkway
 - Add a southbound left-right lane with a receiving lane on Owens Mountain Parkway east of De Wolf Avenue;
 - Remove the southbound right-turn lane; and
 - Modify the intersection to accommodate the added lanes.

Table IV: Existing plus Project Intersection LOS Results

ID	Intersection	Intersection Control	AM Peak Hour		PM Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	Locan Avenue / Shepherd Avenue	Two-Way Stop	27.6	D	16.4	C
2	De Wolf Avenue / Powers Avenue	One-Way Stop	15.2	C	11.5	B
3	De Wolf Avenue / Owens Mountain Parkway	All-Way Stop	44.6	E	17.2	C
		All-Way Stop (Mitigated)	14.4	B	15.6	C
4	Locan Avenue / Nees Avenue	All-Way Stop	8.4	A	9.3	A

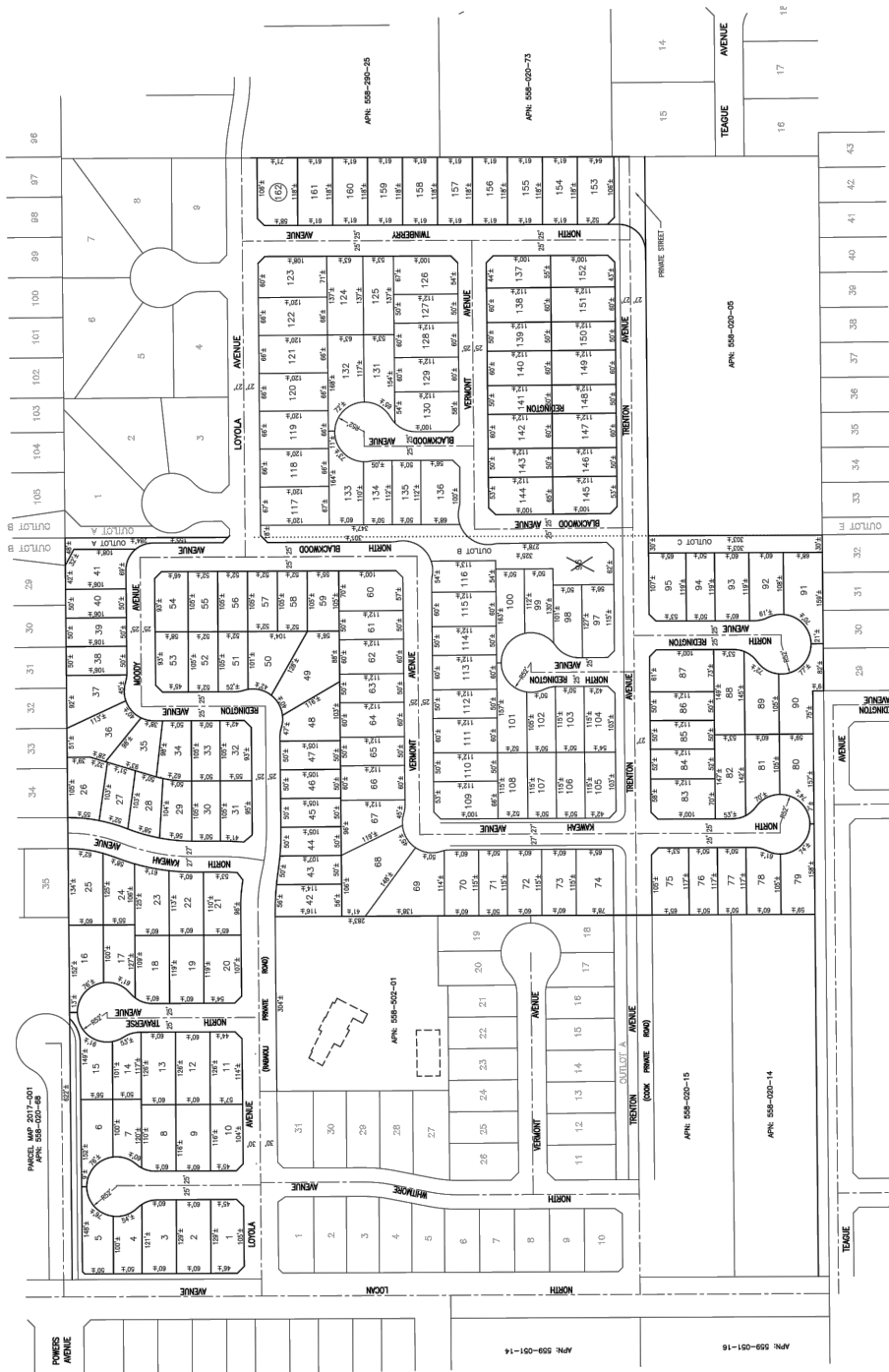
Note: LOS = Level of Service based on average delay on signalized intersections and All-Way STOP Controls
 LOS for two-way and one-way STOP controlled intersections are based on the worst approach/movement of the minor street.



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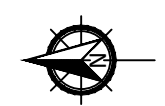


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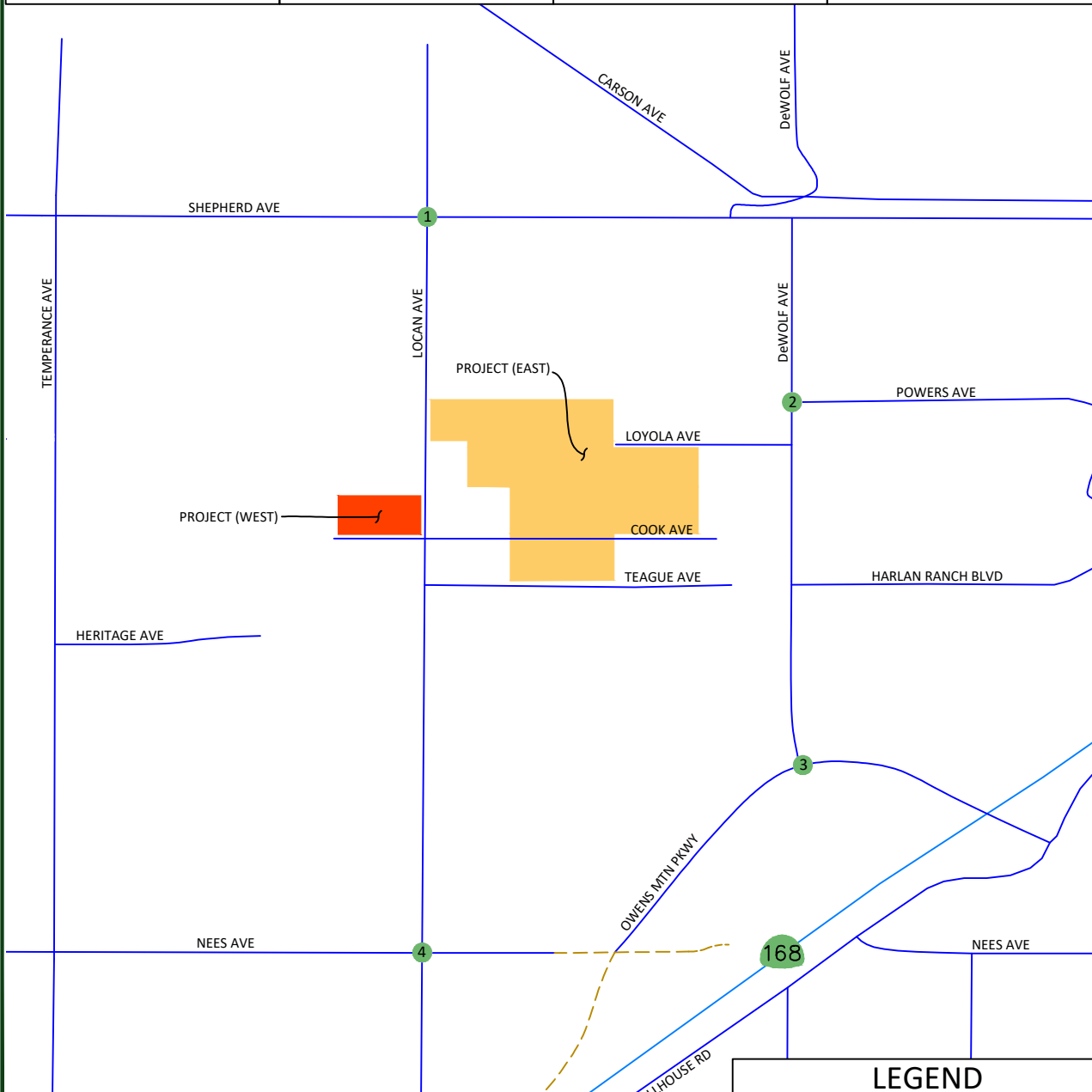
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Locan 35 - City of Clovis Project Only Trips (West)

Figure 5

AGENDA ITEM NO. 9.

<p>1. Locan Ave & Shepherd Ave</p>	<p>2. De Wolf Ave & Powers Ave</p>	<p>3. De Wolf Ave & Owens Mtn Pkwy</p>	<p>4. Locan Ave & Nees Ave</p>
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LEGEND

- # = STUDY INTERSECTION
- = FUTURE ROADWAY
- XX = AM PROJECT ONLY TRIPS
- (XX) = PM PROJECT ONLY TRIPS
- = STOP SIGN

Not To Scale



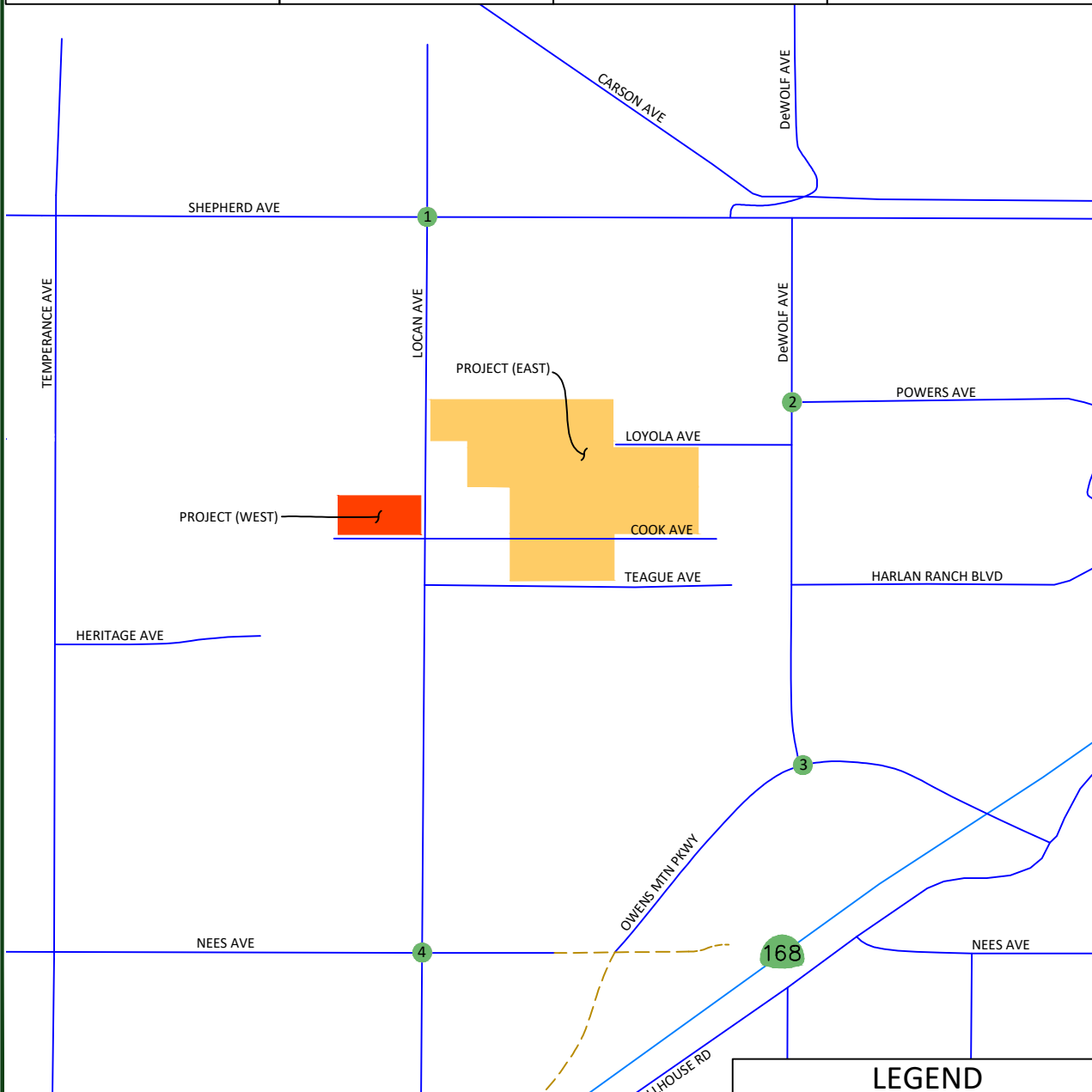
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Locan 35 - City of Clovis Project Only Trips (East)

Figure 6

AGENDA ITEM NO. 9.

<p>1. Locan Ave & Shepherd Ave</p>	<p>2. De Wolf Ave & Powers Ave</p>	<p>3. De Wolf Ave & Owens Mtn Pkwy</p>	<p>4. Locan Ave & Nees Ave</p>
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LEGEND

- # = STUDY INTERSECTION
- = FUTURE ROADWAY
- XX = AM PROJECT ONLY TRIPS
- (XX) = PM PROJECT ONLY TRIPS
- = STOP SIGN

Not To Scale



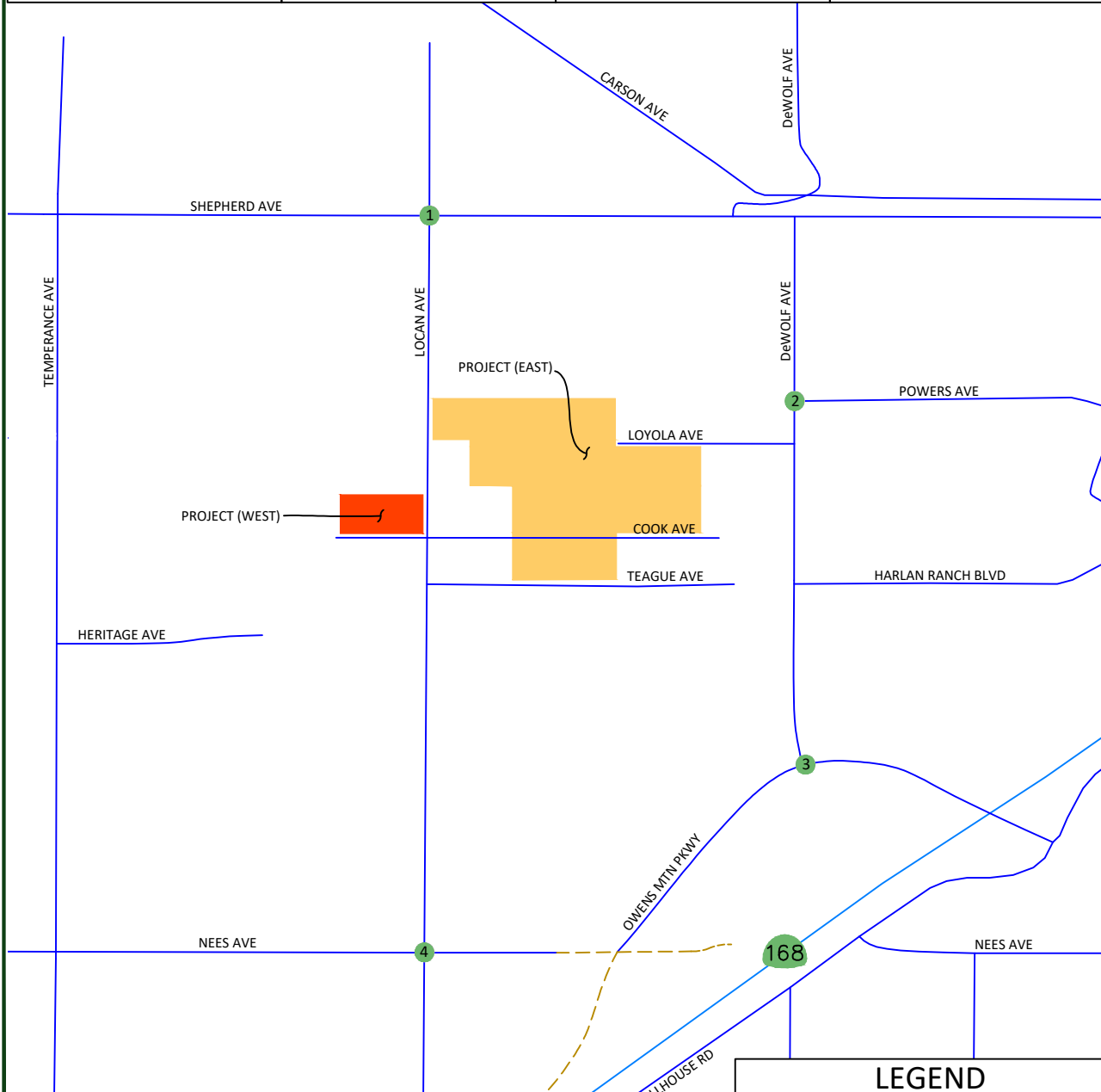
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Locan 35 - City of Clovis Existing plus Project - Traffic Volumes, Geometrics and Controls

Figure 7

AGENDA ITEM NO. 9.

<p>1. Locan Ave & Shepherd Ave</p> <p>0(0) 0(0) 0(0) 0(0) 381(217) 5(2) 32(18) 0(0) 213(334) 57(87) 92(63) 1(0) 18(16)</p>	<p>2. De Wolf Ave & Powers Ave</p> <p>123(112) 105(71) 67(32) 90(49) 114(104) 40(73)</p>	<p>3. De Wolf Ave & Owens Mtn Pkwy</p> <p>9(8) 580(236) 160(454) 14(37) 8(13) 43(17)</p>	<p>4. Locan Ave & Nees Ave</p> <p>264(132) 0(1) 1(2) 1(3) 4(3) 0(0) 114(254) 3(6) 4(7) 4(5) 1(2) 0(0)</p>
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LEGEND

- # = STUDY INTERSECTION
- = FUTURE ROADWAY
- XX = AM PEAK HOUR TRIPS
- (XX) = PM PEAK HOUR TRIPS
- = STOP SIGN

Not To Scale



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Near Term plus Project Traffic Conditions

Description of Approved and Pipeline Projects

Approved and Pipeline Projects consist of developments that are either under construction, built but not fully occupied, are not built but have final site development review (SDR) approval, or for which the lead agency or responsible agencies have knowledge of. The City of Clovis, County of Fresno and Caltrans staff were consulted throughout the preparation of this TIA regarding approved and/or known projects that could potentially impact the study intersections. JLB staff conducted a reconnaissance of the surrounding area to confirm the Near Term Projects. Subsequently, it was agreed that the projects listed in Table V were approved, near approval, or in the pipeline within the proximity of the proposed Project.

The trip generation listed in Table V is that which is anticipated to be added to the streets and highways by these projects between the time of the preparation of this report and five years from 2019. As shown in Table V, the total trip generation for the Near Term Projects is 62,256 daily trips, 4,980 AM peak hour trips and 6,419 PM peak hour trips. Figure 8 illustrates the location of the approved, near approval, or pipeline projects and their combined trip assignment to the study intersections and segments under the Near Term plus Project Traffic Conditions scenario.

Table V: Near Term Projects' Trip Generation

Approved Project Location	Approved or Pipeline Project Name	Daily Trips	AM Peak Hour	PM Peak Hour
A	TT 5546 (portion of) ¹	123	10	13
B	TT 5550 (portion of) ¹	66	5	7
C	TT 5720/A (portion of) ¹	94	7	10
D	TT 6109 (portion of) ²	2,105	165	221
E	TT 6128 (portion of) ¹	198	16	21
F	TT 6134A ¹	132	10	14
G	TT 6145 (portion of) ¹	500	39	52
H	TT 6154 ¹	897	70	94
I	TT 6180 ¹	557	44	58
J	TT 6190 (portion of) ²	255	20	27
K	TT 6200 ¹	5,390	423	565
L	TT 6263 ¹	1,312	103	138
M	Clovis Community Medical Center Expansion ²	30,008	1,622	2,652
N	Harlan Ranch Commerical ¹	4,687	105	407
O	Research & Technology Park ³	16,055	2,351	2,153
Total Approved and Pipeline Project Trips		62,256	4,980	6,419

Note: 1 = Trip Generation prepared by JLB Traffic Engineering, Inc. based on readily available information
 2 = Trip Generation based on JLB Traffic Engineering, Inc. Traffic Impact Analysis Report
 3 = Trip Generation based on Peters Engineering Group Traffic Impact Analysis Report

Traffic Signal Warrants

Peak hour traffic signal warrants, as appropriate, were prepared for the unsignalized intersections in the Near Term plus Project Traffic Conditions scenario. These warrants are found in Appendix J. The effects of right-turning traffic from the minor approach onto the major approach were taken into account using engineering judgement pursuant to the CA MUTCD guidelines for the preparation of traffic signal warrants. Under this scenario, the intersections of Locan Avenue and Shepherd Avenue, De Wolf Avenue and Owens Mountain Parkway, and Locan Avenue and Nees Avenue are projected to satisfy the peak hour signal warrant during both peak periods.

Based on the signal warrants and engineering judgement, signalization of the intersections of Locan Avenue and Shepherd Avenue and De Wolf Avenue and Owens Mountain Parkway is recommended. However, a roundabout at the intersection of De Wolf Avenue and Owens Mountain Parkway is also projected to provide an acceptable LOS and thus both a roundabout and a traffic signal were analyzed for this intersection under this scenario. Furthermore, signalization of the intersection of Locan Avenue and Nees Avenue is not recommended, especially since this intersection is projected to operate at an acceptable LOS during both peak periods. It is worth noting that the CA MUTCD states "satisfaction of a signal warrant or warrants shall not in itself require the installation of a traffic signal." Therefore, it is recommended that prior to the installation of a traffic signal, investigation of CA MUTCD warrants 4 and 7, as applicable, be conducted for this intersection.

Results of Near Term plus Project Level of Service Analysis

The Near Term plus Project Traffic Conditions scenario assumes the same roadway geometrics and traffic controls as those assumed in the Existing Traffic Conditions scenario. Figure 9 illustrates the Near Term plus Project turning movement volumes, intersection geometrics and traffic controls. LOS worksheets for the Near Term plus Project Traffic Conditions scenario are provided in Appendix G. Table VI presents a summary of the Near Term plus Project peak hour LOS at the study intersections.

Under this scenario, the intersections of Locan Avenue and Shepherd Avenue and De Wolf Avenue and Owens Mountain Parkway are projected to exceed their LOS threshold during both peak periods. To improve the LOS at these intersections, it is recommended that the following improvements be implemented.

- Locan Avenue / Shepherd Avenue
 - Signalize the intersection with protective left-turn phasing on the eastbound and westbound approaches and split phasing on the northbound and southbound approaches.
- De Wolf Avenue / Owens Mountain Parkway
 - Signalize the intersection with protective left-turn phasing on all approaches.



Between the Existing Traffic Conditions scenario and the Near Term plus Project Traffic Conditions scenario, the Project accounts for 2.9 percent of the daily trips, 2.9 percent of the AM peak hour trips and 3.0 percent of the PM peak hour trips of growth of traffic, while the rest of the growth is attributable to the Near Term Projects. Therefore, the mitigation measures presented under this scenario may not be necessary upon completion of the proposed Project. However, if all of the Near Term Projects are developed close to the completion date of the proposed Project, the detailed recommended improvements presented above may be necessary in order to improve the LOS to an acceptable threshold.

Table VI: Near Term plus Project Intersection LOS Results

ID	Intersection	Intersection Control	AM Peak Hour		PM Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	Locan Avenue / Shepherd Avenue	Two-Way Stop	>120.0	F	79.2	F
		Signalized (Mitigated)	18.6	B	30.3	C
2	De Wolf Avenue / Powers Avenue	One-Way Stop	18.4	C	15.1	C
3	De Wolf Avenue / Owens Mountain Parkway	All-Way Stop	>120.0	F	>120.0	F
		Signalized (Mitigated)	43.8	D	35.8	D
4	Locan Avenue / Nees Avenue	All-Way Stop	16.9	C	23.1	C

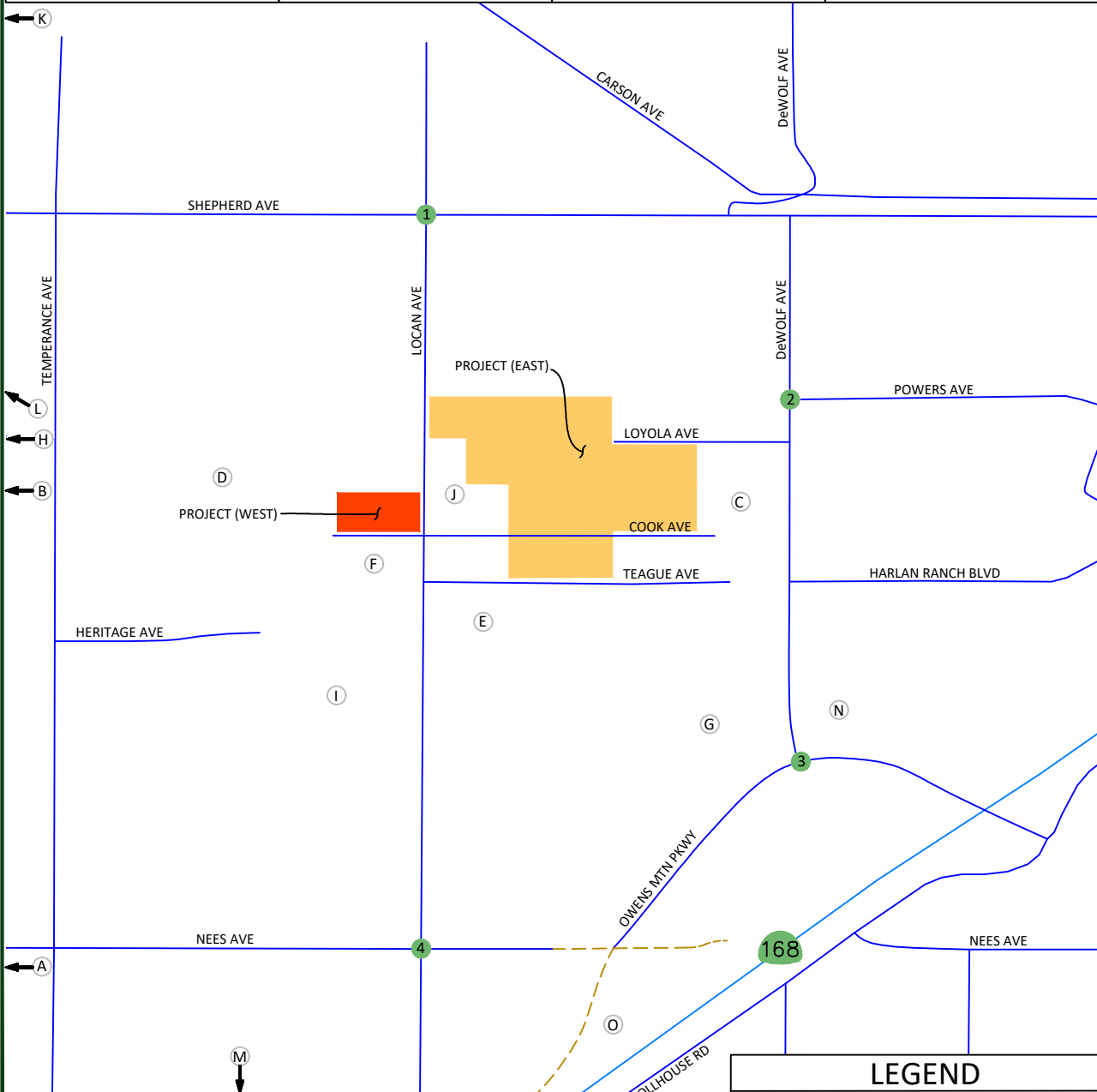
Note: LOS = Level of Service based on average delay on signalized intersections and All-Way STOP Controls
 LOS for two-way and one-way STOP controlled intersections are based on the worst approach/movement of the minor street.

Locan 35 - City of Clovis Near Term Projects' Trip Assignment

Figure 8

AGENDA ITEM NO. 9.

1.	Locan Ave & Shepherd Ave	2.	De Wolf Ave & Powers Ave	3.	De Wolf Ave & Owens Mtn Pkwy	4.	Locan Ave & Nees Ave



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LEGEND

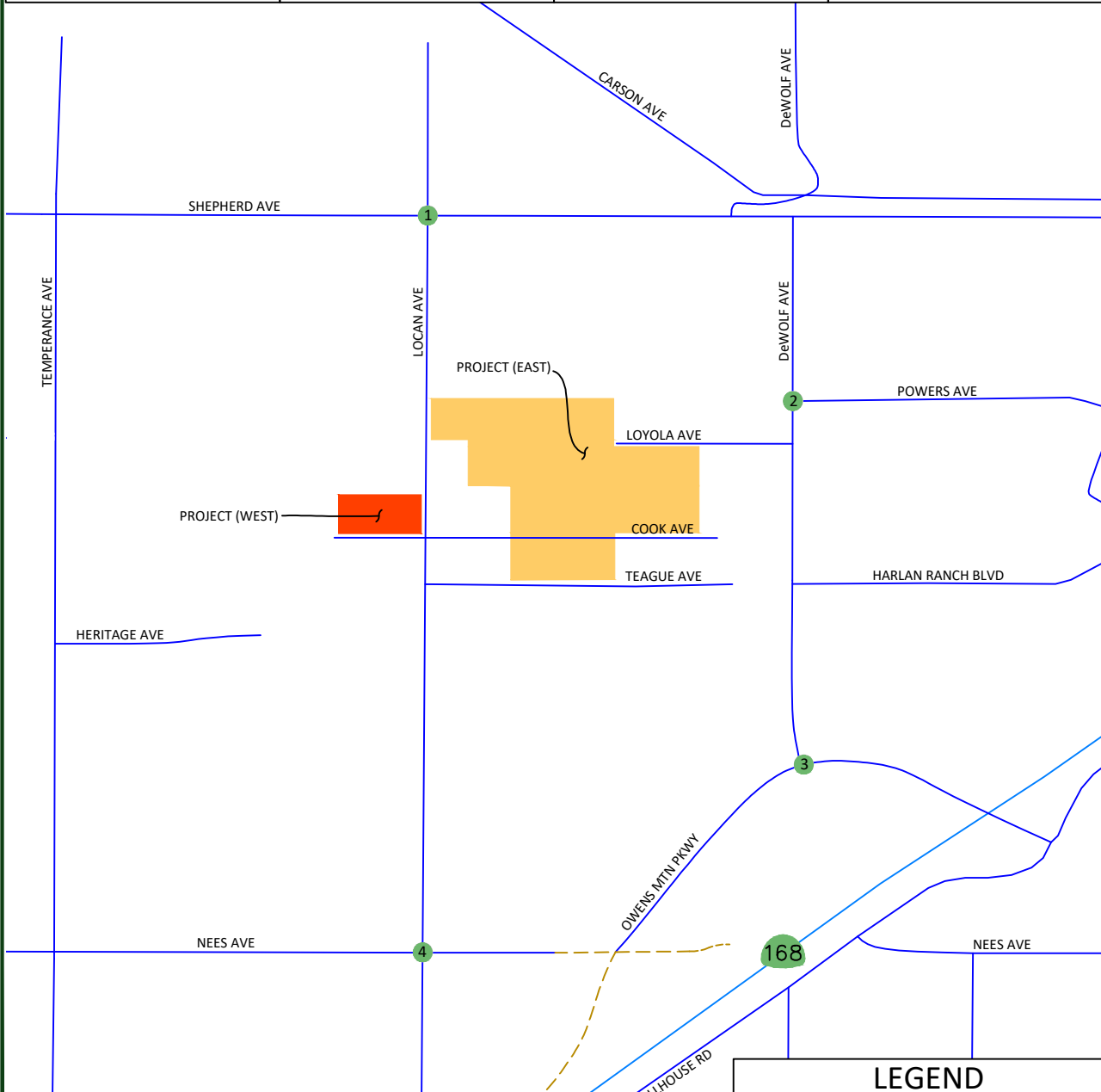
- # = STUDY INTERSECTION
- = FUTURE ROADWAY
- XX = AM NEAR TERM TRIPS
- (XX) = PM NEAR TERM TRIPS
- ⬇️ = STOP SIGN
- (X) = NEAR TERM PROJECT LOCATION

Not To Scale

Locan 35 - City of Clovis Near Term plus Project - Traffic Volumes, Geometrics and Control

Figure 9
AGENDA ITEM NO. 9.

<p>1. Locan Ave & Shepherd Ave</p> <p>0(0) 0(0) 0(0) 0(0) 430(341) 19(23) 32(18) 0(0) 313(427) 155(130) 129(154) 1(0) 34(39)</p>	<p>2. De Wolf Ave & Powers Ave</p> <p>176(163) 105(71) 67(32) 105(92) 129(187) 48(115)</p>	<p>3. De Wolf Ave & Owens Mtn Pkwy</p> <p>44(15) 630(347) 182(567) 467(157) 12(46) 116(481)</p>	<p>4. Locan Ave & Nees Ave</p> <p>382(204) 71(14) 24(17) 5(35) 16(73) 6(5) 150(393) 69(26) 150(29) 24(144) 11(70) 8(6)</p>
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LEGEND

- # = STUDY INTERSECTION
- = FUTURE ROADWAY
- XX = AM PEAK HOUR TRIPS
- (XX) = PM PEAK HOUR TRIPS
- = STOP SIGN

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Cumulative Year 2039 No Project Traffic Conditions

Traffic Signal Warrants

Peak hour traffic signal warrants, as appropriate, were prepared for the unsignalized intersections in the Cumulative Year 2039 No Project Traffic Conditions scenario. These warrants are found in Appendix J. The effects of right-turning traffic from the minor approach onto the major approach were taken into account using engineering judgement pursuant to the CA MUTCD guidelines for the preparation of traffic signal warrants. Under this scenario, the intersections of Locan Avenue and Shepherd Avenue, De Wolf Avenue and Owens Mountain Parkway, and Locan Avenue and Nees Avenue are projected to satisfy the peak hour signal warrant during both peak periods, while the intersection of De Wolf Avenue and Powers Avenue is projected to satisfy the peak hour signal warrant during the AM peak period only.

Based on the signal warrants and engineering judgement, signalization of the intersections of Locan Avenue and Shepherd Avenue and De Wolf Avenue and Owens Mountain Parkway is recommended. However signalization of the intersections of De Wolf Avenue and Powers Avenue and Locan Avenue and Nees Avenue is not recommended. It is worth noting that the CA MUTCD states "satisfaction of a signal warrant or warrants shall not in itself require the installation of a traffic signal." Therefore, it is recommended that prior to the installation of a traffic signal, investigation of CA MUTCD warrants 4 and 7, as applicable, be conducted for these intersections.

Results of Cumulative Year 2039 No Project Level of Service Analysis

The Cumulative Year 2039 No Project Traffic Conditions scenario assumes the same roadway geometrics and traffic controls as those assumed in the Existing Traffic Conditions scenario with one exception. This scenario assumes that Owens Mountain Parkway will exist between Temperance Avenue and De Wolf Avenue. Figure 10 illustrates the Cumulative Year 2039 No Project turning movement volumes, intersection geometrics and traffic controls. LOS worksheets for the Cumulative Year 2035 plus Project Traffic Conditions scenario are provided in Appendix H. Table VII presents a summary of the Cumulative Year 2039 No Project peak hour LOS at the study intersections.

Under this scenario, intersections of Locan Avenue and Shepherd Avenue, De Wolf Avenue and Powers Avenue, and De Wolf Avenue and Owens Mountain Parkway are projected to exceed their LOS threshold during one or both peak periods. To improve the LOS at these intersections, it is recommended that the following improvements be implemented.

- Locan Avenue / Shepherd Avenue
 - Signalize the intersection with protective left-turn phasing on the eastbound and westbound approaches and split phasing on the northbound and southbound approaches.
- De Wolf Avenue / Powers Avenue
 - Modify the westbound left-right lane to a left-turn lane; and
 - Add a westbound right-turn lane.



- De Wolf Avenue / Owens Mountain Parkway
 - Modify the westbound through-right lane to a through lane;
 - Add a westbound right-turn lane;
 - Add a southbound left-right lane with a receiving lane on Owens Mountain Parkway east of De Wolf Avenue;
 - Remove the southbound right-turn lane;
 - Signalize the intersection with protective left-turn phasing on all approaches; and
 - Modify the intersection to accommodate the added lanes.

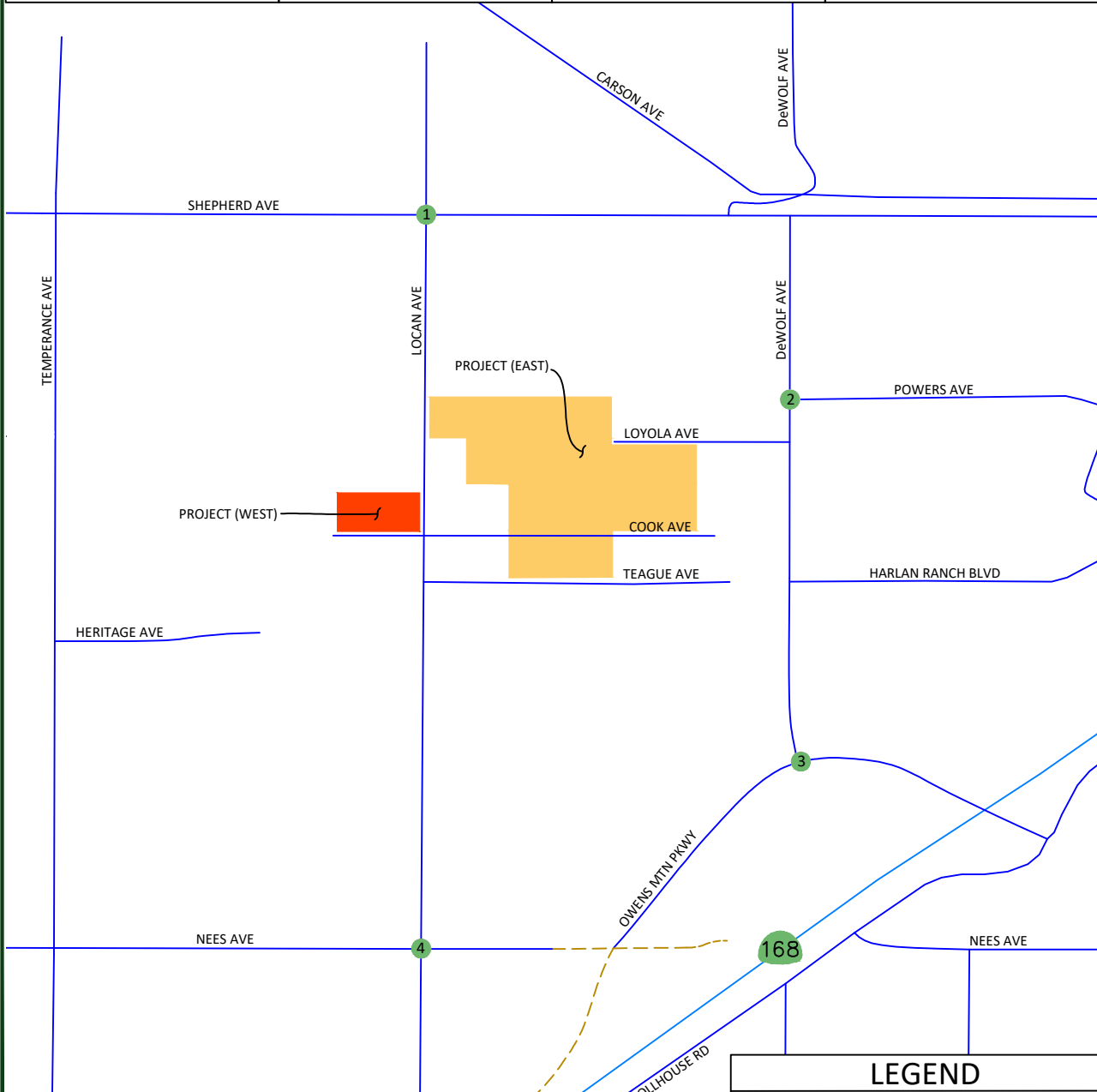
Table VII: Cumulative Year 2039 No Project Intersection LOS Results

ID	Intersection	Intersection Control	AM Peak Hour		PM Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	Locan Avenue / Shepherd Avenue	Two-Way Stop	>120.0	F	>120.0	F
		Signalized (Improved)	38.9	D	27.5	C
2	De Wolf Avenue / Powers Avenue	One-Way Stop	45.2	E	20.1	C
		One-Way Stop (Improved)	30.9	D	18.4	C
3	De Wolf Avenue / Owens Mountain Parkway	All-Way Stop	>120.0	F	>120.0	F
		Signalized (Improved)	19.4	B	14.0	B
4	Locan Avenue / Nees Avenue	All-Way Stop	17.1	C	20.6	C

Note: LOS = Level of Service based on average delay on signalized intersections and All-Way STOP Controls.
 LOS for two-way STOP controlled intersections are based on the worst approach/movement of the minor street.

Locan 35 - City of Clovis
 Cumulative Year 2039 No Project - Traffic Volumes, Geometrics

<p>1. Locan Ave & Shepherd Ave</p>	<p>2. De Wolf Ave & Powers Ave</p>	<p>3. De Wolf Ave & Owens Mtn Pkwy</p>	<p>4. Locan Ave & Nees Ave</p>
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LEGEND

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- (XX) = PM PEAK HOUR TRIPS
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Cumulative Year 2039 plus Project Traffic Conditions

Traffic Signal Warrants

Peak hour traffic signal warrants, as appropriate, were prepared for the unsignalized intersections in the Cumulative Year 2039 plus Project Traffic Conditions scenario. These warrants are found in Appendix J. The effects of right-turning traffic from the minor approach onto the major approach were taken into account using engineering judgement pursuant to the CA MUTCD guidelines for the preparation of traffic signal warrants. Under this scenario, the intersections of Locan Avenue and Shepherd Avenue, De Wolf Avenue and Owens Mountain Parkway, and Locan Avenue and Nees Avenue are projected to satisfy the peak hour signal warrant during both peak periods, while the intersection of De Wolf Avenue and Powers Avenue is projected to satisfy the peak hour signal warrant during the AM peak period only.

Based on the signal warrants and engineering judgement, signalization of the intersections of Locan Avenue and Shepherd Avenue and De Wolf Avenue and Owens Mountain Parkway is recommended. However, signalization of the intersections of De Wolf Avenue and Powers Avenue and Locan Avenue and Nees Avenue is not recommended. It is worth noting that the CA MUTCD states "satisfaction of a signal warrant or warrants shall not in itself require the installation of a traffic signal." Therefore, it is recommended that prior to the installation of a traffic signal, investigation of CA MUTCD warrants 4 and 7, as applicable, be conducted for these intersections.

Results of Cumulative Year 2039 plus Project Level of Service Analysis

The Cumulative Year 2039 plus Project Traffic Conditions scenario assumes the same roadway geometrics and traffic controls as those assumed in the Existing Traffic Conditions scenario with one exception. This scenario assumes that Owens Mountain Parkway will exist between Temperance Avenue and De Wolf Avenue. Figure 11 illustrates the Cumulative Year 2039 plus Project turning movement volumes, intersection geometrics and traffic controls. LOS worksheets for the Cumulative Year 2039 plus Project Traffic Conditions scenario are provided in Appendix I. Table VIII presents a summary of the Cumulative Year 2039 plus Project peak hour LOS at the study intersections.

Under this scenario, all study intersections are projected to exceed their LOS threshold during one or both peak periods. To improve the LOS at these intersections, it is recommended that the following improvements be implemented.

- Locan Avenue / Shepherd Avenue
 - Signalize the intersection with protective left-turn phasing on the eastbound and westbound approaches and split phasing on the northbound and southbound approaches.
- De Wolf Avenue / Powers Avenue
 - Modify the westbound left-right lane to a left-turn lane; and
 - Add a westbound right-turn lane.



- De Wolf Avenue / Owens Mountain Parkway
 - Modify the westbound through-right lane to a through lane;
 - Add a westbound right-turn lane;
 - Add a southbound left-right lane with a receiving lane on Owens Mountain Parkway east of De Wolf Avenue;
 - Remove the southbound right-turn lane;
 - Signalize the intersection with protective left-turn phasing on all approaches; and
 - Modify the intersection to accommodate the added lanes.
- Locan Avenue / Nees Avenue
 - Add an eastbound left-turn lane;
 - Modify the eastbound left-through-lane to a through-right lane; and
 - Modify the intersection to accommodate the added lane.

Table VIII: Cumulative Year 2039 plus Project Intersection LOS Results

ID	Intersection	Intersection Control	AM Peak Hour		PM Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	Locan Avenue / Shepherd Avenue	Two-Way Stop	>120.0	F	>120.0	F
		Signalize (Mitigated)	46.8	D	22.5	C
2	De Wolf Avenue / Powers Avenue	One-Way Stop	47.3	E	21.1	C
		One-Way Stop (Mitigated)	32.1	D	19.1	C
3	De Wolf Avenue / Owens Mountain Parkway	All-Way Stop	>120.0	F	>120.0	F
		Signalized (Mitigated)	20.1	C	14.2	B
4	Locan Avenue / Nees Avenue	All-Way Stop	20.8	C	40.2	E
		All-Way Stop (Mitigated)	17.6	C	22.0	C

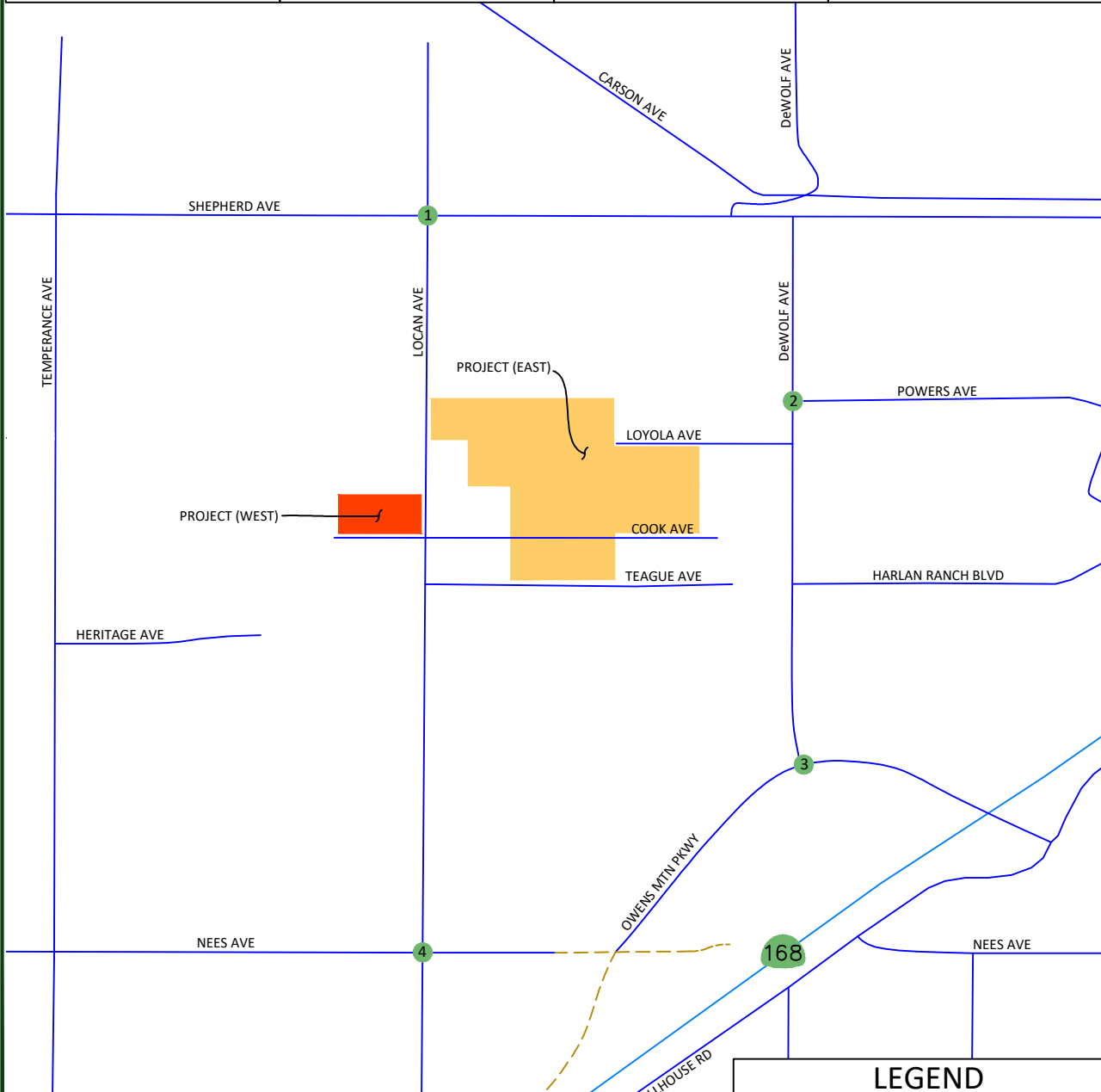
Note: LOS = Level of Service based on average delay on signalized intersections and All-Way STOP Controls.
 LOS for two-way STOP controlled intersections are based on the worst approach/movement of the minor street.

Project Only Trips to State Facilities

The Project Only Trips (West) and Project Only Trips (East) to the interchange of State Route 168 and Owens Mountain Parkway are illustrated in Figures 12 and 13, respectively. Similarly, the Project Only Trips (West) and Project Only Trips (East) to the interchange of State Route 168 and Temperance Avenue are illustrated in Figures 14 and 15, respectively.

Locan 35 - City of Clovis Cumulative Year 2039 plus Project - Traffic Volumes, Geometrics Controls

1.	Locan Ave & Shepherd Ave	2.	De Wolf Ave & Powers Ave	3.	De Wolf Ave & Owens Mtn Pkwy	4.	Locan Ave & Nees Ave



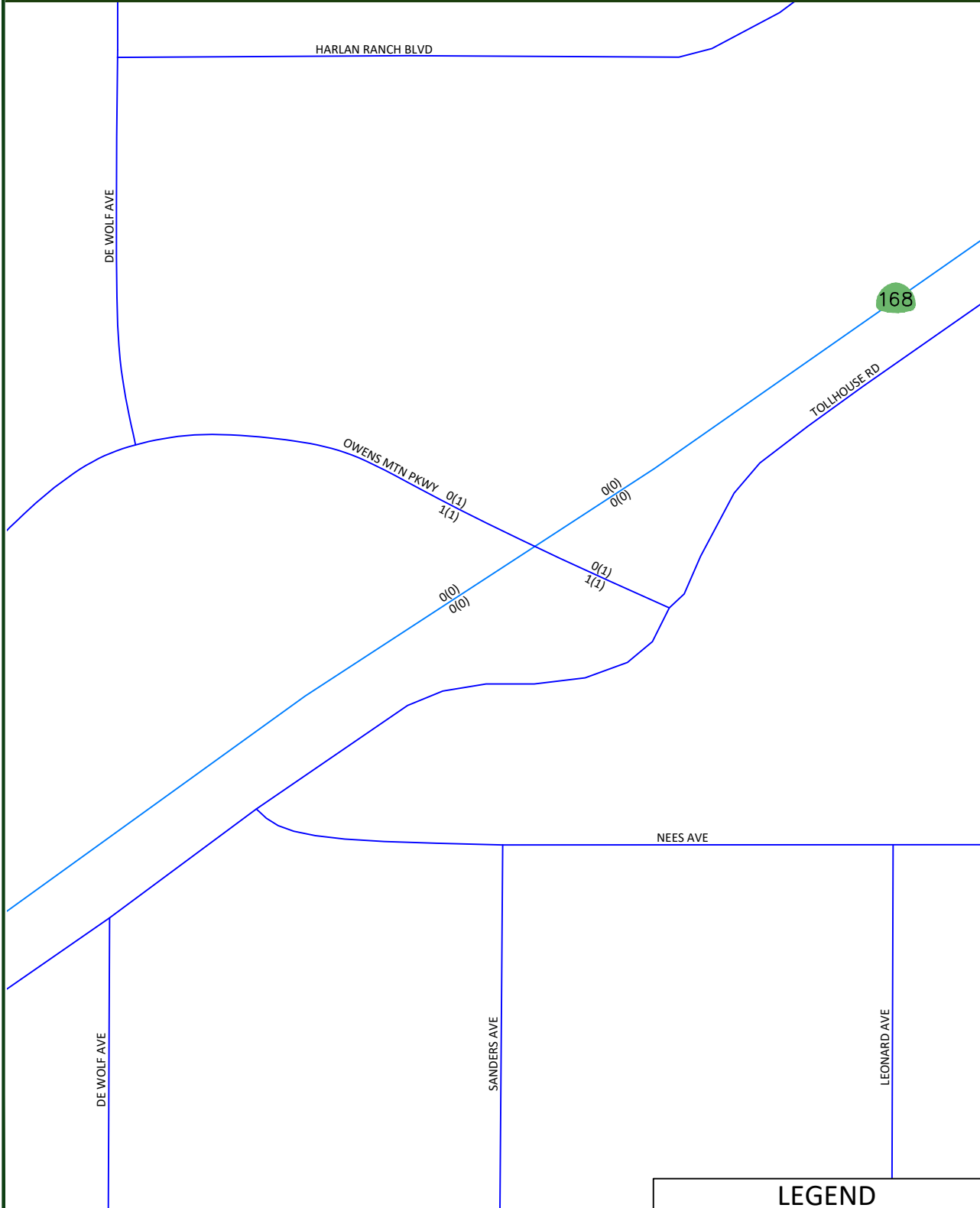
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- # = STUDY INTERSECTION
- - - = FUTURE ROADWAY
- XX = AM PEAK HOUR TRIPS
- (XX) = PM PEAK HOUR TRIPS
- = STOP SIGN

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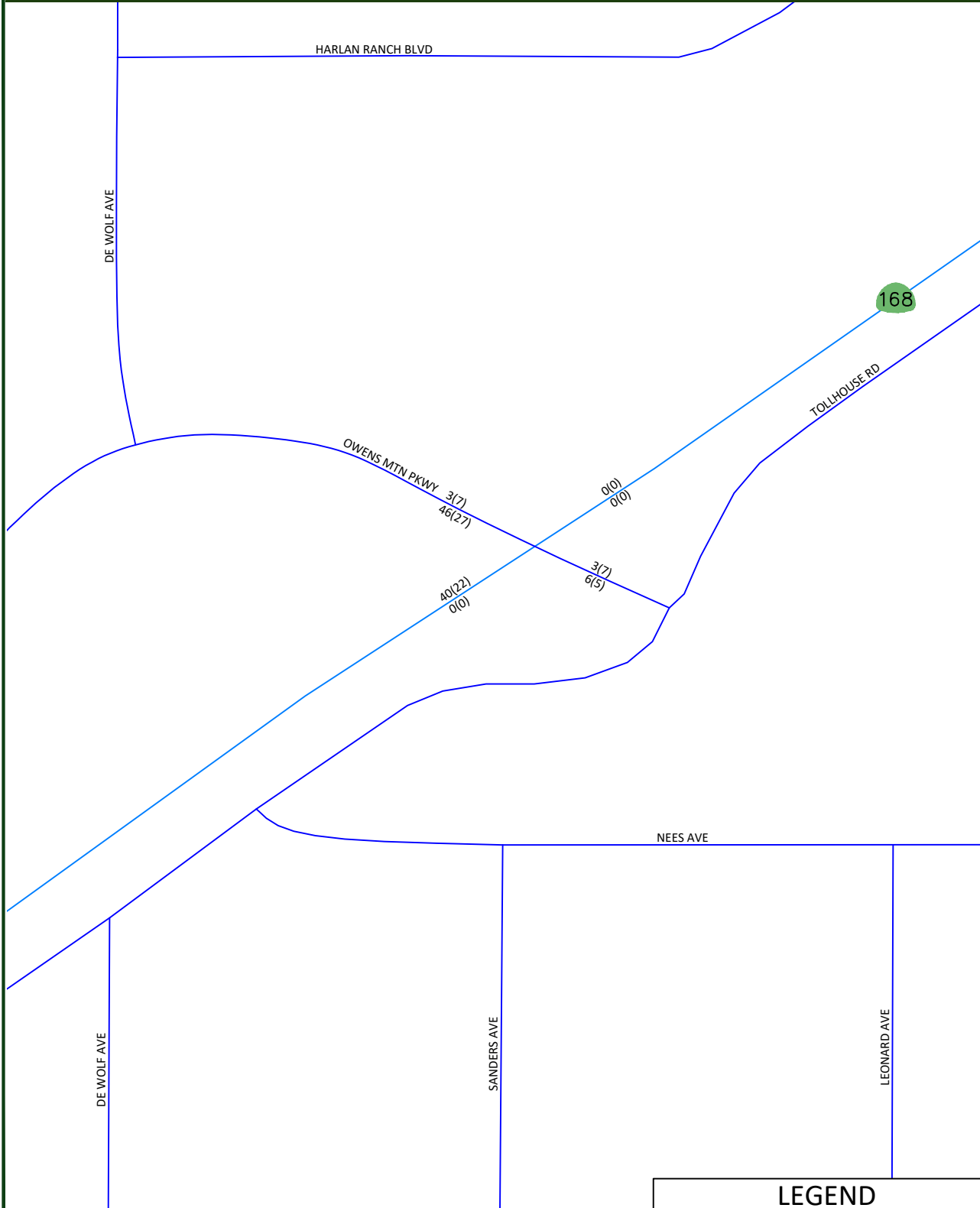


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XX = AM PROJECT ONLY TRIPS
(XX) = PM PROJECT ONLY TRIPS



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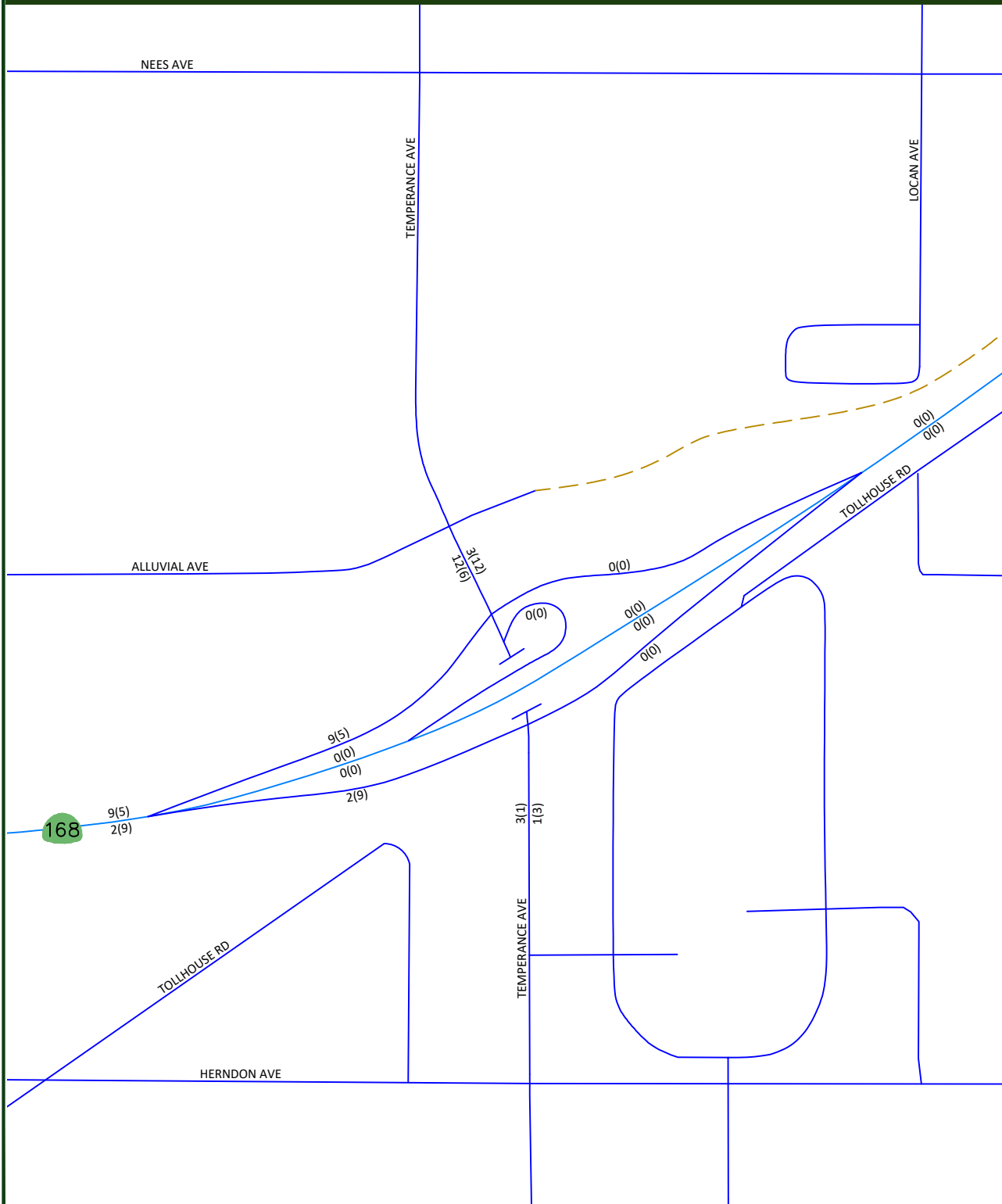
XX = AM PROJECT ONLY TRIPS
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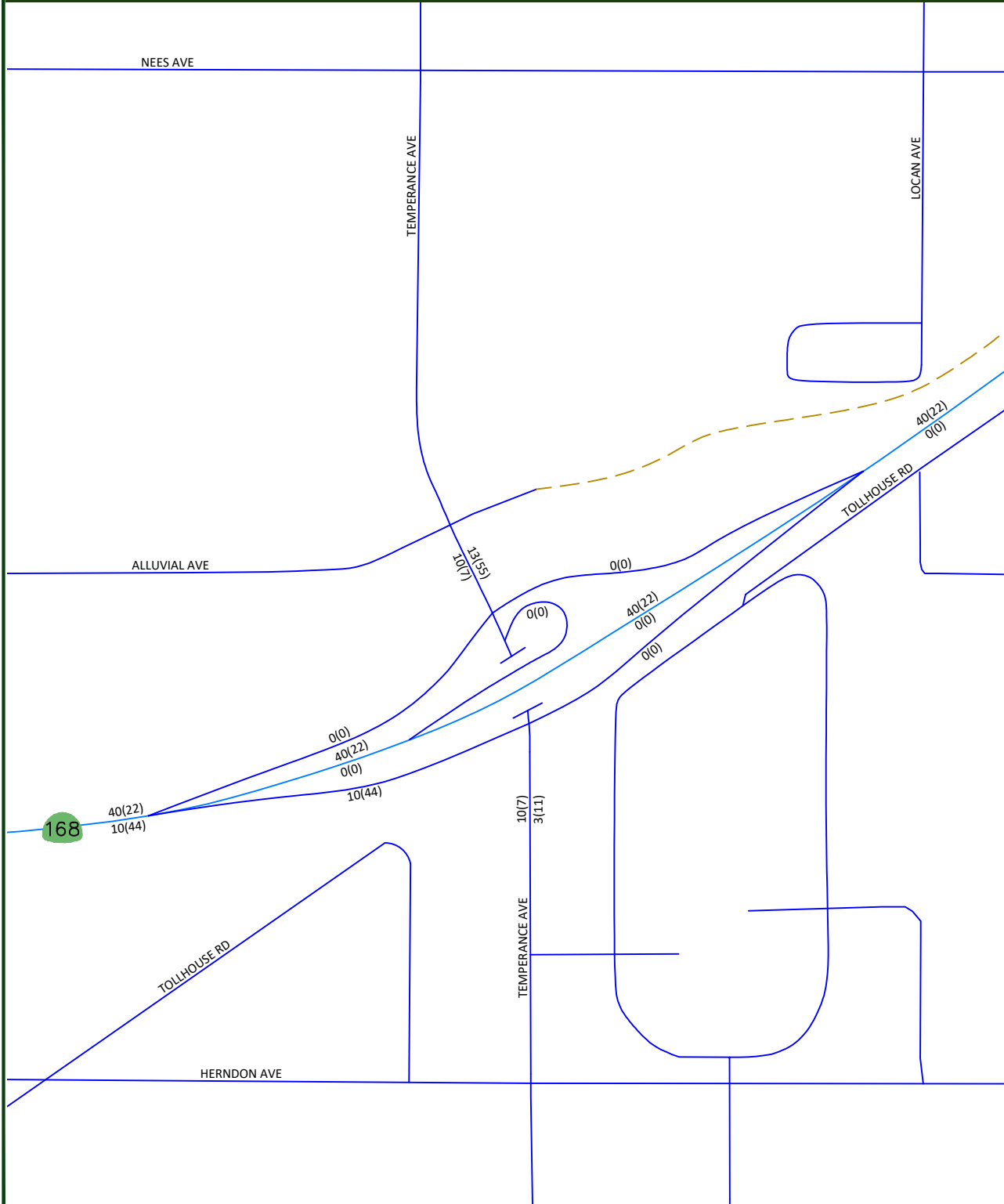


LEGEND

- XX = AM PROJECT ONLY TRIPS
 - (XX) = PM PROJECT ONLY TRIPS
 - = FUTURE ROADWAY
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Queuing Analysis

Table IX provides a queue length summary for left-turn and right-turn lanes at the study intersections under all study scenarios. The queuing analyses for the study intersections are contained in the LOS worksheets for the respective scenarios. Appendix D contains the methodologies used to evaluate these intersections. Queuing analyses were completed using Sim Traffic output information. Synchro provides both 50th and 95th percentile maximum queue lengths (in feet). According to the Synchro manual, “the 50th percentile maximum queue is the maximum back of queue on a typical cycle and the 95th percentile queue is the maximum back of queue with 95th percentile volumes.” The queues shown on Table IX are the 95th percentile queue lengths for the respective lane movements.

The *Highway Design Manual* (HDM) provides guidance for determining deceleration lengths for the left-turn and right-turn lanes based on design speeds. Per the HDM criteria, “tapers for right-turn lanes are usually un-necessary since the main line traffic need not be shifted laterally to provide space for the right-turn lane. If, in some rare instances, a lateral shift were needed, the approach taper would use the same formula as for a left-turn lane.” Therefore, a bay taper length pursuant to the Caltrans HDM would need to be added, as necessary, to the recommended storage lengths presented in Table IX.

Based on the SimTraffic output files and engineering judgement, it is recommended that the storage capacity for the following be considered for the Cumulative Year 2039 plus Project Traffic Conditions. At the remaining approaches of the study intersections, the existing storage capacity will be sufficient to accommodate the maximum queue.

- De Wolf Avenue / Powers Avenue
 - Consider setting the storage capacity of the westbound right-turn lane to 75 feet.
- De Wolf Avenue / Owens Mountain Parkway
 - Consider setting the storage capacity of the westbound right-turn lane to 250 feet.
- Locan Avenue / Nees Avenue
 - Consider setting the storage capacity of the eastbound left-turn lane to 150 feet.



Table IX: Queuing Analysis

ID	Intersection	Existing Queue Storage Length (ft.)		Existing		Existing plus Project		Near Term plus Project		Cumulative Year 2039 No Project		Cumulative Year 2039 plus Project	
				AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1	Locan Avenue / Shepherd Avenue	EB Left	250	36	35	25	11	48	39	68	40	59	40
		WB Left	250	0	0	8	0	47	42	137	43	133	42
2	De Wolf Avenue / Powers Avenue	WB Left-Right	>500	64	48	77	57	80	59	*	*	*	*
		WB Left	>500	*	*	*	*	*	*	93	71	76	96
		WB Right	*	*	*	*	*	*	*	66	51	58	49
		SB Left	150	43	38	43	38	36	39	63	57	61	50
3	De Wolf Avenue / Owens Mountain Parkway	EB Left	200	28	27	17	30	28	55	102	82	85	83
		WB Right	*	*	*	*	*	*	*	135	231	107	224
		SB Left	235	137	63	74	49	367	212	191	134	173	135
		SB Left-Right	>300	*	*	79	46	*	*	238	167	216	178
		SB Right	>300	30	23	*	*	139	21	*	*	*	*
4	Locan Avenue / Nees Avenue	EB Left	*	*	*	*	*	*	*	*	*	67	141

Note: * = Does not exist or is not projected to exist



Project's Pro-Rata Fair Share of Future Transportation Improvements

The Project's fair share percentage impacts of Project (West) and Project (East) to study intersections projected to fall below their LOS threshold are provided in Tables X and XI, respectively. The Project's fair share percentage impacts were calculated pursuant to the Caltrans Guide for the Preparation of Traffic Impact Studies. The Project's pro-rata fair shares were calculated utilizing the Existing volumes, Project Only Trips (West), Project Only Trips (East) and Cumulative Year 2039 plus Project volumes. Figure 2 illustrates the Existing traffic volumes, Figure 5 illustrates the Project Only Trips (West), Figure 6 illustrates the Project Only Trips (East), and Figure 11 illustrates the Cumulative Year 2039 plus Project traffic volumes. Since the critical peak period for the study facilities was determined to be during the AM peak, the AM peak volumes are utilized to determine the Project's pro-rata fair share.

It is recommended that the Project (West) and Project (East) contribute their equitable fair share as listed in Tables X XI, respectively, for the future improvements necessary to maintain an acceptable LOS. However, fair share contributions should only be made for those facilities, or portion thereof, currently not funded by the responsible agencies roadway impact fee program(s) or grant funded projects, as appropriate. For those improvements not presently covered by local and regional roadway impact fee programs or grant funding, it is recommended that the Project contribute its equitable fair share. Payment of the Project's equitable fair share in addition to the local and regional impact fee programs would satisfy the Project's traffic mitigation measures.

This study does not provide construction costs for the recommended mitigation measures; therefore, if the recommended mitigation measures are implemented, it is recommended that the developer work with the City of Clovis to develop the estimated construction cost.

Table X: Project's Fair Share of Future Roadway Improvements (West)

ID	Intersection	Existing Traffic Volumes (AM Peak)	Cumulative Year 2039 plus Project Traffic Volumes (AM Peak)	Project Only Trips (East) (AM Peak)	Project's Fair Share (%)
1	Locan Avenue / Shepherd Avenue	771	1,867	5	0.46
2	De Wolf Avenue / Powers Avenue	533	1,025	0	0.00
3	De Wolf Avenue / Owens Mountain Parkway	763	1,957	1	0.08
4	Locan Avenue / Nees Avenue	330	1,054	22	3.04

Note: Project Fair Share = ((Project Only Trips (West)) / (Cumulative Year 2039 + Project Traffic Volumes - Existing Traffic Volumes)) x 100

Table XI: Project's Fair Share of Future Roadway Improvements (East)

ID	Intersection	Existing Traffic Volumes (AM Peak)	Cumulative Year 2039 plus Project Traffic Volumes (AM Peak)	Project Only Trips (West) (AM Peak)	Project's Fair Share (%)
1	Locan Avenue / Shepherd Avenue	771	1,867	23	2.10
2	De Wolf Avenue / Powers Avenue	533	1,025	6	1.22
3	De Wolf Avenue / Owens Mountain Parkway	763	1,957	50	4.19
4	Locan Avenue / Nees Avenue	330	1,054	44	6.08

Note: Project Fair Share = ((Project Only Trips (East)) / (Cumulative Year 2039 + Project Traffic Volumes - Existing Traffic Volumes)) x 100



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Conclusions and Recommendations

Conclusions and recommendations regarding the proposed Project are presented below.

Existing Traffic Conditions

- At present, all study intersections operate at an acceptable LOS during both peak periods.

Existing plus Project Traffic Conditions

- JLB analyzed the location of the proposed access points relative to the existing local roads and driveways in the Project's vicinity. A review of the Project's local streets to be constructed indicates that they are located at points that minimize traffic operational impacts to the existing roadway network.
- At buildout, the proposed Project (West) is estimated to generate a maximum of 349 daily trips, 27 AM peak hour trips and 37 PM peak hour trips.
- At buildout, the proposed Project (East) is estimated to generate a maximum of 1,529 daily trips, 120 AM peak hour trips and 160 PM peak hour trips.
- It is recommended that the Project implement and retain the Class II Bike Lanes along its frontage to Locan Avenue.
- It is recommended that a high visibility crosswalk be installed across De Wolf Avenue along the south side of Powers Avenue. The high visibility crosswalk should include appropriate signage and markings pursuant to the California Manual on Uniform Traffic Control Devices (CA MUTCD).
- Under this scenario, the intersection of De Wolf Avenue and Owens Mountain Parkway is projected to exceed its LOS threshold during the AM peak period. To improve the LOS at this intersection, it is recommended that the following improvements be implemented.
 - De Wolf Avenue / Owens Mountain Parkway
 - Add a southbound left-right lane with a receiving lane on Owens Mountain Parkway east of De Wolf Avenue;
 - Remove the southbound right-turn lane; and
 - Modify the intersection to accommodate the added lanes.

Near Term plus Project Traffic Conditions

- The total trip generation for the Near Term Projects is 62,256 daily trips, 4,980 AM peak hour trips and 6,419 PM peak hour trips.
- Under this scenario, the intersections of Locan Avenue and Shepherd Avenue and De Wolf Avenue and Owens Mountain Parkway are projected to exceed their LOS threshold during both peak periods. To improve the LOS at these intersections, it is recommended that the following improvements be implemented.
 - Locan Avenue / Shepherd Avenue
 - Signalize the intersection with protective left-turn phasing on the eastbound and westbound approaches and split phasing on the northbound and southbound approaches.
 - De Wolf Avenue / Owens Mountain Parkway
 - Signalize the intersection with protective left-turn phasing on all approaches.



- The Project accounts for 2.9 percent of the daily trips, 2.9 percent of the AM peak hour trips and 3.0 percent of the PM peak hour trips of growth of traffic, while the rest of the growth is attributable to the Near Term Projects. Therefore, the mitigation measures presented under this scenario may not be necessary upon completion of the proposed Project.

Cumulative Year 2039 No Project Traffic Conditions

- Under this scenario, intersections of Locan Avenue and Shepherd Avenue, De Wolf Avenue and Powers Avenue, and De Wolf Avenue and Owens Mountain Parkway are projected to exceed their LOS threshold during one or both peak periods. To improve the LOS at these intersections, it is recommended that the following improvements be implemented.
 - Locan Avenue / Shepherd Avenue
 - Signalize the intersection with protective left-turn phasing on the eastbound and westbound approaches and split phasing on the northbound and southbound approaches.
 - De Wolf Avenue / Powers Avenue
 - Modify the westbound left-right lane to a left-turn lane; and
 - Add a westbound right-turn lane.
 - De Wolf Avenue / Owens Mountain Parkway
 - Modify the westbound through-right lane to a through lane;
 - Add a westbound right-turn lane;
 - Add a southbound left-right lane with a receiving lane on Owens Mountain Parkway east of De Wolf Avenue;
 - Remove the southbound right-turn lane;
 - Signalize the intersection with protective left-turn phasing on all approaches; and
 - Modify the intersection to accommodate the added lanes.

Cumulative Year 2039 plus Project Traffic Conditions

- Under this scenario, all study intersections are projected to exceed their LOS threshold during one or both peak periods. To improve the LOS at these intersections, it is recommended that the following improvements be implemented.
 - Locan Avenue / Shepherd Avenue
 - Signalize the intersection with protective left-turn phasing on the eastbound and westbound approaches and split phasing on the northbound and southbound approaches.
 - De Wolf Avenue / Powers Avenue
 - Modify the westbound left-right lane to a left-turn lane; and
 - Add a westbound right-turn lane.



- De Wolf Avenue / Owens Mountain Parkway
 - Modify the westbound through-right lane to a through lane;
 - Add a westbound right-turn lane;
 - Add a southbound left-right lane with a receiving lane on Owens Mountain Parkway east of De Wolf Avenue;
 - Remove the southbound right-turn lane;
 - Signalize the intersection with protective left-turn phasing on all approaches; and
 - Modify the intersection to accommodate the added lanes.
- Locan Avenue / Nees Avenue
 - Add an eastbound left-turn lane;
 - Modify the eastbound left-through-lane to a through-right lane; and
 - Modify the intersection to accommodate the added lane.

Queuing Analysis

- It is recommended that the City consider left-turn and right-turn lane storage lengths as indicated in the Queuing Analysis.

Project's Equitable Fair Share

- It is recommended that the Project (West) and Project (East) contribute their equitable fair share as listed in Tables X and XI, respectively, for the future improvements necessary to maintain an acceptable LOS.



Study Participants

JLB Traffic Engineering, Inc. Personnel:

Jose Luis Benavides, PE, TE	Project Manager
Susana Maciel, EIT	Engineer I/II
Matthew Arndt, EIT	Engineer I/II
Javier Rios	Engineer I/II
Jove Alcazar	Engineer I/II
Dennis Wynn	Sr. Engineering Technician

Persons Consulted:

Drew Phelps	Copper River Apartments, LP
Sean Smith, RCE, QSD	City of Clovis
Jill Gormley, PE	City of Fresno
Harmanjit Dhaliwal, PE	City of Fresno
Brian Spaunhurst	County of Fresno
David Padilla	Caltrans
Kai Han, TE	Fresno COG
Lang Yu	Fresno COG

References

1. City of Clovis, *2035 General Plan*.
2. County of Fresno, *2000 General Plan*.
3. *Guide for the Preparation of Traffic Impact Studies*, Caltrans, dated December 2002.
4. *Trip Generation*, 10th Edition, Washington D.C., Institute of Transportation Engineers, 2017.
5. *2014 California Manual on Uniform Traffic Control Devices*, Caltrans, November 7, 2014.



CLOVIS PLANNING COMMISSION MINUTES
October 24, 2019

A regular meeting of the Clovis Planning Commission was called to order at 6:00 p.m. by Chair Hatcher in the Clovis Council Chamber.

Flag salute led by Chair Hatcher

Present: Commissioners Antuna, Bedsted, Cunningham, Hinkle, Chair Hatcher

Absent: None

Staff: David Merchen, City Planner
Orlando Ramirez, Deputy City Planner
Ricky Caperton, Senior Planner
Lily Cha, Assistant Planner
Sean Smith, Supervising Civil Engineer
Claudia Cazares, Management Analyst
Eric Aller, Parks Manager

MINUTES

1. The Commission approved the September 26, 2019, minutes by a vote of 5-0.

COMMISSION SECRETARY

Deputy City Planner Orlando Ramirez informed that the Landmark Commons Fresno County Library project needs to be scheduled for Planning Commission but cannot accommodate the December 21st meeting date. He inquired as to whether the Commission would consent to an additional, special meeting on December 5th and, on receiving assent, stated that this would become a public hearing action item during the November 21st meeting.

PLANNING COMMISSION MEMBERS COMMENTS

Commissioner Antuna reported, at the applicant's request, that on Monday, October 21st, she and Commissioner Bedsted met with Coastal Valley Development. However, no discussion regarding a decision on the project (Item X-3) had taken place with either the applicant or with Commissioner Bedsted.

Commissioner Cunningham reported that he had attended the Clovis Citizens Academy, expressed gratitude to Chad McCallum for allowing him to attend, as had Chair Hatcher and Commissioner Antuna previously. He expressed that it was very informative and time well-spent, encouraging the other commissioners to attend at the next opportunity.

COMMUNICATIONS AND REFERRALS

Items of correspondence related to Agenda Item X-3.

BUSINESS FROM THE FLOOR

None.

CONSENT CALENDAR

None.

PUBLIC HEARINGS

2. Consider items associated with approximately 21.52 acres of property located along the south side of Shepherd Avenue between Clovis and Sunnyside Avenues. John and Kristen Sobaje, owners; Lennar Homes of California, Inc., applicant; Yamabe & Horn Engineering, Inc., representative.
 - a. Consider Approval, Res. 19-40, A request to adopt an environmental finding of a Mitigated Negative Declaration for General Plan Amendment GPA2019-001, R2019-003, and Vesting Tentative Tract Map TM6263.
 - b. Consider Approval, Res. 19-41, **GPA2019-001**, A request to amend the General Plan and Herndon-Shepherd Specific Plan to re-designate from the Low Density Residential (2.1 to 4.0 DU/Ac) to the Medium Density Residential (4.1 to 7.0 DU/Ac) classification.
 - c. Consider Approval, Res. 19-42, **R2019-003**, A request to approve a rezone from the R-1-7500 (Single Family Residential – 7,500 Sq. Ft.) to the R-1-PRD (Single Family Planned Residential) Zone District.
 - d. Consider Approval, Res. 19-43, **TM6263**, A request to approve a vesting tentative tract map for a 137-lot Planned Residential Development.

Senior Planner Ricky Caperton presented the staff report.

Commissioner Antuna requested elaboration on the concerns and requests for a gated community. Senior Planner Caperton provided details.

Chair Hatcher followed up with an inquiry as to the presence of a police department condition requesting that the project be gated. Senior Planner Caperton responded that he had sent a supplement on Monday revising that condition, as it was mistakenly included and was intended for a different project.

Commissioner Hinkle sought and received confirmation, for the record, regarding which tract map is up for consideration tonight, as there appeared to be two, with one from the traffic control company and one from Planning staff.

Commissioner Hinkle inquired as to whether this project is already in the Community Facilities District. Senior Planner Caperton responded in the positive, providing an explanation.

Commissioner Hinkle sought and received confirmation that none of the existing homes currently on the properties are historic dwellings.

Commissioner Hinkle inquired regarding the movement of Pruess Avenue. Senior Planner Caperton provided an explanation.

At this point, the Chair opened the floor to the applicant.

Dirk Poeschel of 923 Van Ness Avenue, Fresno, on behalf of Lennar Homes, provided background on the applicant and the project.

Commissioner Hinkle inquired as to whether there would be charging stations for vehicles in all of the proposed home. He believes that there will be state requirements for such by the time this project is ready for construction. Mr. Poeschel responded that he believes that there will be such stations as there will be sockets in all garages. He also stated that car manufacturers are working on the technology, which means that it may have significantly changed by the time state legislation comes about.

Commissioner Hinkle sought and received confirmation that the driveways will be eighteen feet or more in length.

Commissioner Cunningham inquired as to the general price point for these homes. Mr. Poeschel responded that the houses will cost a minimum of \$200 per square foot, with the homes averaging 2,040 square feet in size. This will create expensive houses that many people in the Chamber will not be able afford.

Commissioner Cunningham explained that this is a concern to him, due to the current status of the northeast corner of this site as part of the City's Regional Housing Needs Allotment and to the recent filing of litigation. In addition, this is the first of two projects before the Planning Commission this evening that will ask to overlook this requirement. Even though there is currently a surplus of home sites, this surplus is finite. Therefore, he requested an explanation of the thought process behind removing that property from the RHNA allotment. Mr. Poeschel provided a detailed explanation.

Commissioner Cunningham followed up by expressing concern regarding the request to amend the General Plan, as such exists specifically to plan for expansion, and this is the first of two such requests before the Commission for this meeting. Mr. Poeschel responded with a brief explanation.

At this point, the Chair opened the floor to those in favor.

Steven Jacobsen of 812 Beauregard Land expressed concern regarding green space for this area, stating that the park proposed for this project appears too small to be anything more than essentially a dog park, especially in comparison to the HOA-maintained parks in his subdivision. The Lennar project park west of Clovis Avenue is significantly larger than this proposal. He also expressed concern regarding the impact on Clovis Unified schools as well as the difference between the applicant's numbers and those he found from census data. Another concern of his is traffic impacts and a potential increase in crime.

Chair Hatcher confirmed that Mr. Jacobsen was intending to speak in opposition rather than in favor, then requested others wait until the floor is opened for opposition.

There being none, the Chair opened the floor to those in opposition.

Steve Fitzgerald of 1123 Lester Avenue stated his opposition on the basis that the proposal for the project's green space is different than what had been promised previously, not meeting the General Plan, and the fact that the project concerned Clovis Unified School District. He objected to an increase in density and called for parks to be developed instead. He concluded with his belief that a gated community would make this a better project.

Joseph Smith of 1208 Everglade Avenue first provided the disclaimer that he had worked for Commissioner Cunningham in the Sheriff's office two decades ago. He objected to the density, stating while he understands the pressure State of California housing policy is exerting on the City of Clovis to increase housing density, but he moved to this area with the understanding that development of the subject site would be low density. As a member of law enforcement, he states that gating communities reduces crime, though he understands why Lennar would be reluctant to do so. After one of the neighborhood meetings with Lennar, he and a neighbor distributed flyers throughout the surrounding neighborhoods and was disheartened to hear that many people believed it would have no effect as the Planning Commission would side with the developer because of money. Finally, he is concerned about how many students will actually be added to Woods Elementary School versus the number put forward by the applicant.

Gerry Galvin of 1097 Loyola Avenue expressed concern with the proposed density and the traffic problems it will create. As a law enforcement officer, he believes that more children walking on Clovis Avenue will be a problem as will the proposed circulation. He stated that the area has a low crime rate, which will be changed if the new community is not gated. He questioned Senior Planner Caperton regarding the average lot and home sizes of this project versus the Lennar project north of Clovis Avenue (TM6200) until Chair Hatcher intervened. Mr. Galvin concluded with an expressed wish to have larger lot sizes such as those in the other project, or at least more negotiation with Lennar.

Gary Oliver of 1810 N. Duke Avenue had been involved in the Herndon-Shepherd Specific Plan committee and had moved to this area based on the zoning outlined in the Plan. He expressed appreciation for Senior Planner Caperton's helpfulness in providing information, then objected

to the project based on lot size compared to the project on the north side of Shepherd Avenue (TM6200) and traffic concerns.

Commissioner Hinkle inquired as to whether Mr. Oliver would object to a project containing forty units per acre and standing forty feet high. Mr. Oliver responded that he likely would object as such is not likely consistent with the Herndon-Shepherd Specific Plan.

Tim Riordan of 1134 Riordan Avenue stated that the Herndon-Shepherd Specific Plan was created to guide the growth of the area, with previous project approvals making it possible for Lennar to put forward a proposal that needs more discussion due to how much it goes against the principles of the Plan. He urged the Planning Commission to stay committed to the Specific Plan and not breach the trust of the neighborhood community.

Kim Bigelow of 1850 N. Dupree Lane spoke against the project as she has not heard anything to assure her that the proposed houses will be in compliance with California Department of Forestry and Fire Department requirements regarding water storage and availability, or with the new Title 24 building codes taking effect in January regarding energy efficiency. She suggested possibly making the houses smaller than those proposed but make them more energy neutral.

Rich Nino of 1122 Lester Avenue expressed gratitude to the Planning Commission for taking the time to listen to the neighborhood, confusion over Mr. Poeschel's estimate for how many students this project will add to the school system, and his belief that precedent has already been set for either larger lots or gates (both of which he finds preferable to the current proposal) with the already existing developments in the area.

Chris Hansen of 1143 Lester Avenue expressed agreement with his neighbors' statements and informed that each time a project rezoning to the R-2 Zone District has been approved for this area previously, it created a gated community. He requested that this precedent be followed.

George Goddard of 1890 N. Duke Avenue expressed his admiration for Clovis then his belief that the heart of the neighborhood concerns is density. He stated that the small lot size will eventually lead to the project becoming a rental community, as happened with the Centex development, which will then lead to problems for the surrounding neighborhoods. He believes that gating the proposed community will resolve many of the neighbors' concerns such as traffic circulation.

Mike Elrod of 1299 Everglade Avenue explained that in the process of running along Shepherd Avenue, he has noticed that after Minnewawa Avenue communities have entries on Shepherd Avenue and is confused as to why this one cannot do the same. He expressed concern regarding traffic, child safety, and the impact to the local elementary school (and possible repercussions of such to the area families). He requested opportunity to continue conversation with Lennar in regards to several issues that have been previously mentioned.

At this point, the Chair reopened the floor to the applicant.

Mr. Poeschel addressed the various issues brought up by the speakers.

At this point, the Chair closed the public portion.

Commissioner Cunningham inquired as to the applicant's willingness to work with the neighborhood and the extent of such willingness. Mr. Poeschel assured that they are absolutely willing to do so, then elaborated on the extent of that willingness.

Commissioner Bedsted remarked that the neighborhood appears willing to concede on the proposed density if the project is gated and expressed his concern regarding the project density's impact on schools in the area. Mr. Poeschel reminded about the removal of a potential multifamily project from density calculations for the school district.

Commissioner Bedsted followed up with a statement that the Planning Commission desires accommodations between the public and developers, particularly with infill projects, then inquired as to the applicant's willingness to take this project back to the neighborhood in an attempt to reach further accommodations. Mr. Poeschel responded in the positive, with the caveat that discussions must be productive, explaining.

John Binaski, City of Clovis Fire Chief, provided a detailed explanation regarding Fire Department requirements for access points and water services in regards to gating the community and water capacity for the houses. He also informed that density issues in terms of call volume and crime had been considered extensively by staff in 2018.

Commissioner Hinkle assured that, though the Trailhead Park is different from Centennial Park, it is still a park. He informed that the state government is promoting higher density housing, such as that found in San Francisco, in particular on infill lots such as this one, and that if the project is held off for five or six months, then the developer could potentially come back with a high density proposal. The legislation would not only prohibit neighborhood concerns from affecting outcome, it would also prohibit the Planning Commission from reviewing the project at all by making it by-right. He expressed concern that some people hold the opinion that the Planning Commission will simply go along with whatever developers want, as they have previously stopped projects or made the developers change them. The Commission is under pressure to comply with state legislation while also trying to balance it with maintaining Clovis values.

Commissioner Cunningham endorsed Commissioner Hinkle's comments, expressed gratitude to the audience for participating, and informed that the commissioners are essentially ordinary citizen volunteers. He informed that the Regional Housing Needs Allotment is part of the housing legislation mentioned by Commissioner Hinkle, requiring higher density, multistory apartments and condominiums that are by-right, and therefore unstoppable by either the Planning Commission or the City Council. Such issues are why the Commission encourages developers and citizens to work together on accommodations, but that both sides must have respect for each other and be willing to compromise. He also expressed personal reservations regarding general plan amendments that will nevertheless not prevent him from voting for this project.

A member of the audience called out an inquiry as to what recourse the City has against such state legislation. Chair Hatcher recommended speaking to Senior Planner Caperton for such information at a later time, reminding that the public portion of the project presentation is closed. Commissioner Cunningham informed that another venue would be to attend a City Council and present the question during the time devoted to allow items not on the agenda to be brought forward.

Commissioner Antuna requested elaboration regarding why access is not being allowed on Shepherd Avenue. Supervising Civil Engineer Sean Smith provided an explanation.

Commissioner Antuna expressed gratitude to the audience for participating in this process and the Commission's desire to hear their opinions. She concurred with Commissioner Cunningham regarding the potential fate of the site portion designated for higher density and expressed her opinion that the developer choosing not to take that route is beneficial. She expressed that general plan amendments do not happen often, and that they are a mechanism to make accommodations, even in specific plan areas, for the way growth actually occurs in the decades following the creation of specific plans or designations by general plans. The Fire Chief explained the reasoning behind not gating the project, and Lennar proposed a good product, and therefore she is in support of this project.

Commissioner Bedsted echoed his fellow commissioners' statements then admitted to struggling with the uncertainty regarding the ability of further discussions between the developer and the community to solve all issues brought up by the speakers. In particular, the concern regarding the impact of growth and development on the school system is something that will not change in the near future and needs to be planned for by Clovis Unified School District. Though he would like to see if further concessions can be made in this project, he stated that nothing will get done if people are not prepared to compromise. He concluded by requesting the audience consider the risk of by-right multifamily development going forward.

Commissioner Hinkle expressed gratitude for the public coming out and exercising their right to speak their opinion, then reminded that there will be another chance to be heard by the City Council, regardless of the Planning Commission's decision. He remarked that there have been changes in how projects are presented within the last year and that a beneficial feature of this proposal is the prevalence of sidewalks. Presence or lack of sidewalks impact buyers after they have purchased a home, possibly forcing people to move later in life. He expressed his appreciation for the lack of multistory multifamily development in the northeast section of the project site, and that he is in support of what he believes is a good development.

Commissioner Antuna returned to Commissioner Bedsted's wish to potentially allow more discussion between the developer and the community before a vote by the Commission. The first issue, regarding gating the community, was addressed by the Fire Chief. The second concern raised, regarding density, was addressed in that the developer is not building at the highest density they potentially could. Finally, the school district concern is something that neither party has control over. Therefore, she is ready to vote.

Chair Hatcher inquired as to whether the project could be gated if a way was found for there to be two points of entry. Fire Chief Binaski provided details regarding the difficulty of such in this location and confirmed that the Fire Department would be fine if it is something that can be worked out and agreed on.

Chair Hatcher inquired as to whether the applicant would be willing to continue the project in order to engage in further discussions with the neighborhood or would prefer to have the Planning Commission vote to have it on the record. Senior Planner Caperton interjected with a reminder that as the project includes a general plan amendment, the applicant is required to have another neighborhood meeting before the project goes to the City Council. Commissioner Cunningham also reminded that the Commission's decision is only a recommendation to the City Council. Senior Planner Caperton also offered clarification regarding the generation rates for the school district. Mr. Poeschel stated that they would like to proceed with the vote with the caveat that they would like to meet with staff regarding circulation alternatives, including an ingress point into Shepherd Avenue, providing detail on how that would likely affect their project.

Commissioner Bedsted expressed gratitude to Senior Planner Caperton for clarifying the requirement of another neighborhood meeting and to Mr. Poeschel for his willingness to entertain the neighbors' concerns. He supports bringing it to a vote.

Chair Hatcher expressed gratitude to everyone for participating in the process, even when things got somewhat contentious, and her disturbance regarding statements from speakers that they believed the Planning Commission had already made up its decision and is 'owned' by the developers. She refuted both statements, stating that the commissioners are ordinary citizens who could in the future be replaced by one of the people in the audience. Though she personally does not prefer the proposed product, she is aware that it is what the housing market calls for. She also stated that when buying a house next to a vacant lot, no one can promise it will be zoned the same as your property, encouraging research. She does not necessarily believe that gating makes a community safer and has some concerns regarding density; however, in the Clovis Unified School District there is no guarantee that your child will go to the school nearest your property or will even stay in the same school for the duration of their education. She concluded that she does not believe access onto Shepherd Avenue is a good idea.

At this point, a motion was made by Commissioner Cunningham and seconded by Commissioner Hinkle to approve a finding of a Mitigated Negative Declaration for GPA2019-001, R2019-003, and TM6263. The motion was approved by a vote of 5-0.

At this point, a motion was made by Commissioner Cunningham and seconded by Commissioner Hinkle to approve GPA2019-001. The motion was approved by a vote of 4-1.

At this point, a motion was made by Commissioner Cunningham and seconded by Commissioner Bedsted to approve R2019-003. The motion was approved by a vote of 4-1.

At this point, a motion was made by Commissioner Cunningham and seconded by Commissioner Bedsted to approve TM6263. The motion was approved by a vote of 4-1.

3. Consider items associated with approximately 42.39 acres of property within area bounded by Teague Avenue to the south, Powers Avenue to the north, between Temperance and DeWolf Avenues. John & Patricia Baldwin, Robert & Deborah Brach Bracich, Vincent & Diane Genco, Vong & Mindy Her, James & Leanore McKoane, Janet Nicholson, Edward & Roxanna Stevens, James White, Delores Whitford, Valley Coastal Development LLC., owners; Valley Coastal Development LLC. –Drew Phelps, applicant.
 - a. Consider Approval, Res. 19-44, A request to adopt an environmental finding of a Mitigated Negative Declaration for General Plan Amendment GPA2019-004, Rezone R2019-005, Rezone R2019-006, Vesting Tentative Tract Map TM6264, and Vesting Tentative Tract Map TM6239.
 - b. Consider Approval, Res. 19-45, **GPA2019-004**, A request to amend the General Plan and Herndon-Shepherd Specific Plan to re-designate approximately 42.39 acres of property from Very Low Density Residential (0.6 to 2.0 DU/Ac) to Medium Density Residential (4.1 to 7.0 DU/Ac) classification.
 - c. Consider Approval, Res. 19-46, **R2019-005**, A request to approve a rezone of approximately 5 acres of property from the R-1-AH (Single Family Residential – 18,000 Sq. Ft.) to the R-1-PRD (Single Family Planned Residential Development) Zone District.
 - d. Consider Approval, Res. 19-47, **R2019-006**, A request to approve a rezone of approximately 37.39 acres of property from the R-1-AH (Single Family Residential – 18,000 Sq. Ft.) to the R-1-PRD (Single Family Planned Residential Development) Zone District.
 - e. Consider Approval, Res. 19-48, **TM6264**, A request to approve a vesting tentative tract map for a 36-lot planned single family residential development on approximately 5 acres of property.
 - f. Consider Approval, Res. 19-49, **TM6239**, A request to approve a vesting tentative tract map for a 170-lot planned single family residential development on approximately 39.39 acres of property.

Assistant Planner Lily Cha presented the staff report.

Commissioner Cunningham sought clarification regarding the extent of the paseo. Assistant Planner Cha provided explanation.

Commissioner Cunningham then inquired as to whether there is a RHNA overlay. Assistant Planner Cha responded in the positive, providing details.

Commissioner Antuna inquired as to the locations of sidewalks in TM6264. Assistant Planner Cha explained.

Commissioner Antuna followed up by seeking and receiving confirmation that there are no sidewalks in the interior of TM6264.

Commissioner Hinkle sought elaboration regarding the safety of the design of the relocation of the Trenton Avenue trail. Assistant Planner Cha provided an explanation. Deputy City Planner Ramirez provided further clarification.

Commissioner Bedsted remarked that the area indicated by Commissioner Hinkle, on Attachment "A," appeared more as part of a sidewalk rather than a pass-through. Deputy City Planner Ramirez confirmed that staff is concerned about this area and will work with the applicant to bring it into compliance.

Commissioner Hinkle expressed concurrence with staff concerns regarding this area. Deputy City Planner Ramirez explained that Planning Commission approval would be tentative and that following final approval, the tract would be subject to the residential site plan review process and amended accordingly.

Commissioner Hinkle remarked that the three-foot setback for TM6264 recalls to his mind that several tracts in the Loma Vista area have that same setback which turned out to cause access issues for the Fire Department, leading to a four-foot setback being implemented instead. He questioned the return of three-foot setback after that. Fire Chief Binaski explained the Fire Department's points of consideration in relation to the three-foot setback.

Commissioner Hinkle stated that he was concerned also with the four-foot setback on the other side in relation to the storage of trash totes and first responder access to backyards. He had previously spoken to the police department and it is a problem for them, and he does not see how the Fire Department does not also have a problem with it. Fire Chief Binaski acknowledged that it is an issue that has been brought to the City Council many times, but that regardless of the provided guidance, Fire staff makes it work, remarking that the slope in front of the garage door, causing staff to trip. Additionally, the undeveloped side yard causes his staff more trouble.

Commissioner Hinkle followed up with an inquiry as to how many times Fire staff has had to move to the backyard with a charged hose because of fire movement and if the hose has to be uncharged. Fire Chief Binaski responded that nine times out of ten, Fire staff come in through the front door of the house, providing a detailed explanation of that response as well as an explanation of the remaining one time out of ten.

Commissioner Cunningham sought clarification regarding the Fresno Irrigation District comments on page 941 of the agenda packet. Supervising Civil Engineer Smith provided an explanation.

Commissioner Hinkle sought confirmation that many of the streets in TM6239 lack sidewalks, as he neither saw them in the exhibits nor read anything in the report. Assistant Planner Cha explained that the applicant proposed sidewalks on all of the public streets of the tract.

At this point, the Chair opened the floor to the applicant.

Drew Phelps of 1396 W. Herndon Avenue provided background on the project.

Commissioner Cunningham inquired as to how many meetings had happened between the applicant and the neighbors. Mr. Phelps provided the information.

Commissioner Hinkle inquired as to the reasoning for not providing sidewalks on the interior lots for TM6264. Mr. Phelps responded with an explanation of that reasoning and a statement that it is open for discussion.

Commissioner Hinkle sought and received confirmation that, due to the sidewalk pattern, someone with challenged mobility would need to cross a street to reach sidewalk in this development. He is concerned that these new developments lacking sidewalks will pose future ADA problems for the City. He concluded that this issue needs to be addressed in this meeting, as Clovis is a walkable city and this needs to be maintained.

At this point, the Chair opened the floor to those in favor.

There being none, the Chair opened the floor to those in opposition.

Randy Dhindsa of 1771 N. Twinberry Avenue explained that he was unable to attend the first neighborhood meeting last year and was unaware of the second meeting scheduled for Monday. He expressed dismay that the low-density 'oasis' promised by Wathen-Castanos at the time they bought their house will be gone, after having paid a premium price to live in a large-lot community. He also expressed concern for the safety of children due to lack of crosswalks and sidewalks currently and the increased number of children who will face those safety risks with approval of this project.

Elizabeth Pahel of 1711 N. Locan Avenue first expressed unwillingness to have her property rezoned in order to keep their animals. After Assistant Planner Cha assured that the inclusion of her property in the rezone exhibit was in error and that her property was not subject to rezoning, Mrs. Pahel expressed discontent with the lack of sidewalk continuation that leads to walkers such as her having to cross streets multiple times. In addition, when walking through an already existing development with sidewalks on one side only, she and her daughter are forced to walk in the street due to obstructions such as basketball courts or oversized trucks. She also expressed discontent regarding changes made to the open space and trail between the first neighborhood meeting and this hearing. Finally, she expressed concern for how Loyola Avenue will be affected by the proposed phasing of construction.

Dale Pahel of 1711 N. Locan Avenue elaborated on their concerns with the trail design presented for this hearing versus what was presented at the neighborhood meeting a year ago. He also expressed regarding walkability and safety due to lack of sidewalks.

Jacob Ward of 1751 N. Twinberry Avenue explained the difficulty in finding a large lot to purchase, then expressed dismay that the low-density oasis present when he researched before

purchasing his property. He expressed opposition to small lots across the street from his home and the accompanying diminishment of value in his house.

Nicole Hill of 1779 N. Blackwood referred to Chair Hatcher's comment regarding buying a home next to an empty lot, stating that her family had not done so but rather purchased a home next to rural properties. She also expressed dismay, in regards to the previous presentation, that citizens are losing their voice due to legislation while assuring that she is aware that this is not the fault of the Planning Commission. She expressed her concern for the safety of children crossing DeWolf Avenue with the lack of crosswalks as well as her concern for traffic safety due to circulation issues on Loyola Avenue.

At this point, the Chair reopened the floor to the applicant.

Mr. Phelps expressed gratitude for the airing of concerns, explained that the noticing for the neighborhood meeting was mailed on Monday, then addressed the sidewalk, density, trail location feasibility, Locan Avenue crossing safety, and phasing concerns.

Commissioner Antuna requested the neighborhood meeting information in the event that the invitations do not arrive in time. Mr. Phelps provided the information as well as his phone number for those who may have trouble finding it.

Commissioner Hinkle inquired as to the intended driveway setback for TM6264. Mr. Phelps responded that it is twenty feet.

At this point, the Chair closed the public portion.

Chair Hatcher inquired as to the timelines and locations for street signals north of these developments based on the traffic study. Supervising Civil Engineer Smith provided information.

Commissioner Antuna sought clarification regarding the design of a particular area of trail in relation to a partial cul-de-sac. Assistant Planner Cha provided a detailed explanation and assured that staff will continue to work with the applicant on areas of concern to find feasible alternatives.

Chair Hatcher sought and received confirmation regarding the new location of the trail versus the originally proposed location.

Chair Hatcher sought and received confirmation that the previous location of the trail is difficult now because of development to the north. Deputy City Planner Ramirez provided further clarification regarding the changes made to the trail relocation.

Chair Hatcher followed up with an inquiry as to whether there is a scenario that would allow the trail to remain at its original location but at less than a thirty-foot width, and if there had been other circumstances in which the trail had been moved from its originally intended location. Deputy City Planner Ramirez responded that it is policy for the trail to be thirty feet wide with a ten-foot sidewalk, that such a width-reduction is something staff can consider but he is unaware

of any such circumstances in which it has been done. He then provided details of several instances in the Loma Vista area in which the trail has been moved.

Chair Hatcher remarked that she personally dislikes developments with sidewalks on only one side of the streets, though it has been requested a great deal, especially in gated communities. She does not believe that such is a safe environment, but expressed appreciation for the larger tract proposing sidewalks on both sides of the streets. She expressed understanding of the audience's concerns regarding the density change and the impact it will have on their lives.

Commissioner Hinkle informed that he had been involved in the latest update to the general plan, explaining that a general plan may state something different for land use than what the current zoning calls for. Therefore, when buying a house, especially if there are vacant lots around, he urges researching the general plan designations for the area. Development leads to changes to the designations of nearby areas. He also remarked that, based on how the state government is legislating, such changes are likely to happen faster than will be appreciated.

Commissioner Bedsted, in reference to Commissioner Hinkle's concerns with setbacks, informed that the Planning Department had provided the Commission with an excel sheet detailing these variances that have occurred historically. He expressed appreciation for the ability to see the data presented in such a format as well as for Fire Chief Binaski's input on the impacts of the setbacks. He noted that there had been three instances of three-foot setbacks, excluding those that were three-foot/five-foot setbacks. He concluded with a remark expressing a desire for that table to be updated for tracking when a precedent is either being set or followed.

Commissioner Hinkle responded that though the Commission has tried different things to see if they will work, there is time to change things that are found to not work.

Chair Hatcher, in reference to a piece of correspondence requesting speed bumps on Loyola Avenue, inquired as to the process for seeking such. Supervising Civil Engineer Smith responded that there is such a process, then offered both his business card and his assistance to the audience with the requirements and steps of that process.

At this point a motion was made by Commissioner Bedsted and seconded by Chair Hatcher to approve a finding of a Mitigated Negative Declaration for GPA2019-004, R2019-005, R2019-006, TM6264, and TM6239. The motion was approved by a vote of 5-0.

At this point a motion was made by Commissioner Bedsted and seconded by Commissioner Cunningham to approve GPA2019-004. The motion was approved by a vote of 4-1.

At this point a motion was made by Commissioner Bedsted and seconded by Commissioner Cunningham to approve R2019-005. The motion was approved by a vote of 4-1.

At this point a motion was made by Commissioner Bedsted and seconded by Commissioner Cunningham to approve R2019-006. The motion was approved by a vote of 4-1.

At this point a motion was made by Commissioner Bedsted and seconded by Commissioner Cunningham to approve TM6264. The motion was denied by a vote of 2-3. (Commissioner Hinkle requested an amendment to Commissioner Bedsted's motion. Upon recommendation from the City Planner, Commissioner Hinkle requested a motion to reconsider TM6264 with added conditions. The motion did not receive a second, voiding the motion.

At this point a motion was made by Commissioner Bedsted and seconded by Commissioner Cunningham to approve TM6239. The motion was approved by a vote of 4-1.

4.
 - a. **Consider Recommendation for Approval, Res. 19-50**, A request to approve an environmental finding of a Mitigated Negative Declaration for the 2019 City of Clovis Dog Parks Master Plan.
 - b. **Consider Recommendation for Approval, Res. 19-51**, A request to approve the Draft 2019 City of Clovis Dog Parks Master Plan.

Management Analyst Claudia Cazares, Chad Kennedy of O'Dell Engineering, Inc., and Parks Manager Eric Aller presented the staff report.

Commissioner Bedsted recused himself during the staff report due to potential conflict of interest with the park on an investment property located in close proximity.

Commissioner Cunningham inquired as to whether the temporary dog park would undergo modification if it becomes permanent. Parks Manager Aller provided details regarding the modifications.

Commissioner Cunningham inquired as to the cost of the temporary dog park. Parks Manager Aller provided both the bid estimate and the actual, lower cost.

Commissioner Antuna inquired as to whether the applicant considered having any types of water features for the dog parks, given the hot climate of the area. Parks Manager Aller responded that they have not considered such at this time due to the water situation, but it can be considered for feasibility. Mr. Kennedy clarified that it had been discussed in the document in relation to the regional dog park but not the smaller ones. Maintenance is an issue, but it is recommended to consider water features for the larger parks.

Commissioner Hinkle expressed his satisfaction with the timeliness of consideration of this action, what with the increase in service and companion dogs, as well as his gladness that the Heritage Grove is addressed. He expressed that though this should have been done a long time ago, this is the right time for it now.

Chair Hatcher inquired as to whether Bicentennial Park would need to be closed for a time to become permanent, if this plan is approved and funded. Such a closure would deprive the public of a dog park for a time, which she foresees as causing a public outcry. Parks Manager Aller

responded that it may indeed be closed for a short amount of time, providing a detailed explanation.

Commissioner Hinkle proposed a possible method to keep the dog park open during such construction. Parks Manager Aller acknowledged that such a method could be used, remarking that the neighborhood may need to be noticed regarding the action they take.

Commissioner Antuna expressed approval of noticing the neighborhood, with at least signage on the fence, to let the public know what is happening with the park.

Commissioner Cunningham offered compliments to staff and the consultants for their work on this project. He has been involved since the beginning and has attended most of the meetings, and he expressed his admiration for the progress that has been made.

At this point, the Chair opened the floor to those in favor.

Josie McGuire of 87 Joshua Avenue informed that she had started the petition to create a dog park and that there were a couple of issues that needed to be addressed, such as flooding in Bicentennial Park when it rains. She praised Parks Manager Aller and expressed gratitude for the effort that has been put into this plan.

Alex Rangel of 954 Sunnyside Avenue expressed gratitude to City staff for their hard work and getting the plan to this point so quickly as well as for their attentiveness. She expressed her appreciation for the park and her hope that it will continue to be funded.

William Holland of 1175 Palo Alto Avenue expressed gratitude to staff, as it has been a long road but the process has worked out well. He uses the park twice a day and is greatly pleased both with what currently exists and with the possible expansion. In his time spent in the park, he has not seen any problems and has only heard of two that have been resolved. He informed that the public helps keep the dog park maintained and that working with staff and Parks Manager Aller in particular was a pleasant experience. He concluded by requesting approval for the plan.

A member of the public inquired as to whether there will be lights, as it is getting dark early now and many people use the park after work. Parks Manager Aller responded that they are not currently on the list of amenities but that they could be added later.

The member of the public provided an explanation of the now-resolved problem Mr. Holland had referred to.

At this point, the Chair opened the floor to those in opposition.

There being none, the Chair reopened the floor to the applicant.

The applicant chose not to rebut.

At this point, the Chair closed the public portion.

At this point a motion was made by Commissioner Hinkle and seconded by Commissioner Antuna to approve a finding of a Mitigated Negative Declaration for the 2019 City of Clovis Dog Parks Master Plan. The motion was approved by a vote of 4-0-1.

At this point a motion was made by Commissioner Hinkle and seconded by Chair Hatcher to approve the Draft 2019 City of Clovis Dog Parks Master Plan. The motion was approved by a vote of 4-0-1.

City Planner David Merchen clarified, for the record, the Commissions actions regarding Item X-3. All resolutions had been approved with the exception of the resolution to approve TM6264. The motion to approve a revised resolution failed, resulting in denial. A motion was made to reconsider the resolution that did not receive a second.

OLD BUSINESS

None

NEW BUSINESS

None

ADJOURNMENT AT 9:58 P.M. UNTIL the Planning Commission meeting on November 21, 2019.

Amy Hatcher, Chair