CITY OF MERCED
Planning & Permitting Division

STAFF REPORT:	**#18-14**	**AGENDA ITEM: 4.3**
FROM:	Kim Espinosa, Planning Manager	**PLANNING COMMISSION** **MEETING DATE: June 6, 2018**
PREPARED BY:	Julie Nelson, Associate Planner	**CITY COUNCIL** **MEETING DATE: July 16, 2018** **(Tentatively)**

SUBJECT: **Annexation and Pre-zoning #15-01, General Plan Amendment #15-04, and Pre-Annexation Development Agreement**, initiated by Louann Bianchi, and Quad LLC, property owners. This application involves annexing 8.83 acres of land at the northwest and southwest corners of North Highway 59 and Santa Fe Drive into the City of Merced; changing the General Plan designation for the northwest corner from Open Space (OS) to Thoroughfare Commercial (CT) and pre-zoning the northwest corner as Thoroughfare Commercial (C-T) for the Thoroughfare Commercial development. The General Plan designation for the southwest corner would remain Industrial (IL) and this corner would be pre-zoned Light Industrial (I-L). *PUBLIC HEARING*

ACTION: PLANNING COMMISSION:

Recommendation to City Council

1) Environmental Review #15-36 (Mitigated Negative Declaration)
2) Pending Annexation Application #15-01
3) Pre-zoning Application #15-01
4) General Plan Amendment #15-04
5) Pre-Annexation Development Agreement

CITY COUNCIL:

Approve/Disapprove/Modify

1) Environmental Review #15-36 (Mitigated Negative Declaration)
2) Pending Annexation Application #15-01
3) Pre-zoning Application #15-01
4) General Plan Amendment #15-04
5) Pre-Annexation Development Agreement

SUMMARY

The is a request to annex and pre-zone approximately 8.83 acres of land generally located at the northwest and southwest corners of North Highway 59 and Santa Fe Drive (Attachment A). The

proposal also includes a General Plan Amendment for the northwest corner of North Highway 59 and Santa Fe Drive to change the General Plan land use designation from Open Space (OS) to Thoroughfare Commercial (CT). The proposed pre-zoning designations would be Light Industrial (I-L) for the southwest corner which is consistent with the current General Plan designation, and Thoroughfare Commercial (C-T) for the northwest corner which would be consistent with the General Plan designation if the proposed General Plan Amendment is approved.

The southwest corner of North Highway 59 and Santa Fe Drive is developed with a wholesale/retail landscape and irrigation distribution business (Horizon). No changes are proposed to the business or the site with this application. This use is consistent with the proposed Light Industrial General Plan and Zoning designations.

The northwest corner is currently vacant. Once annexed, a portion of the property would be developed with a commercial development (Attachment B). The first phase of development would consist of a gas station, mini-market, and car wash business, a fast-food restaurant, and a drive-thru coffee kiosk. The second phase could include another fast-food restaurant as well as additional retail uses (these uses are unknown at this time). For a list of uses that are appropriate for the Thoroughfare Commercial (C-T) zone, please refer to the table at Attachment C.

Staff has reviewed the proposed applications and is recommending the Planning Commission recommend approval of these applications to the City Council.

RECOMMENDATION

Planning staff recommends that the Planning Commission recommend approval of Environmental Review #15-36 (Mitigated Negative Declaration), Pending Annexation #15-01, Pre-zoning Application #15-01, and General Plan Amendment #15-01 (including the adoption of the Resolution at Attachment I) subject to the following conditions:

*1) All new construction within the annexation area (including modifications to the developed site at the southwest corner of North Highway 59 and Santa Fe Drive) shall comply with all standard Municipal Code and Subdivision Map Act requirements as applied by the City Engineering Department.

*2) All other applicable codes, ordinances, policies, etc. adopted by the City of Merced shall apply.

*3) Approval of Pre-Annexation #15-01, Pre-zoning Application #15-01, and General Plan Amendment #15-04 is subject to the applicant's entering into a written (legislative action) agreement that they agree to all the conditions and shall pay all City and school district fees, taxes, and/or assessments, in effect on the date of any subsequent subdivision and/or permit approval, any increase in those fees, taxes, or assessments, and any new fees, taxes, or assessments, which are in effect at the time the building permits are issued, which may include public facilities impact fees, a regional traffic impact fee, Mello-Roos taxes—whether for infrastructure, services, or any other activity or project authorized by the Mello-Roos law, etc. Payment shall be made for each phase at the time of building permit issuance for such phase unless an Ordinance or other requirement of the City requires payment of such fees, taxes, and or assessments at an earlier or subsequent time. Said

agreement to be approved by the City Council prior to the adoption of the ordinance, resolution, or minute action.

*4) The developer/applicant shall indemnify, protect, defend (with counsel selected by the City), and hold harmless the City, and any agency or instrumentality thereof, and any officers, officials, employees, or agents thereof, from any and all claims, actions, suits, proceedings, or judgments against the City, or any agency or instrumentality thereof, and any officers, officials, employees, or agents thereof to attack, set aside, void, or annul, an approval of the City, or any agency or instrumentality thereof, advisory agency, appeal board, or legislative body, including actions approved by the voters of the City, concerning the project and the approvals granted herein. Furthermore, developer/applicant shall indemnify, protect, defend (with counsel selected by the City), and hold harmless the City, or any agency or instrumentality thereof, against any and all claims, actions, suits, proceedings, or judgments against any governmental entity in which developer/applicant's project is subject to that other governmental entity's approval and a condition of such approval is that the City indemnify and defend such governmental entity. City shall promptly notify the developer/applicant of any claim, action, or proceeding. City shall further cooperate fully in the defense of the action. Should the City fail to either promptly notify or cooperate fully, the developer/applicant shall not thereafter be responsible to indemnify, defend, protect, or hold harmless the City, any agency or instrumentality thereof, or any of its officers, officials, employees, or agents.

*5) The developer/applicant shall construct and operate all future projects within the annexation area in strict compliance with the approvals granted herein, City standards, laws, and ordinances, and in compliance with all State and Federal laws, regulations, and standards. In the event of a conflict between City laws and standards and a State or Federal law, regulation, or standard, the stricter or higher standard shall control.

<u>The following conditions apply to new construction within the annexation area:</u>

*6) Community Facilities District (CFD) formation is required for annual operating costs for police and fire services as well as storm drainage, public landscaping, public landscaping within State rights-of-way, street trees, street lights, parks and open space. CFD procedures shall be initiated before final map or first building permit approval. Developer/Owner shall submit a request agreeing to such a procedure, waiving right to protest and post deposit as determined by the City Engineer to be sufficient to cover procedure costs and maintenance costs expected prior to first assessments being received.

<u>The following conditions apply to the future development at the northwest corner of North Highway 59 and Santa Fe Drive:</u>

*7) All development shall be subject to the Mitigation Measures outlined in the Mitigation Monitoring Program for Initial Study #15-36.

*8) Site Plan Review is required prior to construction on the northwest corner, the Site Plan Review Committee shall review the site design and determine which alternative at the western driveway is best to reduce the expected impacts. The alternatives may include those alternatives included in the traffic analysis or another alternative such as moving the driveway further to the west. The developer shall provide any additional documentation or studies needed for the Site Plan Review Committee to make this determination (Mitigation Measure TRA-1).

*9) The southbound left-turn lane on SR 59 shall be lengthened as determined by the City Engineer and approved by Caltrans (Mitigation Measure TRA-1a).

*10) The development shall contribute its fair share to the cost of improvements for the intersection of SR 59 and Olive Avenue (Mitigation Measure TRA-1b):

- Reconstruct westbound Olive Avenue to provide dual left turn lanes on southbound SR 59; and,
- Reconfigure the westbound right turn lane to create a combination through and right turn lane, and extend that through lane across SR 59 along the project's frontage; and,
- Reconstruct the existing northbound right turn lane as a "free" right turn with a median island separating eastbound and right-turning traffic. Reconstruct the eastbound Santa Fe Drive approach to provide dual left turn lanes.

*11) Prior to the issuance of a building permit, the developer shall work with the Merced County Transit Authority (aka: The Bus) to determine if a bus stop is needed at this location. If a bus stop is required, the stop shall be in an area to allow the bus to move completely out of the travel lanes. The location of all bus stops shall be subject to approval by the City Engineer and Caltrans if along SR 59 (Mitigation Measure TRA-6).

*12) Any outdoor dining areas or other outdoor uses shall have the following setbacks to maintain an acceptable noise level of 70 dB for outdoor uses (Mitigation Measure NOI-2):

- Road/Railroad - Required Setback
- Santa Fe Drive - 54 Ft.
- North Highway 59 - 89 Ft.
- BNSF Railroad - 137 F

*13) At the time of construction, all required public improvements shall be installed along the property frontage. This includes, but is not limited to, sidewalk, curb, gutter, street lights, and street trees.

*14) The developer shall work with Caltrans and obtain all necessary permits for all work done within the state right of way.

*15) All construction shall comply with Post Construction Standards in accordance with the requirement for the City's Phase II MS-4 Permit (Municipal Separate Storm Sewer System).

*16) All new utilities serving the site shall be installed underground.

*17) All City sewer, water, and storm drain lines serving the site shall be extended across the full frontage of the property unless it is determined by the Public Works Director that these lines are not likely to be extended to serve any other property (consistent with Merced Municipal Code Section 15.40.030).

*18) All storm water shall be contained onsite and metered out to the City's storm water system in accordance with City Standards.

*19) A minimum turning radius of 33 feet inside, curb-to-curb and 49 feet wall-to-wall for fire apparatus access must be provided throughout the project site or as required by the Fire Department.

20) The future commercial development shall provide pedestrian and bicycle access throughout the site. Connectivity throughout the site shall be provided by pedestrian pathways. Bicycle parking shall be provided as required by the City's Zoning Ordinance.

21) The developer shall use proper dust control procedures during site development in accordance with San Joaquin Valley Air Pollution Control District rules.

22) All landscaping shall be in compliance with the City's Water Efficient Landscaping and Irrigation Ordinance (Merced Municipal Code Section 17.60) and all state-mandated conservation and drought restrictions as well as the City's Zoning Ordinance Section 20.36 – Landscaping. This shall include the use of xeriscape landscaping as appropriate.

23) Irrigation for all onsite landscaping shall be provided by a low-volume system in accordance with the State's Emergency Regulation for Statewide Urban Water Conservation or any other state or city-mandated water regulations dealing with the current drought conditions.

24) All landscaping in the public right-of-way shall comply with the most recently adopted water regulations by the State and City addressing water conservation measures. If turf is proposed to be installed in medians or parkstrips, high quality artificial turf (approved by the City Engineer and Development Services Director) shall be installed.

25) Parking lot trees shall be installed per the City's Parking Lot Landscape Standards. Trees shall be a minimum of 15 gallons, and be of a type that provides a 30-foot minimum canopy at maturity (trees shall be selected from the City's approved tree list). Trees shall be installed at a ratio of 1 tree for every 6 parking spaces. A reduced number of trees may be required where there are carports with solar panels over the parking spaces. However, if all the parking spaces are covered by a carport with solar panels, then additional trees may be required at the discretion of the Development Services Director. Trees within the PG&E easement shall comply with the regulations of this easement which limits the height of trees to a maximum of 15 feet at full maturity.

26) All mechanical equipment shall be screened from public view.

(*) Denotes non-discretionary conditions.

PROJECT DESCRIPTION

The proposed annexation area consists of three parcels containing approximately 8.83 acres of land. Approximately 7.83 acres is located at the northwest corner of North Highway 59 and Santa Fe Drive and the remaining 1.0 acre is located at the southwest corner of the intersection (Attachment A). The original annexation application was only for the northwest corner. However, in consultation with LAFCo (Local Agency Formation Commission), it was determined that a "logical boundary" should include the southwest corner as well.

The annexation area is bounded by Black Rascal Creek to the north, the Burlington Northern Santa Fe (BNSF) Railroad to the south, and North Highway 59 to the east. Vacant county land is located to the west of the annexation area. The annexation area is divided by Santa Fe Drive splitting the northern portion of the annexation area (7.83 acres) from the southern portion (1.0 acre). The property located at the southwest corner of North Highway 59 and Santa Fe Drive (3065 N. Hwy 59) is developed with a wholesale/retail business (Horizon). The 7.83 acres of land at the northwest corner of North Highway 59 and Santa Fe is currently vacant. The vacant land is comprised of two separate parcels – Assessor's Parcel Number (APN): 057-200-067 contains 7.4 acres and APN: 057-200-029 contains 0.43 acres.

The owner of the property at the northwest corner is in contract with a developer to purchase and develop approximately 2.5 acres of the existing 7.4-acre parcel. The 7.4 acres would be subdivided into three separate parcels (refer to the Tentative Map at Attachment D) with the developer purchasing Parcel 1 and Parcel 4 for development (Phase One). The remainder of the property would be developed in the future as Phase Two. Phase One of the development would consist of a 3,764-square-foot convenience market (AM/PM), a gas station with 8 pumps (16 fueling positions), a car wash, and a 3,462-square-foot fast food restaurant with 110 seats and a drive-thu (refer to the Site Plan at Attachment B). Parcel 4 would be developed with a drive-thru coffee shop/kiosk.

Phase Two could include a 2,695-square-foot fast-food restaurant at the western edge of the site on Parcel 2. The remainder of the site would be for the future development of commercial space totaling approximately 32,000 square feet. Development of Phase Two remains speculative at this time. The owner does not have a developer interested in constructing Phase Two. However, for CEQA Environmental Review purposes, uses were identified and analyzed as part of the annexation.

Uses allowed within the remainder of the development would be consistent with the Thoroughfare Commercial (C-T) zone and could include:

- Retail, General (i.e., drug stores, general merchandise stores, pet stores, department stores, etc.)
- Business Support Services
- Indoor Commercial Recreation, except multi-screen (6 or more) movie theaters
- Vehicle Sales
- Warehousing, Wholesaling, and Distribution

For a full list of permitted uses as well as conditional uses and uses allowed with Site Plan Review, refer to the Table at Attachment C.

No development is planned for the 0.43-acre parcel at the northeast corner of the site. This area would be used for storm drain retention for the site once it's developed.

Two driveways are proposed for Santa Fe Drive. The driveway serving Parcel One would be a right-in/right-out driveway only. This driveway would be approximately 170 feet west of the intersection of North Highway 59 and Santa Fe Drive. A second full access driveway is proposed approximately 500 feet west of the intersection. An additional right-in/right-out driveway would be provided approximately 250 feet north of the intersection on Highway 59.

The existing use at the southwest corner of North Highway 59 and Santa Fe Drive will remain unchanged. The pre-zoning designation for the site is Light Industrial (I-L) which is consistent with the current General Plan designation of Industrial (IL). For a full listing of uses allowed within the I-L zone, please refer to the table at Attachment E.

Surrounding Uses
(Attachment A)

Surrounding Land	Existing Use of Land	Zoning Designation	City General Plan Land Use Designation
North	Black Rascal Creek/Vacant Land	Merced County	Regional/Community Commercial (RC)
South	BNSF Railroad/Industrial Uses	I-L	Industrial (IL)
East	Vacant Land (across SR 59)	P-D #12 and R-1-6	Commercial Office (CO) and Industrial (IL)
West	Vacant Land	Merced County	Regional/Community Commercial (RC) and Industrial (IL)

BACKGROUND

The annexation area is comprised of the northwest corner and southwest corner of North Highway 59 and Santa Fe Drive. The northwest corner of Santa Fe Drive has been vacant for many years. This property was previously identified by FEMA as an area within a floodway. Therefore, development on this property was not feasible and the property was given a General Plan designation of Open Space (OS). However, in 2014, FEMA revised the floodway and removed the majority of this property out of the floodway making it possible to be developed (Attachment F).

The southwest corner has been developed for many years with similar retail/wholesale businesses operating from the site.

FINDINGS/CONSIDERATIONS:

General Plan Compliance and Policies Related to This Application

A) The proposed annexation complies with the General Plan designation of Industrial (IND) for the southwest corner. The northwest corner of the annexation area would comply with the General Plan designation of Thoroughfare Commercial (CT) upon approval of General Plan Amendment #15-04. The southwest corner would also comply with the zoning designation of Light Industrial (I-L) and the northwest corner would comply with the designation of Thoroughfare Commercial (C-T) if the recommended pre-zoning is approved.

Policy UE-1.3	
Control the annexation, Timing, Density, and Location of new Land Uses Within the City's Urban Expansion Boundaries.	
Implementing Actions:	
1.3.a	**The City should continue to require that all new urban development and annexations be contiguous to existing urban areas and have reasonable access to public services and facilities.**
1.3.c	**The City shall encourage phasing of new development.**
Policy UE-1.5	
Promote Annexation of Developed Areas Within the City's Specific Urban Development Plan (SUDP)/Sphere of Influence (SOI) During the Planning Period.	
Implementing Actions:	
1.5.a	*The City should continue to promote the annexation of unincorporated urban areas within the urban expansion boundaries, which cause a duplication of public services and hinder extension of City services to new development, if they are financially feasible.*

General Plan Policy UE-1.3 and Implementing Action 1.3.g requires that annexation requests be evaluated against certain criteria. Below is an evaluation of the proposed annexation against those criteria:

Criteria 1

Is the area contiguous to the Current City Limits and within the City's Specific Urban Development Plan (SUDP)/Sphere of Influence (SOI)? Do the annexed lands form a logical and efficient City limit and include older areas where appropriate to minimize the formation of unincorporated peninsulas?

Evaluation

The proposed annexation area is contiguous to the existing City Limits to east and south (see map at Attachment A). The annexation area is on the western edge of the City Limits. The annexation would form a logical and efficient boundary and does not create any new islands or peninsulas.

Criteria 2
Is the proposed development consistent with the land use classification on the General Plan Land Use Diagram (Figure 3.1)?

Evaluation
The property at the southwest corner of the annexation area is consistent with the land use classification (IND) of the General Plan diagram. The northwest corner is currently designated as Open Space. However, the proposed General Plan Amendment would change the designation to Thoroughfare Commercial (CT) which would be consistent with the proposed development on that site.

Criteria 3
Can the proposed development be served by the City water, sewer, storm drainage, fire and police protection, parks, and street systems to meet acceptable standards and service levels without requiring improvements and additional costs to the City beyond which the developer will consent to provide or mitigate?

Evaluation
The City would be able to provide all services to the annexation area. All new development within the annexation area would be required to annex into the City's Community Facilities District (CFD) for services which would cover the costs of Police and Fire protection. Public Facilities Impact Fees would also be paid that would help fund future police and fire stations, parks and street improvements.

Criteria 4
Will this annexation result in the premature conversion of prime agricultural land as defined in the Important Farmland Map of the State Mapping and Monitoring Program? If so, are there alternative locations where this development could take place without converting prime soils?

Evaluation
The annexation area is not listed as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency.

Criteria 5
Will a non-agricultural use create conflict with adjacent or nearby agricultural uses? If so, how can these conflicts be mitigated?

Evaluation
The proposed development would not conflict with any nearby agricultural uses. The land directly to the north of the site is currently vacant. Beyond the vacant land is property planted with almond trees. Other than this use, there are no other agricultural uses nearby. Therefore, there would be no conflict with ag uses.

Criteria 6
Does the annexation area help the City reach one of the following goals?

a) Does annexation of the area bring the City closer to annexation of the UC Merced campus and University Community?

b) Does the area contain significant amounts of job-generating land uses, such as industrial, commercial, office, and business/research and development parks?
c) Does the project provide key infrastructure facilities or other desirable amenities such as the extension of major roads, utility trunk lines, parks and recreational facilities, etc.?

Evaluation

a) The proposed annexation does not bring the City closer to annexation the UC or UC Community area. This annexation is on the western edge of the City approximately 7 miles from UC Merced.
b) The proposed commercial development at the northwest corner of North Highway 59 and Santa Fe would generate a small number of jobs within the City. The first phase of the development would include a fast-food restaurant, gas station/mini-market/car wash, and drive-thru coffee kiosk. The jobs generated by these uses would typically be part-time jobs, but would include some full-time jobs. The future development of Phase Two would most likely include more retail-type uses. The exact number of jobs created is not currently available, but it is certain that new jobs would be available due to development of this site.
c) The development proposed for the northwest corner of North Highway 59 and Santa Fe Drive would be required to extend utility services across the full length of the project frontage as development occurs.

Traffic/Circulation

B) *The following is a summary. For more details regarding the traffic analysis, please refer to Section O of Initial Study #15-36 at Attachment G.*

Substantial Increase in Traffic Levels: Thresholds are established for arterial and collector type roadways. Customarily, traffic studies prepared for the City established a threshold of significance at 5% or more of existing traffic amounts contributed by the Project to an "arterial roadway" that is, or will be, operating at an unacceptable level of service (LOS) "E" or "F." KD Anderson and Associates prepared a traffic analysis for the proposed development (Attachment L) of Initial Study #15-36 (Attachment G). This analysis concluded the following:

All the roadway segments studied (SR 59, Santa Fe Drive, and Olive Avenue) are arterial roadways. Thus, the threshold of significance would be the addition of 5% of the current ADT for roadways operating at LOS "E" or "F." As shown in the table below, SR 59 from Olive Avenue to W. 16th Street is currently operating at LOS F.

Existing Roadway Segments Volumes and Levels of Service				
Street	**From**	**To**	**Daily Volume**	**LOS**
SR 59	Buena Vista Dr.	W. Olive Ave	13,379	D
	W. Olive Ave.	BNSF RR	21,954	**F**
	BNSF RR	W. 16th St.	20,462	**F**
Santa Fe Dr.	Beachwood Dr.	SR 59	19,733	C
W. Olive Ave	SR 59	Loughborough Dr.	25,131	C

Phase One of the proposed development at the northwest corner of North Highway 59 and Santa Fe Drive would add approximately 1,116 daily trips to the area. Phase Two would add an additional 1,924 trips for a total of 4,040 daily trips at full build-out of the project. The table on the following page shows the comparison of the existing traffic volumes to the expected traffic volumes with build-out of the project. As shown, the additional traffic generated from the project would not decrease the level of service for these roadway segments below the existing LOS. As shown below, no segment of the SR 59 that currently operates at LOS F exceeds a 5% increase in traffic volume. Therefore the project would not result in a significant impact.

Existing Roadway Segments Plus Project Volumes and Levels of Service							
Street	**From**	**To**	**Existing Daily Volume**	**Project Daily Volume**	**Total Daily Volume**	**Percent Increase**	**LOS**
SR 59	Buena Vista Dr.	W. Olive Ave	13,379	1,010	14,749	7.0%	D
	W. Olive Ave.	BNSF RR	21,954	808	22,762	3.7%	**F**
	BNSF RR	W. 16th St.	20,462	404	20,866	2.0%	**F**
Santa Fe Dr.	Beachwood Dr.	SR 59	19,733	606	20,339	3.1%	C
W. Olive Ave	SR 59	Loughborough Dr.	25,131	2,015	27,146	8.0%	C

Intersections

Although SR 59 between Olive Avenue and W. 16th Street would continue to operate at an LOS F, the existing off-site intersections studied would all operate at an LOS D. However, the proposed western driveway is forecasted to operate at an LOS F in the p.m. peak hour (4-6 p.m.) In order to improve this condition, the traffic analysis offers three possible alternatives. Each scenario would have ramifications on the project.

Similarly, the SR 59 access is expected to occasionally be blocked by the queue of southbound traffic extending from the Santa Fe Drive traffic signal. Alternative measures to alleviate this issue are also noted, along with their ramifications on the site. The traffic analysis recommends Alternative #1 as the preferred mitigation measure for this impact.

Western Driveway Alternatives

Alternative	**Ramification**
Install a Two-Way Left-Turn lane on Santa Fe Drive.	Requires moving driveway or reconstructing SR 59 intersection.
Prohibit outbound left turns.	Exacerbates problem at SR 59 driveway.
Install traffic signal.	Location is problematic and would likely require moving the driveway.

SR 59 Access Alternatives

Alternative	Ramification
Lengthen southbound left turn lane.	Facilitates access, but does not shorten queues (*mitigation recommended by traffic analysis*).
Move access to the north.	Affects Black Rascal Creek as well as property not included in project.
Close SR 59 access.	Exacerbates issues at western access and makes site untenable as a retail center.

The additional traffic on the roadways does not reach the level of significance since the amount of traffic added to the sections of road currently operating at LOS F are less than 5%. However the on-site impacts described above would require mitigation to reduce them to a less than significant level.

Cumulative Conditions

The analysis of the Cumulative Plus Project analysis determined that in order to improve the level of service at SR 59 and Olive Avenue, improvements would be needed. As mitigation for the project's proportional impact on this roadway segment, the analysis determined the development should contribute its fair share to the cost of intersection improvements.

The following Mitigation Measures have been recommended in order to reduce traffic impacts to a less than significant level. These mitigation measures are also included as Conditions #8, 9, and 10.

Mitigation Measure TRA-1

Prior to construction, the Site Plan Review Committee shall review the site design and determine which alternative at the western driveway is best to reduce the expected impacts. The alternatives may include those alternatives included in the traffic analysis or another alternative such as moving the driving further to the west. The developer shall provide any additional documentation or studies needed for the Site Plan Review Committee to make this determination.

Mitigation Measure TRA-1a

The southbound left-turn lane on SR 59 shall be lengthened as determined by the City Engineer and approved by Caltrans.

Mitigation Measure TRA-1b

The development shall contribute its fair share to the cost of improvements for the intersection of SR 59 and Olive Avenue:

- *Reconstruct westbound Olive Avenue to provide dual left turn lanes on southbound SR 59; and,*
- *Reconfigure the westbound right turn lane to create a combination through and right turn lane, and extend that through lane across SR 59 along the project's frontage; and,*
- *Reconstruct the existing northbound right turn lane as a "free" right turn with median island separating eastbound and right-turning traffic. Reconstruct the eastbound Santa Fe Drive approach to provide dual left turn lanes.*

Caltrans is currently working on improvements to the intersection of Olive Ave./Santa Fe Dr. and Highway 59. Caltrans would be consulted prior to any mitigation measures being constructed at this intersection.

Parking

C) The annexation does not directly produce a need for parking. However, the subsequent development would require parking to serve the future uses on the site. Parking requirements would be evaluated at the Site Plan Review and/or Building Permit phase of development.

Public Improvements/City Services

D) *Streets/Sidewalks/Curb/Gutter*

Santa Fe Drive and North Highway 59 shall be widened to the full width along the north side of Santa Fe Drive and the west side of Highway 59 as part of the development of the retail center. All public improvements shall be installed in this area including, but not limited to, sidewalk, curb, gutter, street lights, and street trees (Condition #13). The developer shall work with Caltrans and obtain all necessary permits for all work done within the state right of way (Condition #14).

E) *Sewer/Water*

The City's current water and wastewater system is capable of handling the annexation area and future development of the proposed project at the northwest corner of North Highway 59 and Santa Fe Drive. There is an existing sewer line in Olive Avenue. The project would be required to extend the main line to their site and across the entire frontage of their property (approximately 1,000 feet) as development occurs. A sewer line also exists in Highway 59, south of Olive Avenue that would serve the existing development in that area.

There is a water line in North Highway 59 which extends along the property frontage within the entire annexation area. This water line would serve both the existing development and future development.

F) *Storm Drainage*

Any future development within the annexation area would be required to provide on-site storm drainage facilities that would connect to the City's storm drain system (Condition #18). Details regarding this system would be addressed prior to issuance of any building permits for development. Prior to the issuance of a building permit for this project, the

applicant shall demonstrate to the City that proposed storm drainage facilities are adequate to meet the Project demands and that improvements are consistent with the City's Storm Drainage Master Plan and the Post Construction Standards for the City's Phase II MS4 permit (Mitigation Measure HYD-5 and Condition #15).

Additionally, the developer would be required to submit a Storm Water Pollution Prevention Plan (SWPPP) and a Storm Water Mitigation Plan (SWMP) for review and approval prior to construction (Mitigation Measures HYD-1a and 1b).

G) *Police and Fire Protection*

The annexation area is located within the City's Police and Fire emergency response times. All new construction within the annexation area would be required to annex into the City's Community Facilities District (CFD) for services which helps cover the cost of Police and Fire response. In addition, all new development would be required to pay the City's Public Facilities Impact Fees to help fund future Police and Fire stations.

H) *Parks and Recreation*

The existing use and proposed uses within the annexation area are all commercial or industrial in nature. These uses would not produce a need for additional parks and recreation facilities. However, a portion of the PFFP fees paid go towards the development of new parks within the City.

Building Design/Site Design/Landscaping/Signs

I) The annexation process does not get into the detail of building and site design, landscaping, or signs for projects. These issues would be addressed during subsequent reviews for new development.

Neighborhood Impact/Interface

J) The annexation area is not adjacent to any developed residential areas. The nearest residential uses to the annexation area are approximately 1,000 to 1,500 feet away. Public hearing notices were mailed to all property owners within 300 feet of the annexation area. To date, no one has expressed any concerns with the proposed annexation or subsequent development.

Timeliness of Annexation

K) This annexation would be the first since the Mather Road Annexation in 2009. In 2016, the City and County reached an agreement for a new Revenue Sharing Agreement which paved the way for new annexations.

Pre-Annexation Development Agreement

L) Section 20.86.150 of the Zoning Ordinance requires a property owner to enter into a Pre-Annexation Development Agreement prior to annexation. This agreement shall not become operative unless annexation proceedings are completed by the Local Agency Formation commission (LAFCO). A Draft Pre-Annexation Development Agreement

(Attachment H) has been provided for the Commission to make a recommendation on to the City Council as required by Section 20.86.060 of the Zoning Ordinance. The Pre-annexation Development Agreement is only with the owner of the vacant land and binds the owner and her successors to certain conditions and requirements related to the development of the land. The property owner has reviewed the draft agreement and has verbally agreed to sign it prior to City Council taking final action on the agreement.

Environmental Clearance

M) The Planning staff has conducted an environmental review (Initial Study #15-36) of the project in accordance with the requirements of the California Environmental Quality Act (CEQA), and a Draft Mitigated Negative Declaration (i.e., no significant effects in this case because of the mitigation measures and/or modifications described in Initial Study #15-36 is being recommended (Attachment G).

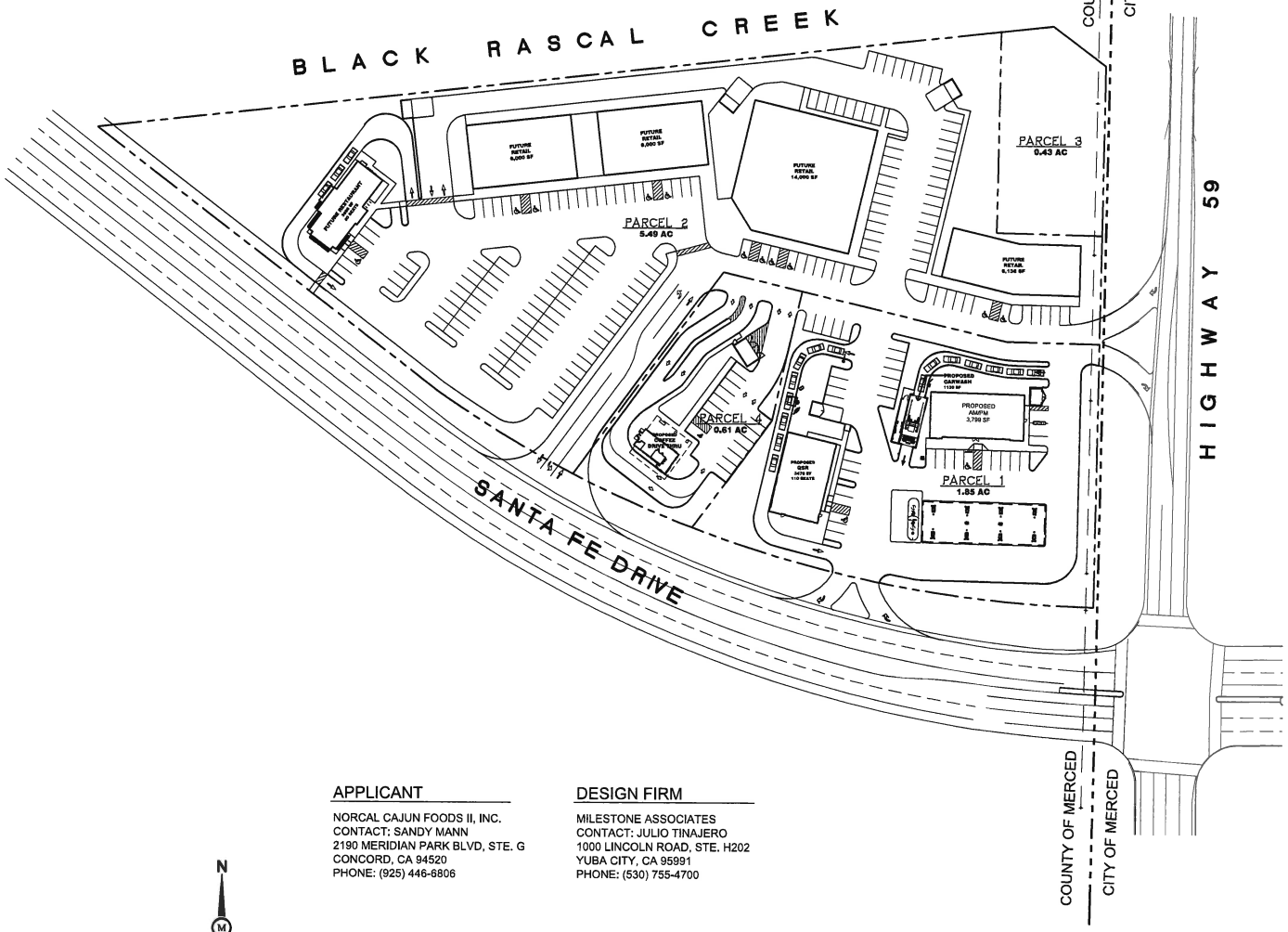
Attachments:

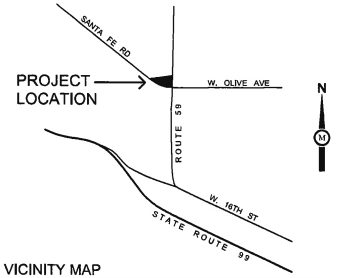
A) Location Map
B) Site Plan
C) Zoning Table – Commercial Uses
D) Tentative Map
E) Zoning Table – Industrial Uses
F) Flood Zone
G) Initial Study
H) Draft Pre-Annexation Development Agreement
I) Draft Planning Commission Resolution

Ref: *N:\SHARED\PLANNING\STAFFREP\SR2018\SR 18-14 Annex & Pre-Zone .docx*


ATTACHMENT A
Black Rascal Creek
BLACK RASCAL BP
SANTA FE
SANTA FE
C-T
I-L
59
OLIVE
N
Legend
Proposed Annexation Boundary
railroad
City Limit
Proposed Zone
Throughfare Commercial (C-T)
Light Industrial (I-L)

ATTACHMENT B





VICINITY MAP

NOT TO SCALE

LOT DATA:

A.P.N.:	57-200-067 & 57-200-029
TOTAL ACREAGE:	341,075 SF (7.83 AC)
EXISTING PARCELS:	2
PROPOSED PARCELS:	4
EXISTING ZONE:	INDUSTRIAL (COUNTY)
PROPOSED ZONE:	C-T DISTRICT COMMERCIAL (CITY)
EXISTING USE:	VACANT
PROPOSED USE:	CONVENIENCE STORE, FUEL SALES, CARWASH, QUICK SERVE RESTAURANT, WITH DRIVE THRU (QSR), AND COFFEE DRIVE THRU

PARCEL	BLDG. SQ. FT.	ACREAGE
1	FUEL / QSR	1.85
2	FUTURE DEVELOPMENT	4.94
3	FUTURE DEVELOPMENT	0.43
4	FUTURE DEVELOPMENT	0.61
TOTAL	7,275	7.83

PARCEL 1 PARKING DATA:

REQUIRED:	
C-STORE (3799/250 SF):	15 SPACES
QSR (110 SEATS/2.5):	44 SPACES
CARWASH	2 SPACES
REQUIRED:	61 SPACES
PROVIDED:	
STANDARD SPACE (9'x20')	35 SPACES
SPACES AT FUEL PUMPS	16 SPACES
RECIPROCAL SPACES	8 SPACES
ACCESSIBLE SPACE (9'x20')	2 SPACES
PROVIDED:	61 SPACES

PROPERTY DESCRIPTION

A PORTION OF LOT 96 AND A PORTION OF THE WEST 40 FEET OF THE 100 FOOT WIDE SOUTHERN PACIFIC RAILROAD-OAKDALE BRANCH RIGHT-OF-WAY (NOW ABANDONED) AS SHOWN ON THE MAP ENTITLED, MAP OF THE CROCKER COLONY, RECORDED IN VOLUME 5 OF OFFICIAL PLATS, PAGE 6, MERCED COUNTY RECORDS

SITE UTILITIES:	PROVIDED BY:
SEWAGE DISPOSAL:	CITY
WATER SUPPLY:	CITY
DRAINAGE:	CITY

APPLICANT

NORCAL CAJUN FOODS II, INC.
CONTACT: SANDY MANN
2190 MERIDIAN PARK BLVD, STE. G
CONCORD, CA 94520
PHONE: (925) 446-6806

DESIGN FIRM

MILESTONE ASSOCIATES
CONTACT: JULIO TINAJERO
1000 LINCOLN ROAD, STE. H202
YUBA CITY, CA 95991
PHONE: (530) 755-4700

N

SCALE 1" = 50'
0 50 100

OVERALL PROJECT SITE

SCALE: 1" = 50'

CLIENT:
NORCAL CAJUN FOODS, INC.
2190 MERIDIAN PARK BLVD, SUITE G
CONCORD, CA 94520
CONTACT: SURINA MANN
PHONE: (925) 446-6806

ARCO
BP WEST COAST PRODUCTS, LLC

Milestone Associates
1000 LINCOLN ROAD, STE. H202, YUBA CITY, CA 95991
TEL (530) 755-4700 FAX (530) 755-4707

NO.	DATE	REVISION DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

SEAL:

DEVELOPMENT INFORMATION:
ARCO NTI
3800 AM/PM
PROTOTYPE

SITE ADDRESS:
SANTA FE DRIVE
HIGHWAY 59
MERCED, CA
FACILITY # TBD

DESIGNED BY:	ARCO
CHECKED BY:	JT
DRAWN BY:	STAFF
VERSION: 07-07-16	PROJECT NO: 15-916

DRAWING TITLE:
OVERALL SITE PLAN

SHEET NO:
DD1

SUBMITTAL DATE: 1-19-18

DESIGN REVIEW 01/25/18
PLANNING REVIEW 01/25/18

Chapter 20.10 - COMMERCIAL ZONING DISTRICTS

Sections:

20.10.010 Purpose of the Commercial Zoning Districts

20.10.020 Land Use Regulations for Commercial Zoning Districts

20.10.030 Development Standards and Guidelines for Commercial Zoning Districts

20.10.010 Purpose of the Commercial Zoning Districts

A. Neighborhood Commercial (C-N). The C-N zoning district provides areas for shopping centers and other commercial uses that serve the day-to-day needs of residential neighborhoods. The C-N districts shall have a minimum area of three acres and shall be located only where analysis of the residential population demonstrates that the facilities are justified.

B. Shopping Center Commercial (C-SC). The C-SC zoning district provides areas for grocery stores, supermarkets, and other retail establishments selling groceries to serve local residents as well as the larger regional market. The C-SC districts shall have a minimum area of five acres.

C. Regional/Central Commercial (C-C). The C-C zoning district provides areas for a diversity of commercial and residential land uses in the central business district and regional centers. These uses help to support a vibrant retail destination, provide jobs for residents, and accommodate commercial and service uses to meet the needs of community and regional businesses and residents.

D. Office Commercial (C-O). The C-O zoning district provides a location for a broad range of office uses including professional offices, business offices, medical offices, and regional or "back" offices. The C-O zoning district can also accommodate limited "accessory" restaurant, retail, and service uses that cater to the needs of on-site employees and visitors.

E. Thoroughfare Commercial (C-T). The C-T zoning district provides areas for auto-oriented commercial uses that accommodate the needs of people traveling on highways and local motorists. The C-T zoning district also accommodates large recreational facilities and heavy commercial uses that benefit from proximity to the highway.

F. General Commercial (C-G). The C-G zoning district provides areas for heavy commercial and light industrial uses that may impact neighboring uses and often require large parcels and benefit from separation from retail uses. The C-G districts are to be established in areas of four acres or larger.

G. Business Park (B-P). The B-P zoning district provides a location for employment-intensive uses within an attractive campus-like setting. The B-P zoning district shall primarily allow "back" offices, research and development businesses but also limited commercial retail uses to serve employees in the area. The B-P zoning district shall have a minimum area of five acres.

20.10.020 Land Use Regulations for Commercial Zoning Districts

A. Permitted Uses. Table 20.10-1 identifies land uses permitted in commercial zoning districts.

TABLE 20.10-1 PERMITTED LAND USES IN THE COMMERCIAL ZONING DISTRICTS

Key	Zoning District [1]							
P Permitted Use **M** Minor Use Permit Required **SP** Site Plan Review Permit Required **C** Conditional Use Permit Required **X** Use Not Allowed	**C-O**	**C-N**	**C-C**	**C-SC**	**C-T**	**C-G**	**B-P**	**Additional Regulations**
RESIDENTIAL USES								
Group/Transitional/Supportive Housing	X	X	P [3]	X	X	X	X	
Live/Work Units	C	C	P [2]	X	X	X	X	Sec. 20.44.080
Multiple-Family Dwellings	C	C	P	X	X	X	X	
Residential Care Facilities, Small *(6 or Less)*	X	X	P [3]	X	X	X	X	
Residential Care Facilities, Large *(More than 6 residents)*	X	X	P [3]	X	X	X	X	
Single-Room Occupancy	X	X	P [3]	X	X	X	X	Sec. 20.44.120
COMMUNITY USES								
Community Assembly	C	C	C	X	C	C	C	
Community Garden	SP	SP	SP	X	X	SP	X	
Colleges and Trade Schools	C	C	C	X	X	C	C	
Convalescent or Nursing Homes	C	C	C	X	X	X	X	
Cultural Institutions	C	C	C	X	C	C	C	
Day Care Centers (Children & Adults)	M	M	M	X	X	X	SP	
Emergency Shelters	X	X	C	X	C	P	X	Sec.20.44.150
Government Offices	P	P	P	X	C	C	C	
Hospitals and Surgery Centers	C	C	C	X	X	X	C	
Instructional Services	P	P	P	X	X	X	SP	
Medical Offices and Clinics	P	P	P	X	X	X	C	
Parks and Recreational Facilities	C	C	C	X	X	X	C	
Public Safety Facilities	SP	SP	P	C	SP	SP	SP	
Rehabilitation Centers	P	P [6]	P[10]	X	X	C	C	
Social Assistance Services	C	C	C	X	SP	P	X	

Key	Zoning District [1]							
P Permitted Use **M** Minor Use Permit Required **SP** Site Plan Review Permit Required **C** Conditional Use Permit Required **X** Use Not Allowed	C-O	C-N	C-C	C-SC	C-T	C-G	B-P	Additional Regulations
COMMERCIAL USES								
Alcoholic Beverage Sales [7]	X	P [7][8]	P [7]	C [7][8]	P [7]	P [7]	SP [7]	Sec.20.44.010
Bail Bond Businesses	C	X	C [10]	X	C	C	C	
Bars and Nightclubs	X	C	C	X	C	C	C	
Banks, Retail	P	P	P	P [9]	SP	SP	SP	
Bed and Breakfast	X	X	C	X	C	C	X	Sec.20.44.030
Building Supplies/Home Improvement	X	X	C	X	SP	P	SP	
Business Support Services	X	C	M	X	P	P	SP	
Cardrooms [5]	X	X	C [5]	X	C [5]	C [5]	X	Chapter 9.08
Cemeteries and Mausoleums	X	X	C	X	C	P	X	
Check Cashing/Payday Loan Establishments	C	X	C [10]	X	C	C	C	Sec.20.44.040
Commercial Recreation, Indoor (Except Below)	X	SP	SP	X	P	SP	C	
Multi-Screen (6 or More) Movie Theaters	X	C	P	X	C	X	C	
Commercial Recreation, Outdoor	X	X	X	X	P	C	C	
Drive-Through and Drive-Up Sales	C	C	SP	X	P	P	SP	
Equipment Sales and Rental	X	X	X	X	P	P	SP	
Farmer's Market	C	SP	SP	SP	SP	SP	SP	Sec.20.50.030B
Flea Market	X	X	X	X	C	C	C	
Funeral Parlors and Mortuaries	C	C	C	X	C	P	C	
Gas and Service Stations/Car Washes	X	C	SP	C [9]	P	P	SP	Sec.20.44.070
Hotels and Motels	X	X	P	X	P	C	C	
Hookah Lounges	X	C	C	X	C	C	C	
Kennels	X	X	X	X	C	P	C	
Maintenance and Repair Services	X	X	X	X	P	P	SP	
Massage Establishments	C [16]	C [16]	C [16]	X	C [16]	C [16]	X	Chapter 5.44
Massage Therapy—Sole Practitioner	P[17]	P[17]	P[17]	X	C [16]	C [16]	X	Chapter 5.44
Medical Marijuana Dispensaries	C [19]	X	X	X	X	X	X	Sec. 20.44.170
Mobile Food Vendors	C	C	C [10]	X	SP [11]	SP	C	Sec. 5.54 & 20.44.020
Mobile Home Sales	X	X	X	X	P	P	SP	
Office, Professional	P	P	P	C [9]	SP	SP	SP	

Key	Zoning District [1]							
P Permitted Use **M** Minor Use Permit Required **SP** Site Plan Review Permit Required **C** Conditional Use Permit Required **X** Use Not Allowed	C-O	C-N	C-C	C-SC	C-T	C-G	B-P	Additional Regulations
COMMERCIAL USES (Continued)								
Pawn Shops	X	X	C [10]	X	X	P	X	
Personal Services	SP	P	P	P [9]	SP	SP	SP [12]	
Retail, General	SP[12]	P	P	P [9]	P	SP	SP	
Restaurants	C [13]	P [8]	P	C [9]	P	M	SP [12] [13]	
Tattoo Parlors	X	SP	M	X	M	M	SP	
Tobacco Retailers [18]	X	P [18]	P [18]	P [18]	P [18]	P [18]	SP[18]	Sec.20.44.160
Vehicle Parts and Accessories Sales	X	P	P	X	P	P	SP	
Vehicle Rentals	X	X	M	X	P	P	SP	
Vehicle Repair and Maintenance, Major	X	X	X	X	C	P	C	
Vehicle Repair and Maintenance, Minor	X	SP	P	X	P	P	C	
Vehicle Sales	X	X	P [10] [14]	X	P	P	C	
INDUSTRIAL USES								
Manufacturing and Processing, General	X	X	X	X	X	M	C	
Manufacturing and Processing, Light	X	X	X	X	X	P	SP	
Research and Development	C	X	C	X	SP	SP	P	
Warehousing, Wholesaling, and Distribution	X	X	SP[15]	X	P	P	SP	
Wrecking & Salvage Establishments	X	X	X	X	C	C	X	Sec.20.44.140
TRANSPORTATION, COMMUNICATION, AND UTILITY USES								
Airports	X	X	X	X	C	C	C	
Freight Terminals	X	X	X	X	C	C	C	
Heliports	C	X	C	X	C	C	C	
Parking Facilities	P	P	P	P[9]	P	P	P	
Public/Mini Storage	X	X	X	X	M	M	SP	
Recycling Collection Facilities								Sec.20.44.090
Reverse Vending Machines	P	P	P	M[9]	P	P	P	
Small Collection Facilities	SP	SP	SP	SP[9]	SP	SP	SP	
Large Collection Facilities	X	X	X	X	C	C	C	
Utilities, Major	C	C	C	X	C	C	C	
Utilities, Minor	P	P	P	P[9]	P	P	P	
Wireless Communications Facilities	**See Chapter 20.58**							

Notes:

[1] A Site Plan Review Permit may be required per Chapter 20.32 (Interface Regulations) regardless of the uses shown in Table 20.10-1.

[2] Residential use on the ground floor is prohibited unless it is located on the back of the property where it is not visible or approved with a Conditional Use Permit.

[3] Prohibited as a single use. Permitted as part of a residential mixed-use project.

[4] Use shall not exceed 20,000 square feet.

[5] 24 hour operations limited to C-T and C-C zones per Chapter 9.08 (Gaming).

[6] Rehabilitation centers for drug, methadone, and alcohol are prohibited.

[7] A Conditional Use Permit is required for establishments smaller than 20,000 square feet.

[8] A Conditional Use Permit is required for alcoholic beverage sales for on-site consumption.

[9] Permitted only as part of a shopping center or other retail establishment with a minimum of 5,000 square feet of floor area devoted to the sale of groceries.

[10] Prohibited in the City Center area between 19th and 16th Streets and O Street and Martin Luther King, Jr. Way, including properties fronting on either side of each of the above streets, except vehicle sales showrooms can be allowed.



[11] Includes refreshment stands.

[12] Permitted only as an ancillary use to serve employees, not to occupy more than 5,000 square feet.

[13] Conditional Use Permit required unless the use is ancillary to a principal permitted use. For restaurants, Conditional Use Permit is required unless the uses are conducted in and entered from within the building with no outside advertising.

[14] A Site Plan Review Permit is required for used vehicle sales.

[15] Temporary warehousing and storage only is allowed per the requirements of Section 20.10.030(D).

[16] Provided that a massage establishment permit has not been revoked at that location within 12 months of the application for a conditional use permit and a massage establishment permit is obtained pursuant to Chapter 5.44.

[17] Must have valid certificate from State of California as a massage therapist or massage practitioner pursuant to the Massage Therapy Act (Business and Professions Code Section 4600 *et seq.)*.

[18] Prohibited within 1,000 feet of schools and other uses per Sec. 20.44.160, unless building over 20,000 square feet.

[19] Limited to no more than 4 dispensaries. Prohibited within 600 feet of schools; 500 feet of public parks, playgrounds, and sports fields; and 500 feet of youth centers, City-owned and operated recreational center, or public library. See Section 20.44.170 for details.

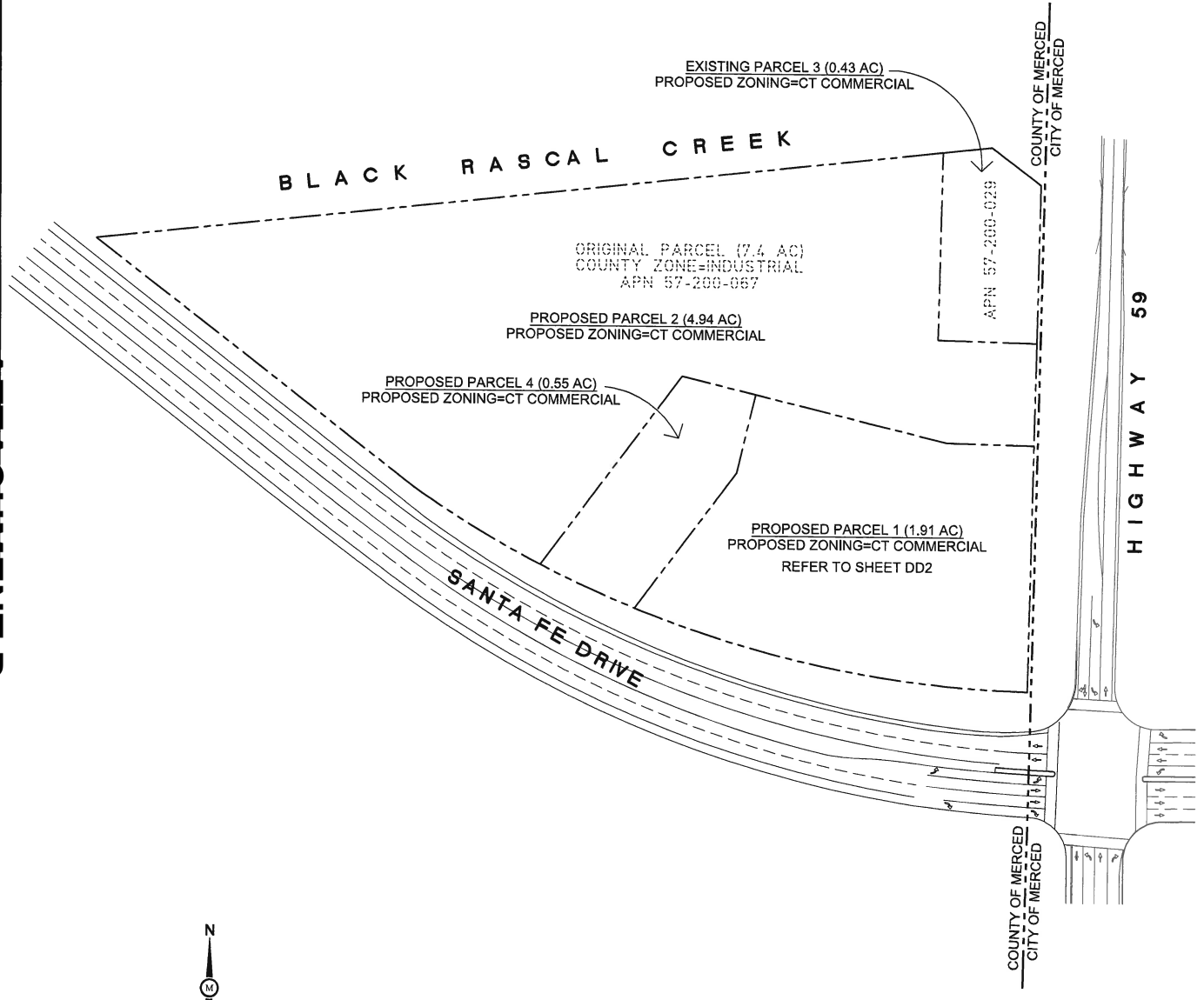
20.10.030 Development Standards and Guidelines for Commercial Zoning Districts

A. General Standards. Table 20.10-2 identifies development standards that apply to all parcels and structures located in commercial zoning districts. See Figure 20.10-1.

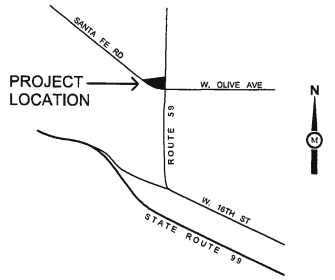
B. Outdoor Operation of Uses.

1. The outdoor operation of a land use in the C-C and C-N zoning districts shall require approval of a Site Plan Review Permit. Outdoor dining in accordance

ATTACHMENT D



PROPOSED TENTATIVE MAP
SCALE: 1" = 50'



VICINITY MAP
NOT TO SCALE

LOT DATA:

A.P.N.:	57-200-067 & 57-200-029
TOTAL ACREAGE:	341,075 SF (7.83 AC)
EXISTING PARCELS:	2
PROPOSED PARCELS:	4
EXISTING ZONE:	INDUSTRIAL (COUNTY)
PROPOSED ZONE:	C-T DISTRICT COMMERCIAL (CITY)
EXISTING USE:	VACANT
PROPOSED USE:	CONVENIENCE STORE, GASOLINE SALES, CARWASH, COFFEE DRIVE THRU, AND QUICK SERVE RESTAURANT (QSR) W/ DRIVE THRU

PARCEL	BLDG. SQ. FT.	ACREAGE
1	7,226	1.91
2	FUTURE DEVELOPMENT	4.94
3	FUTURE DEVELOPMENT	0.43
4	FUTURE DEVELOPMENT	0.55
TOTAL	7,226	7.83

PROPERTY DESCRIPTION

A PORTION OF LOT 96 AND A PORTION OF THE WEST 40 FEET OF THE 100 FOOT WIDE SOUTHERN PACIFIC RAILROAD-OAKDALE BRANCH RIGHT-OF-WAY (NOW ABANDONED) AS SHOWN ON THE MAP ENTITLED, MAP OF THE CROCKER COLONY, RECORDED IN VOLUME 5 OF OFFICIAL PLATS, PAGE 6, MERCED COUNTY RECORDS

SITE UTILITIES:	PROVIDED BY:
SEWAGE DISPOSAL:	CITY
WATER SUPPLY:	CITY
DRAINAGE:	CITY

APPLICANT

NORCAL CAJUN FOODS II, INC.
CONTACT: SANDY MANN
2190 MERIDIAN PARK BLVD, STE. G
CONCORD, CA 94520
PHONE: (925) 446-6806

DESIGN FIRM

MILESTONE ASSOCIATES
CONTACT: JULIO TINAJERO
1000 LINCOLN ROAD, STE. H202
YUBA CITY, CA 95991
PHONE: (530) 755-4700

CLIENT:
NORCAL CAJUN FOODS, INC.
2190 MERIDIAN PARK BLVD, SUITE G
CONCORD, CA 94520
CONTACT: SURINA MANN
PHONE: (925) 446-6806

ARCO
BP WEST COAST PRODUCTS, LLC

Milestone Associates
LAND DEVELOPMENT
1000 LINCOLN ROAD, STE. H202, YUBA CITY, CA 95991
TEL (530) 755-4700 FAX (530) 755-4701

NO.	DATE	REVISION DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

SEAL:

DEVELOPMENT INFORMATION:
ARCO NTI
3800 AM/PM
PROTOTYPE

SITE ADDRESS:
SANTA FE DRIVE
HIGHWAY 59
MERCED, CA

FACILITY # TBD

DESIGNED BY:	ARCO
CHECKED BY:	JT
DRAWN BY:	STAFF
VERSION: 07-07-16	PROJECT NO: 15-916

DRAWING TITLE:
TENTATIVE MAP

SHEET NO:
TM

SUBMITTAL DATE: 1-19-18

07/07/16 PLANNING REVISION
04/26/16 PLANNING REVISION

Chapter 20.12 - INDUSTRIAL ZONING DISTRICTS

Sections:	
20.12.010	Purpose of the Industrial Zoning Districts
20.12.020	Land Use Regulations for Industrial Zoning Districts
20.12.030	Development Standards for Industrial Zoning Districts

20.12.010 Purpose of the Industrial Zoning Districts

A. Light Industrial (I-L). The I-L zoning district provides areas for manufacturing, wholesale, and storage activities that meet City standards to ensure compatibility with surrounding areas and that maintain and strengthen the economic base of the City. I-L districts shall have a minimum size of 5 acres.

B. Heavy Industrial (I-H). The I-H zoning district provides areas for a full range of industrial land uses, including operations that necessitate the storage of hazardous or unsightly materials, and encourages sound industrial development by providing and protecting an environment exclusively to insure the protection of surrounding areas. I-H districts shall have a minimum size of 10 acres.

20.12.020 Land Use Regulations for Industrial Zoning Districts

A. Permitted Uses. Table 20.12-1 identifies land uses permitted in industrial zoning districts.

TABLE 20.12-1 PERMITTED LAND USES IN THE INDUSTRIAL ZONING DISTRICTS

Key	Zoning District [1]		
P Permitted Use M Minor Use Permit Required SP Site Plan Review Permit Required C Conditional Use Permit Required X Use Not Allowed	I-L	I-H	Additional Regulations
RESIDENTIAL USES			
Caretaker's Home	SP	X	
COMMUNITY USES			
Colleges and Trade Schools	C	X	
Instructional Services	C [2]	X	
Public Safety Facilities	SP	C	

Key	Zoning District [1]		
P Permitted Use **M** Minor Use Permit Required **SP** Site Plan Review Permit Required **C** Conditional Use Permit Required **X** Use Not Allowed	**I-L**	**I-H**	**Additional Regulations**
COMMERCIAL USES			
Adult Entertainment Businesses	**SP**	**SP**	Chapters 5.58 and 20.60
Building Supplies/Home Improvement Stores	**SP**	**X**	
Business Support Services	**SP**	**X**	
Commercial Cannabis Businesses	Refer to Table 20.44-1 in Section 20.44.170		
Equipment Sales and Rental	**SP**	**X**	
Gas and Service Stations/Car Washes	**SP [5]**	**SP [5]**	Section 20.44.070
Horticultural Nurseries, Retail	**C**	**X**	
Horticultural Nurseries, Wholesale	**SP**	**X**	
Mobile Food Vendors	**C**	**C**	Chapter 5.54 & 20.44.020
Restaurants	**C [4]**	**C [4]**	
Retail (Products Manufactured On-site Only)	**SP [3]**	**SP [3]**	
Vehicle Repair and Maintenance	**SP [5]**	**SP [5]**	
INDUSTRIAL USES			
Construction and Material Yards	**SP**	**SP**	
Manufacturing and Processing, Light	**SP**	**SP**	
Manufacturing and Processing, General	**SP**	**SP**	
Manufacturing and Processing, Heavy	**X**	**SP [6]**	Section 20.12.020.B
Research and Development	**SP**	**SP**	
Wrecking and Salvage Establishments	**X**	**C**	Section 20.44.140
TRANSPORTATION, COMMUNICATION, AND UTILITY USES			
Freight Terminals	**X**	**SP**	
Public/Mini Storage	**SP**	**X**	
Recycling Collection Facilities, Small	**SP**	**X**	Section 20.44.090
Recycling Collection Facilities, Large	**SP**	**SP**	Section 20.44.090
Recycling Processing Facilities	**SP**	**SP**	Section 20.44.090
Utilities, Major	**C**	**SP**	
Utilities, Minor	**SP**	**SP**	
Warehousing, Wholesaling and Distribution	**SP**	**SP**	
Wireless Communications Facilities	See Chapter 20.58		

Notes:

[1] A Site Plan Review Permit may be required per Chapter 20.32 (Interface Regulations) regardless of the uses shown in Table 20.12-1.

[2] Limited to fitness, gymnastics, and other similar recreational sports and health facilities.

[3] Permitted only as an ancillary showroom use for goods manufactured onsite, not to occupy more than 10 percent of the total building floor area unless a Site Plan Review Permit is obtained for additional floor area.

[4] May be permitted only as an ancillary use to serve employees, not to occupy more than 2,500 square feet with no outside advertising, unless a Conditional Use Permit is obtained.

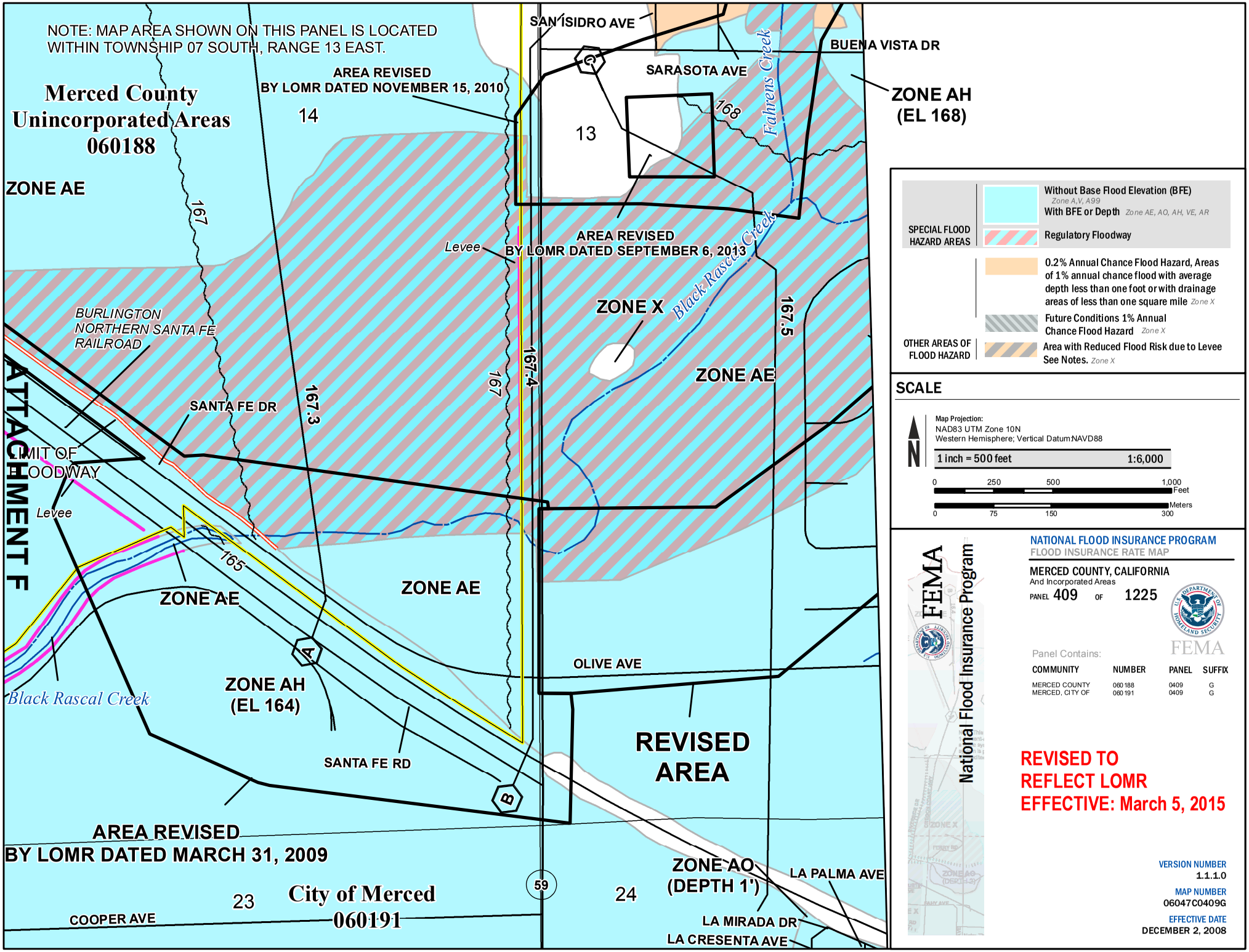
[5] Limited to fleet operations only.

[6] All manufacturing of materials listed in the Section 20.12.020.B is prohibited unless the Planning Commission determines otherwise through a Conditional Use Permit.

B. Prohibited Uses. The manufacturing of the following materials are prohibited unless the Planning Commission determines otherwise through a Conditional Use Permit process.



1. Asphalt, cement, charcoal, and fuel briquettes.
2. Aniline dyes, ammonia, carbide, caustic soda, cellulose, chlorine, carbon black and bone black, creosote, hydrogen and oxygen, industrial alcohol, nitrates of an explosive nature, potash, pyroxylin, rayon yarn, and hydrochloric, nitric phosphoric, picric, and sulphuric acids.
3. Coal, coke, and tar products, including use in other manufacturing; explosives, fertilizers, gelatin, animal glue, and size.
4. Turpentine, matches, and other than water-based paint.
5. Rubber and soaps, including fat rendering.
6. Flour mill.
7. Processing of nitrating of cotton or other materials; magnesium foundry; reduction, refining, smelting and alloying of metal or metal ores; refining petroleum products, such as gasoline, kerosene, naphtha, lubricating oil, distillation of wood or bones; storage, curing or tanning of raw, green or salted hides or skins.
8. Stockyards or slaughterhouses, except for poultry, animal feed or sales yard, fertilizer yard; slag piles.
9. Storage of fireworks or explosives, except where incidental to a permitted use.
10. Any other use which is determined by the Planning Commission to be of the same general character as the above uses.


NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 07 SOUTH, RANGE 13 EAST.
Merced County Unincorporated Areas 060188
AREA REVISED BY LOMR DATED NOVEMBER 15, 2010
SAN ISIDRO AVE
SARASOTA AVE
BUENA VISTA DR
ZONE AH (EL 168)
Fahrens Creek
ZONE AE
AREA REVISED BY LOMR DATED SEPTEMBER 6, 2013
Levee
Black Rascal Creek
ZONE X
BURLINGTON NORTHERN SANTA FE RAILROAD
SANTA FE DR
LIMIT OF FLOODWAY
ATTACHMENT F
ZONE AE
ZONE AH (EL 164)
OLIVE AVE
REVISED AREA
SANTA FE RD
AREA REVISED BY LOMR DATED MARCH 31, 2009
ZONE AO (DEPTH 1')
LA PALMA AVE
LA MIRADA DR
LA CRESENTA AVE
COOPER AVE
City of Merced 060191
14
13
23
24
167
167.3
167.4
167.5
168
165
59
SPECIAL FLOOD HAZARD AREAS
Without Base Flood Elevation (BFE) Zone A,V, A99
With BFE or Depth Zone AE, AO, AH, VE, AR
Regulatory Floodway
0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
Future Conditions 1% Annual Chance Flood Hazard Zone X
OTHER AREAS OF FLOOD HAZARD
Area with Reduced Flood Risk due to Levee See Notes. Zone X
SCALE
Map Projection:
NAD83 UTM Zone 10N
Western Hemisphere; Vertical Datum:NAVD88
1 inch = 500 feet 1:6,000
0 250 500 1,000 Feet
0 75 150 300 Meters
FEMA
National Flood Insurance Program
NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP
MERCED COUNTY, CALIFORNIA
And Incorporated Areas
PANEL 409 OF 1225
FEMA
Panel Contains:
COMMUNITY NUMBER PANEL SUFFIX
MERCED COUNTY 060188 0409 G
MERCED, CITY OF 060191 0409 G
REVISED TO REFLECT LOMR EFFECTIVE: March 5, 2015
VERSION NUMBER
1.1.1.0
MAP NUMBER
06047C0409G
EFFECTIVE DATE
DECEMBER 2, 2008

CITY OF MERCED
PLANNING & PERMITTING DIVISION

TYPE OF PROPOSAL: **Annexation and Pre-Zone Application #15-01, General Plan Amendment #15-04**

INITIAL STUDY: #15-36

DATE RECEIVED: April 21, 2016 (date application determined to be complete)

LOCATION: City of Merced

ASSESSOR'S PARCEL NUMBERS: 057-200-067, 057-200-029, and 057-200-042

(SEE ATTACHED PUBLIC HEARING NOTICE AND MAP AT ATTACHMENTS M AND N.)

Please forward any written comments by June 6, 2018 to:

Julie Nelson, Associate Planner
City of Merced Planning & Permitting Division
678 West 18th Street
Merced, CA 95340
209-385-6858
nelsonj@cityofmerced.org

Applicant Contact Information:

Applicant	**Owner**
Norcal Cajun Foods, Inc.	Louann Bianchi
2901 Meridian Park Blvd, Ste. G	151 N. Ulukoa Place
Concord, CA 94520	Lahaina, HI 96761-1969

Project Description

The proposed annexation area consists of three parcels containing approximately 8.83 acres of land. Approximately 7.83acres is located at the northwest corner of North Highway 59 and Santa Fe Drive and the remaining 1.0 acre is located at the southwest corner of the intersection (Attachment A). The annexation area is bounded by Black Rascal Creek to the north, the Burlington Northern Santa Fe (BNSF) Railroad to the south, and North Highway 59 to the east. Vacant county land is located to the west of the annexation area. The annexation area is divided by Santa Fe Drive splitting the northern portion of the annexation area (7.83 acres) from the southern portion (1.0 acre). The property located at the southwest corner of North Highway 59 and Santa Fe Drive (3.65 N. Hwy 59) is developed with a wholesale/retail business (Horizon). The 7.83 acres of land at the northwest corner of North Highway 59 and Santa Fe is currently vacant. The vacant land is comprised of two separate parcels – Assessor's Parcel Number (APN): 057-200-067 contains 7.4 acres and APN: 057-200-029 contains 0.43 acres.

The developer for the vacant property is proposing to subdivide the 7.4 acres into three separate parcels with construction of the development being done in two phases (refer to the Tentative Map at Attachment B). Phase One of the development would be on Parcel 1 (1.91 acres) and Parcel 4 (0.61 acres). The development on Parcel 1 would consist of a 3,764-square-foot convenience market (AM/PM), a gas station with 8 pumps (16 fueling positions), a car wash, and a 3,462-

square-foot fast food restaurant with 110 seats and a drive-through (refer to the Site Plan at Attachment C). Parcel 4 would be developed with a drive-thru coffee shop/kiosk.

Phase Two would include a 2,695-square-foot fast-food restaurant at the western edge of the site on Parcel 2. The remainder of the site would be for the future development of commercial space totaling approximately 32,000 square feet.

Uses allowed within the remainder of the development would be consistent with the Thoroughfare Commercial (C-T) zone and could include:

- Retail, General (i.e., drug stores, general merchandise stores, pet stores, department stores, etc.)
- Business Support Services
- Indoor Commercial Recreation, except multi-screen (6 or more) movie theaters
- Vehicle Sales
- Warehousing, Wholesaling, and Distribution

For a full list of permitted uses as well as conditional uses and uses allowed with Site Plan Review, refer to the Table at Attachment D.

No development is planned for 0.43-acre parcel at the northeast corner of the site. This area would be used for storm drain retention for the site once it's developed.

Two driveways are proposed for Santa Fe Drive. The driveway serving Parcel One would be a right-in/right-out driveway only. This driveway would be approximately 170 feet west of the intersection of North Highway 59 and Santa Fe Drive. A second full access driveway is proposed approximately 500 feet west of the intersection. An additional right-in/right-out driveway would be provided approximately 250 feet north of the intersection on Highway 59.

This Initial Study will analyze both Phase One and Phase Two development as well as impacts to the existing developed parcel at the southwest corner North Highway 59 and Santa Fe Drive.

The existing use at the southwest corner of North Highway 59 and Santa Fe Drive will remain unchanged. The pre-zoning designation for the site is Light Industrial (I-L) which is consistent with the current General Plan designation of Industrial (IL). For a full listing of uses allowed within the I-L zone, please refer to the table at Attachment E.

I. INITIAL FINDINGS

A. The proposal is a project as defined by CEQA Guidelines Section 15378.

B. The project is not a ministerial or emergency project as defined under CEQA Guidelines (Sections 15369 and 15369).

C. The project is therefore discretionary and subject to CEQA (Section 15357).

D. The project is not Categorically Exempt.

E. The project is not Statutorily Exempt.

F. Therefore, an Environmental Checklist has been required and filed.

II. CHECKLIST FINDINGS

A. An on-site inspection was made by this reviewer on January 3, 2017, and on April 9, 2018.

B. The checklist was prepared on January 3, 2018.

C. The *Merced Vision 2030 General Plan* and its associated EIR (SCH# 2008071069) were certified in January 2012. The document comprehensively examined the potential environmental impacts that may occur as a result of build-out of the 28,576-acre Merced SUDP/SOI. For those significant environmental impacts (Loss of Agricultural Soils and Air Quality) for which no mitigation measures were available, the City adopted a Statement of Overriding Considerations (City Council Resolution #2011-63). This document herein incorporates by reference the *Merced Vision 2030 General Plan, the General Plan Program EIR* (SCH# 2008071069), and Resolution #2011-63.

As a subsequent development project within the SUDP/SOI, many potential environmental effects of the Project have been previously considered at the program level and addressed within the General Plan and associated EIR. (Copies of the General Plan and its EIR are available for review at the City of Merced Planning and Permitting Division, 678 West 18th Street, Merced, CA 95340.) As a second tier environmental document, Initial Study #15-36 plans to incorporate goals, policies, and implementing actions of the *Merced Vision 2030 General Plan*, along with mitigation measures from the General Plan EIR, as mitigation for potential impacts of the Project.

Project-level environmental impacts and mitigation measures (if applicable) have been identified through site-specific review by City staff. This study also utilizes existing technical information contained in prior documents and incorporates this information into this study.

Project-level environmental impacts have been identified through site-specific review by City staff. This study also utilizes existing technical information contained in prior documents and incorporates this information into this study.

III. ENVIRONMENTAL IMPACTS:

Will the proposed project result in significant impacts in any of the listed categories? Significant impacts are those which are substantial, or potentially substantial, changes that may adversely affect the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant. (Section 15372, State CEQA Guidelines. Appendix G of the Guidelines contains examples of possible significant effects.)

A narrative description of all "potentially significant," "negative declaration: potentially significant unless mitigation incorporated," and "less than significant impact" answers are provided within this Initial Study.

The California Supreme Court has clarified CEQA practice to limit the evaluation of environmental effects only to the impact of a proposed project on the environment, and not the effects of the environment on a project. Thus, adverse effects from existing environmental hazards on a proposed new use would not be assessed for CEQA purposes, and no environmental conclusions would be reached. No mitigation could be required. The exception to this general rule would be if the construction or operation of the proposed project modified a condition on the project site or affecting the project site in a way that caused new or increased environmental effects offsite, or if implementation of the project exacerbated an existing condition for offsite uses.

This revision of CEQA practice affects the following issue areas in this Initial Study:

C. Air Quality

Question 4-Exposure to Substantial Pollutant Concentrations

F. Geology and Soils

Question 1.a-Earthquake Faults

Question 1.b-Seismic Ground Shaking

Question 1.c-Ground Failure/Liquefaction

Question 1.d-Landslides

Question 4-Expansive Soils

G. Hazards and Hazardous Materials

Question 5-Public Airport Hazards

Question 6-Private Airport Hazards

Question 8-Wildland Fire Hazards

H. Hydrology and Water Quality

Question 7-Housing in Floodplain

Question 8-Structures in Floodplain

Question 9-Exposure to Flood Risk

Question 10-Inundation by Seiche

K. Noise

Question 1-Expose Persons to Offsite Noise in Excess of Standards

Question 2-Expose Persons to Offsite Vibration

Question 5-Public Airport Noise

Question 6-Private Airport Noise

However, for many environmental hazards, local agencies such as the City of Merced impose requirements to avoid or reduce hazards. Similarly, local agencies have the ability to impose conditions of project approval to avoid or reduce hazardous conditions.

A. Aesthetics

SETTING AND DESCRIPTION

This project involves the annexation of approximately 8.83 acres of land, the development of approximately 1.91 acres of land, and the development of a portion of the 5.49 acres of land. The area for development is a vacant lot at the northwest corner of North Highway 59 and Santa Fe Drive. The site is bordered on the north by Black Rascal Creek. Beyond the creek is vacant land. To the east of the site, across North Highway 59, is also vacant land and the Rascal Creek Bike Path. To the south, across Santa Fe Drive, is developed land with an industrial/wholesale-type use. To the west, also across Santa Fe Drive, is additional vacant land and Black Rascal Creek. Refer to the aerial photograph at Attachment A. Because the property on the north side of Santa Fe Drive is currently vacant, there is no light or glare generated from the site. The developed parcel on the south side of Santa Fe Drive currently has a building and generates light for security at nighttime.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A. Aesthetics. Will the project:				
1) Have a substantial adverse effect on a scenic vista?				✓
2) Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
3) Substantially degrade the existing visual character or quality of the site and its surrounding?			✓	
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		✓		

1) **No Impact**

There are no scenic vistas in this area. Although vacant land and Black Rascal Creek abut the area proposed for development, there is developed land beyond that. This area is considered an urban area and does not have any scenic vistas.

2) **No Impact**

There are no scenic resources on this site.

3) **Less Than Significant Impact**

The annexation area at the southwest corner of North Highway 59 and Santa Fe Drive is currently developed. No changes are proposed for this area. The site at the northwest corner of North Highway 59 and Santa Fe is currently vacant. However, the proposed development would not degrade the visual character. It would create a development that is consistent with the surrounding development in the area and help eliminate an area that often becomes overgrown with weeds and vegetation and looks blighted.

4) **Less Than Significant Impact with Mitigation**

The development of the project would create new light and glare with the construction of the proposed buildings on the site. New exterior lighting would be installed on the proposed buildings and throughout the site as it develops for safety and security purposes. Parking lot lighting, lighting under the gas canopy, and lighting from signs would add to the amount of light generated from the site due to development. In order to prevent adverse impacts from these new sources of lighting, the following mitigation measures are required:

Mitigation Measure AES-4*:*

Lighting should be designed to provide ambiance, safety, and security without unnecessary spillover or glare onto adjacent properties.

The quality of light, level of light (measured in foot-candles) and the type of bulb or source should be carefully addressed. Lighting levels should not be so intense as to draw attention to the flow or glare of the project site. The lighting plan should incorporate current energy-efficient fixtures and technology.

Glare from any site lighting should be shielded from adjacent properties and directed at a specific object or target area. Exposed bulbs shall not be used.

Wall-mounted light fixtures shall not extend above the height of the wall to which the fixtures are mounted.

Blinking and flashing lights used to illuminate building facades or to outline buildings shall not be used.

When security lighting is necessary, it should be recessed, hooded and located to illuminate only the intended area. Off-site glare and light trespass is prohibited.

Pedestrian areas, sidewalks, parking lots, and building entrances shall be adequately lit to provide safety and security.

All exterior lighting fixtures shall be efficient in terms of design and energy use.

Mitigation Measure AES-4a:

The project shall comply with Mitigation Measure 3.1-4 required by the Mitigation and Reporting Program for the Merced Vision 2030 General Plan EIR.

B. Agriculture Resources

SETTING AND DESCRIPTION

Merced County is among the largest agriculture producing counties in California (ranked fifth), with a gross income of more than $2.9 billion in 2012. The County's leading agriculture commodities include milk, chickens, almonds, cattle and calves, tomatoes, and sweet potatoes.

The portion of the annexation area north of Santa Fe Drive has been used for farmland in the past, but no crops have been grown here for at least the last 20 years.

Important Farmlands

The Farmland Mapping and Monitoring Program is a farmland classification system that is administered by the California Department of Conversation. The system classifies agricultural land according to its soil quality and irrigation status. The best quality agricultural land is called "Prime Farmland." Prime Farmland is land that has the best combination of physical and chemical characteristics for the production of crops.

Important Farmland is land characterized by one or more of the following characteristics: (1) presence of prime agricultural soils; (2) presence of soils of statewide agricultural importance; and (3) active agricultural lands.

According to the 2016 Important Farmland Map for Merced County the vacant portion of the annexation area is designated as "Vacant and Disturbed Land" and area that is currently developed on the south side of Santa Fe Drive is designated as "Urban and Built-Up Land" (refer to the map at Attachment F) There are no agricultural activities taking place within the annexation area. The area surrounding the annexation area to the north of the site is classified as Farmland of Local Importance, but is not currently being farmed. Land approximately ¼-mile north of the annexation area is currently planted with almonds. This is the closest agricultural use to the annexation area.

The property immediately adjacent to the annexation area to the north is zoned as Light Manufacturing according to the Merced County Zoning Map.

Williamson Act

in 2005, Merced County elected to participate in the State of California Williamson Act agricultural land preservation program. The purpose of the Act is to preserve agricultural and open space lands by discouraging premature and unnecessary conversion to urban uses. As of 2007, there were more than 450,000 acres of the County under Williamson Act contracts, but in 2009, the Merced County Board of Supervisors elected to suspend the Act when the State elected to end tax reimbursements to the County. The annexation area is not subject to a Williamson Act contract.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
B. <u>Agriculture Resources.</u> Will the project:				
1) 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 - agriculture?				✓
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
3) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				✓
4) Cause development of non-agricultural uses within 1,000 feet of agriculturally zoned property (Right-to-Farm)?				✓

1) **No Impact**

The annexation area is not listed as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency.

2) **No Impact**

The annexation area is not currently zoned for agriculture activities or part of a Williamson Act contract.

3) **No Impact**

The closest property to the site being used for agricultural purposes in approximately ¼-mile to the north. The development of the annexation area would not impact the existing environment or cause the conversion of Farmland to non-agriculture use. The area currently being farmed remains outside of the City Limits and is not viable for uses other than farmland uses.

4) **No Impact**

There are no properties within 1,000 feet of the annexation area that are zoned for agricultural uses.

C. Air Quality

SETTING AND DESCRIPTION

The San Joaquin Valley Air Pollution Control District (SJVAPCD) reviews development projects to assess the impact to air quality and to establish acceptable mitigation measures. While the action of the SJVAPCD is independent of City reviews and actions, their process allows the City to review proposed mitigation measures that could affect project design and operation. Any proposed changes are subject to approval by the City.

The City of Merced is located in the San Joaquin Valley Air Basin (SJVAB), which occupies the southern half of the Central Valley and is approximately 250 miles in length and, on average, 35 miles in width. The Coast Range, which has an average elevation of 3,000 feet, serves as the western border of the SJVAB. The San Emigdio Mountains, part of the Coast Range, and the Tehachapi Mountains, part of the Sierra Nevada, are both located to the south of the SJVAB. The Sierra Nevada extends in a northwesterly direction and forms the eastern boundary of the SJVAB. The SJVAB is basically flat with a downward gradient to the northwest.

The climate of the SJVAB is strongly influenced by the presence of these mountain ranges. The mountain ranges to the west and south induce winter storms from the Pacific to release precipitation on the western slopes, producing a partial rain shadow over the valley. A rain shadow is defined as the region on the leeward side of the mountain where precipitation is noticeably less because moisture in the air is removed in the form of clouds and precipitation on the windward side. In addition, the mountain ranges block the free circulation of air to the east, resulting in the entrapment of stable air in the valley for extended periods during the cooler months.

Winter in the SJVAB is characterized as mild and fairly humid, and the summer is hot, dry, and cloudless. During the summer, a Pacific high-pressure cell is centered over the northeastern Pacific Ocean, resulting in stable meteorological conditions and a steady northwesterly wind.

The following information is an excerpt from the Air Quality/Greenhouse Gas Report prepared by BaseCamp Environmental. The full report is available at Attachment G.

The SJVAPCD has jurisdiction over most air quality matters in the Air Basin. It is tasked with implementing programs and regulations required by the federal and California Clean Air Acts. Under their respective Clean Air Acts, both the federal government and the State of California have established ambient air quality standards for six criteria air pollutants: ozone, particulate matter, carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead. California has four additional pollutants for which it has established standards. The table below shows the attainment status of the Air Basin relative to federal and State ambient air quality standards.

TABLE C-1
SAN JOAQUIN VALLEY AIR BASIN ATTAINMENT STATUS

	Designation/Classification	
Criteria Pollutant	**Federal Primary Standards**	**State Standard**
Ozone – One hour	No Federal Standard	Nonattainment/Severe
Ozone – Eight hour	Nonattainment/Extreme	Nonattainment
PM_{10}	Attainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Attainment/Unclassified	Attainment/Unclassified

Criteria Pollutant	Federal Primary Standards	State Standard
Nitrogen Dioxide (NO_x)	Attainment/Unclassified	Attainment
Sulfur Dioxide (SO_x)	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

As shown in Table 2-1, the Air Basin is considered a nonattainment area for ozone under both State and federal 8-hour standards and under the State 1-hour standard, for particulate matter less than 10 micrometers in diameter (PM_{10}) under the State standard, and for particulate matter less than 2.5 micrometers in diameter ($PM_{2.5}$) under the federal standard. The Air Basin is in attainment of, or unclassified for, all other federal and State criteria pollutant standards.

Ozone is not directly produced by automobile fuel combustion; rather, it is a secondary pollutant that is formed from reactive organic gases (ROG) and nitrogen oxides (NO_x) in the presence of sunlight. The principal sources of ROG and NO_x (known as "ozone precursors") are the combustion of fuels and the evaporation of solvents, paints, and fuels. Ozone is a strong irritant that can cause constriction of the airways, forcing the respiratory system to work harder to provide oxygen. It also can lead to aggravated respiratory diseases and lung damage, and it can cause substantial damage to vegetation and to manmade products such as rubber and plastics. Applicable attainment plans of the SJVAPCD include the 2007 Ozone Plan and the 2013 Plan for the Revoked 1-Hour Ozone Standard for the Air Basin.

Particulate matter is a complex mixture of solids and liquids that may contain soot, smoke, metals, nitrates, sulfates, dust, water, and tire rubber. It can be directly emitted, or it can form in the atmosphere from reactions of gases such as NO_x. There are many sources of particulate matter emissions, including combustion, industrial and agricultural processes, grading and construction, and motor vehicle use. The size of the particles is directly linked to their potential for causing health problems, including respiratory, pulmonary, and cardiovascular diseases. $PM_{2.5}$ poses the greatest health threat because it can get deep into the lungs and even enter the bloodstream. Applicable attainment plans of the SJVAPCD include the 2015 PM2.5 Plan for the 1997 federal $PM_{2.5}$ standard, the 2012 PM2.5 Plan for the 2006 federal $PM_{2.5}$ standard, the 2016 Moderate Area Plan for the 2012 federal $PM_{2.5}$ standard, and the 2007 PM10 Maintenance Plan to maintain the Air Basin's attainment status of federal PM_{10} standards.

Another criteria pollutant of concern is carbon monoxide (CO). CO is an odorless, colorless gas that is formed by incomplete combustion of fuels and is emitted directly into the air. The main source of CO in the San Joaquin Valley is on-road motor vehicles. At high concentrations, CO reduces the oxygen-carrying capacity of the blood and can cause dizziness, headaches, unconsciousness, and even death. Problems associated with CO are localized in character, so both ARB and EPA designate urban areas as CO nonattainment areas instead of the entire Air Basin (SJVAPCD 2015b). The project site is not within an urban area designated as nonattainment for CO.

In addition to the criteria pollutants, the California Air Resources Board (ARB) has identified a class of air pollutants known as toxic air contaminants (TACs) - pollutants that even at low

levels may cause acute serious, long-term health effects, such as cancer. Diesel particulate matter is the most commonly identified TAC, generated mainly as a product of combustion in diesel engines. Other TACs are less common and are typically associated with industrial activities. However, gasoline contains toxic substances such as benzene, toluene and naphthalene, among others.

Regulatory Framework

As previously noted, the SJVAPCD has jurisdiction over most air quality matters in the San Joaquin Valley Air Basin, including the City of Merced. It implements the federal and California Clean Air Acts, and the applicable attainment and maintenance plans, through local regulations. The SJVAPCD regulations that would be applicable to the project are summarized below.

Regulation VIII (Fugitive Dust PM10 Prohibitions)
Rules 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 track out, landfill operations, etc.

Rule 4101 (Visible Emissions)

This rule prohibits emissions of visible air contaminants to the atmosphere and applies to any source operation that emits or may emit air contaminants.

Rule 9510 (Indirect Source Review)

Rule 9510, also known as the Indirect Source Rule (ISR), is intended to reduce or mitigate emissions of NO_x and PM_{10} from new development in the SJVAPCD including construction and operational emissions. This rule requires specific percentage reductions in estimated on-site construction and operation emissions, and/or payment of off-site mitigation fees for required reductions that cannot be met on the project site. ISR fees are used to provide offsetting mitigation. Construction emissions of NO_x and PM_{10} exhaust must be reduced by 20% and 45%, respectively. Operational emissions of NO_x and PM_{10} must be reduced by 33.3% and 50%, respectively. The ISR applies to commercial development projects of 2,000 square feet and larger. Based on this criteria, the project would be subject to Rule 9510.

In addition, the SJVAPCD regulates the construction and improvement of facilities with potential air toxic emissions, including gasoline stations. SJVAPCD rules applicable to gasoline stations include:

Rule 2201 (New and Modified Stationary Source Review Rule)

New stationary sources and modifications of existing stationary sources that may emit criteria pollutants must obtain an Authority to Construct and Permit to Operate the proposed facility. Emissions that exceed impact thresholds must include emission controls and may require additional mitigation.

Rule 4621 (Gasoline Transfer into Stationary Storage Containers, Delivery Vessels and Bulk Plants)

Rule 4621 prohibits the transfer of gasoline from a delivery vessel into a stationary storage container unless the container is equipped with an ARB-certified permanent submerged fill pipe and ARB certified pressure-vacuum relief valve, and utilizes an ARB-certified Phase I vapor recovery system.

Rule 4622 (Transfer of Gasoline into Vehicle Fuel Tanks)

Rule 4622 prohibits the transfer of gasoline from a stationary storage container into a motor vehicle fuel tank with a capacity greater than 5 gallons, unless the gasoline dispensing unit used to transfer the gasoline is equipped with and has in operation an ARB-certified Phase II vapor recovery system.

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on the environment if it would do the following:

- Conflict with or obstruct implementation of an applicable air quality plan.
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
- 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.
- Expose sensitive receptors to substantial pollutant concentrations.
- Create objectionable odors affecting a substantial number of people.

CEQA Guidelines Appendix G also states that, where available, significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make significance determinations. In 2015, the SJVAPCD adopted an updated Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI). The GAMAQI defines methodology and thresholds of significance for the assessment of air quality impacts for projects within SJVAPCD's jurisdiction, along with potential mitigation measures for identified impacts.

Table 2-2 shows the significance thresholds for criteria air pollutant emissions within the SJVAPCD, both for construction emissions and emissions from project operations. As stated in the GAMAQI, the basis for the significance thresholds are the New Source Review (SJVAPCD Rule 2201) offset thresholds. The SJVAPCD's attainment plans demonstrate that project-specific emissions below these offset thresholds would have air quality impacts that are less than significant (SJVAPCD 2015b). It should be noted that a project may still have significant air quality impacts even if its estimated emissions are below significance thresholds, depending on its location and adjacent land uses.

TABLE C-2
SJVAPCD SIGNIFICANCE THRESHOLDS
Emissions (tons per year)

Pollutant	Construction	Operational
Carbon Monoxide	100	100
Nitrogen Oxides (NOx)	10	10
Reactive Organic Gases (ROG)	10	10
Sulfur Oxides (SOx)	27	27
Particulate Matter (PM_{10})	15	15
Fine Particulate Matter ($PM_{2.5}$)	15	15

Source: SJVAPCD 2015b.

For CO emissions, the GAMAQI states that project operational emissions would have an impact that is less than significant if neither of the following criteria are met:

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

If either of these criteria can be associated with any intersection affected by the project, then a CO analysis would need to be conducted to determine the significance of the project's impacts (SJVAPCD 2015b). For TACs, the GAMAQI states that carcinogenic emissions from project operations are considered to have a significant impact if the maximally exposed individual risk equals or exceeds 10 in 1 million.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
C. <u>Air Quality.</u> Would the project:				
1) Conflict with or obstruct implementation of the applicable air quality plan?			✓	
2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			✓	
3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			✓	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
4) Expose sensitive receptors to substantial pollutant concentrations?			✓	
5) Create objectionable odors affecting a substantial number of people?			✓	

1) **Less than Significant Impact**

The project would be substantially below the significance thresholds adopted by the SJVAPCD Operation emissions at project buildout. The SJVAPCD's attainment plans demonstrate that project-specific emissions below New Source Review offset thresholds, which are the basis for the SJVAPCD significance thresholds, would have air quality impacts that are less than significant. On this basis, the project would be consistent with attainment plans for the Air Basin. Project impacts regarding consistency with the applicable air quality plans are considered **less than significant**.

2) **Less than Significant Impact**

As mentioned under Impact 1, the proposed project would have construction emissions that are substantially below the SJVAPCD significance thresholds under both phases. Project construction may generate localized dust emissions at levels above existing ambient conditions, which is of concern if "sensitive receptors" are located in proximity to the project site. As defined in the GAMAQI, sensitive receptors include residential units, schools, parks and playgrounds, day care centers, hospitals, and nursing homes. None of these land uses are near the project site. Furthermore, dust emissions would be reduced through the required implementation of SJVAPCD Regulation VIII.

The project would be subject to the ISR, which requires development projects to reduce NO_x operational emissions by 33.3%. Application of this reduction requirement would further reduce NO_x emissions that are already below the SJVAPCD significance threshold. Phase 2 NO_x emissions would be reduced further below the significance threshold. Project impacts related to air quality standards are considered **less than significant**.

3) **Less than Significant Impact**

Cumulative impacts of project emissions focus on operational emissions, as construction emissions cease with completion of project work. Operational emissions at project buildout would not exceed the significance thresholds established by SJVAPCD. As discussed under Impact 2, NOx emissions would be further reduced by compliance with the ISR. Cumulative project impacts on air quality are considered **less than significant**.

4) **Less than Significant Impact**

As noted in the discussion under Impact 2, there are no sensitive receptors in the immediate project vicinity. The nearest sensitive receptor to the project site is a residential area more than 1,000 feet to the east. At that distance, dispersion of criteria pollutant emissions would likely occur before emissions reached the residential area. For additional information

related to this impact, refer to the complete Air Quality/Greenhouse Gas Report at Attachment G.

5) **Less than Significant Impact**

Odors are more of a nuisance than an environmental hazard. Nevertheless, the Environmental Checklist in CEQA Guidelines Appendix G regards objectionable odors as a potentially significant environmental impact. In accordance with this, the GAMAQI states that a project should be evaluated to determine the likelihood that it would result in nuisance odors. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, there are no quantitative or formulaic methodologies to determine if potential odors would have a significant impact. Rather, projects must be assessed on a case-by-case basis (SJVAPCD 2015b).

Odors that could be generated potentially at the project site include releases of gasoline vapors and cooking odors from the quick-serve restaurant. Such odors in general would be confined mainly to the project site and would readily dissipate. As discussed under Impact 4, vapor recovery systems that would limit vapor emissions would be required. Restaurants are generally not considered significant sources of objectionable odors. Future land uses that would occupy Phase 2 development generally would be retail in nature, and thus unlikely to generate odors that would be considered a nuisance. Project impacts related to odors are considered **less than significant**.

D. Biological Resources

SETTING AND DESCRIPTION

The City of Merced is located in the Central California Valley eco-region (Omernik 1987). This eco-region is characterized by flat, intensively farmed plains with long, hot, dry summers and cool, wet winters (14-20 inches of precipitation per year). The Central California Valley eco-region includes the Sacramento Valley to the north and the San Joaquin Valley to the south and it ranges between the Sierra Nevada Foothills to the east to the Coastal Range foothills to the west. Nearly half of the eco-region is actively farmed, and about three fourths of that farmed land is irrigated.

A Biological Assessment was prepared for this annexation by Moore Biological Consultants (Attachment H). The results of this assessment have been used to evaluate any potential impacts on biological resources within or near the annexation area. The following is partially excerpted from the Biological Assessment prepared by Moore Biological Consultants.

The site is nearly level and is at an elevation of approximately 150 feet above mean sea level. The site was likely farmed in crops in the past but has been fallow for years. The body of the site is currently disturbed weedy grassland (refer to Figure 3 and photographs in Attachment C of the Biological Assessment found at Attachment H).

Surrounding land uses in this portion of Merced County are primarily agricultural and commercial. North Highway 59 bounds the site on the east and Santa Fe Drive bounds the site on the south and west. There are open fields to the east and southeast of the site, and a commercial or industrial property to the southwest of the site. Black Rascal Creek flows along the north edge of the site and there is open grassland to the north of the site, across Black Rascal Creek.

VEGETATION

Due to the amount of disturbance from past agriculture, surrounding development, and periodic mowing and/or disking for weed abatement, vegetation on the north portion of the annexation area (north of Santa Fe Drive) is primarily annual grass and weed species. The area on the south side of Santa Fe Drive is currently developed and has grass and other landscaping.

There are trees (primarily Willow trees) near the northern property line along Black Rascal Creek on the northern portion of the annexation area. There are also a three Blue Gum Eucalyptus trees near the southeast portion of the parcel. There is a cluster of Blue Gum Eucalyptus trees on the north side of Black Rascal Creek outside of the annexation area. On the southern portion of the annexation area, south of Santa Fe Drive, there are five Pine trees scattered throughout the landscaping on the site as well as a row of trees of unknown species along the southern property line.

No elderberry shrubs are present within or adjacent to the annexation area. A full list of plant species observed on the project site is available at Table 1 (page 7) of the Biological Assessment found at Attachment H.

WILDLIFE

A variety of bird species were observed on the northern portion of the annexation area. These birds were common species found in agricultural and riparian areas of Merced County. A complete list of the wildlife species observed on the project site is available at Table 2 (page 9) of the Biological Assessment (Attachment H).

There are several potential nest trees in and near the site that are suitable for nesting raptors and other protected migratory birds, including Swainson's hawk. A few stick nests were observed within some of the trees within and near the site. Given the presence of large trees and raptor foraging habitat (i.e., open fields) in and near the site, it is likely one or more pairs of raptors, plus a variety of songbirds, nest in trees in the site each year. Further, it is considered likely that songbirds nest within the vegetation along Black Rascal Creek and in the grassland habitats in the site each year. Additional information on the wildlife found on the project site is available in the Biological Assessment.

WATERS OF THE U.S. AND WETLANDS

Black Rascal Creek is a jurisdictional Water of the U.S. subject to Section 404 of the Clean Water Act. The limit of federal jurisdiction is the ordinary high water mark. This waterway also falls under the jurisdiction of CDFW, RWQCB, and the Central Valley Flood Protection Board (CVFPB). Beyond Black Rascal Creek, other potentially jurisdictional wetlands or Water of the U.S. were observed in or adjacent to the project site.

SPECIAL STATUS SPECIES

Special-status species are plants and animals that are legally protected under the state and/or federal Endangered Species Act or other regulations. Special-status species are those which are designated rare, threatened, or endangered and candidate species for listing by the USFWS. Special-status species also include species considered rare or endangered under the conditions of Section 15380 of the California Environmental Quality Act (CEQA). Table 3 (page 14) of the Biological Assessment provides a list of special-status plant and wildlife species documented in the Merced area.

The likelihood of finding any special-status species within the annexation area is considered low. While the annexation area may have provided habitat for special-status wildlife species at some time in the past, farming and development have substantially modified natural habitats in the greater project vicinity. Of the wildlife species considered to be "special-status" species, the Swainson's hawk, tricolored blackbird, and western pond turtle are the only species that have potential to occur on the site on more than a transitory or very occasional basis.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
D. <u>Biological Resources.</u> Would the project:				
1) Have a substantial adverse effect, either directly or through habitat modification, 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?		✓		
2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		✓		
3) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		✓		
4) 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?		✓		
5) Conflict with any local policies or ordinance protecting biological resources, such as a tree preservation policy or ordinance?		✓		

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan		✓		

1) **Less than Significant Impact with Mitigation**

Although no special-status species was identified on the site, there is still the potential that some special-status species may exist. In order to protect any special-status species, the following mitigation measures are required to reduce this possible impact to a less than significant level:

Mitigation Measure BIO-1:

Pre-construction surveys by a qualified biologist or other qualified professional shall be conducted for nesting Swainson's hawks within 0.25 miles of the project site if construction commences between March 1 and September 15. If active nests are found, a qualified biologist shall determine the need (if any) for temporal restrictions on construction. The determination shall utilize criteria set forth by CDFW (CDFG 1994).

***Mitigation Measure BIO-1a**:*

Pre-construction surveys by a qualified biologist or other qualified professional shall be conducted for western pond turtles and their nests if construction commences between April 1 through October 31. This survey shall include a search for nests in uplands adjacent to the creek. If nest sites are located, a 50-foot buffer area around the nest shall be established and work shall be delayed until hatching is complete and the young have left the nest site.

***Mitigation Measure BIO-1b**:*

Pre-construction surveys by a qualified biologist or other qualified professional shall be conducted for birds protected by the Migratory Bird Treaty Act of 1918. If nesting birds are found, work in the vicinity of the nest shall be delayed until the young fledge.

2) **Less than Significant Impact with Mitigation**

Although it is unlikely that any protected riparian habitat or other sensitive natural community would be found on the site, the above mitigation measures would reduce any possible impacts to a less than significant level.

3) **Less than Significant Impact with Mitigation**

The annexation and subsequent development on the site is not proposed to involve any direct removal, filling, or hydrological interruption to Black Rascal Creek. The development, as proposed, would remain far enough away from the creek to ensure no impacts would occur to the creek. However, the following mitigation measure would

reduce any possible impacts to a less than significant level if the development plans changed.

Mitigation Measure BIO-3*:*

Avoidance of jurisdictional Waters of the U.S. is recommended, if possible. If complete avoidance of Black Rascal Creek is infeasible, impact shall be minimized to the maximum extent practicable, and permits from ACOE, CDFW, RWQCB, and possibly CVFPS shall be secured prior to the placement of any fill material (e.g., culverts, fill dirt, rock) within jurisdictional Waters of the U.S.

4) **Less than Significant Impact with Mitigation**

As explained above, it is not anticipated that the annexation and subsequent development would interfere with the movement of any native resident or migratory fish or wildlife species. However, if these species or habitat were found on the site, Mitigation Measures BIO-1 through BIO-4 would reduce any potential impacts to a less than significant level.

5) **Less than Significant Impact with Mitigation**

The *Merced Vision 2030 General Plan* includes policies directed at the conservation of wildlife habitats which support rare, endangered, or threatened species and preserving and enhancing creeks in their natural state. The proposed mitigation measures BIO-1 through BIO-4 would mitigate any potential impacts that might conflict with these policies.

6) **Less than Significant Impact with Mitigation**

There are no known conflicts with any Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan (Merced County does not have Habitat Conservation Plans, etc.). However, the above mitigation measures would reduce any possible impacts to a less than significant level.

E. Cultural Resources

SETTING AND DESCRIPTION

The City of Merced area lies within the ethnographic territory of the Yokuts people. The Yokuts were members of the Penutian language family which held all of the Central Valley, San Francisco Bay Area, and the Pacific Coast from Marin County to near Point Sur.

Merced County was first explored by Gabriel Moraga in 1806, when he named the Merced River, "El Rio de Nuestra Señora de la Merced." Moraga's explorations were designed to locate appropriate sites for an inland chain of missions. Moraga explored the region again in 1808 and 1810.

The project site is not known to have any cultural or historical resources.

Archaeology

Archaeological sites are defined as locations containing significant levels of resources that identify human activity. Very little archaeological survey work has been conducted within the City or its surrounding areas. Creeks, drainage, and sloughs exist in the northern expansion area of the City, and Bear Creek and Cottonwood Creek pass through the developed area. Archaeological sites in

the Central Valley are commonly located adjacent to waterways and represent potential for significant archaeological resources.

Paleontological sites are those that show evidence of pre-human existence. Quite frequently, they are small outcroppings visible on the earth's surface. While the surface outcroppings are important indications of paleontological resources, it is the geologic formations that are the most important. There are no known sectors within the project area known to contain sites of paleontological significance.

Historic Resources

In 1985, in response to community concerns over the loss of some of the City's historic resources, and the perceived threats to many remaining resources, a survey of historic buildings was undertaken in the City. The survey focused on pre-1941 districts, buildings, structures, and objects of historical, architectural, and cultural significance. The survey area included a roughly four square-mile area of the central portion of the City.

The National Register of Historic Places, the California Historical Landmarks List, and the California Inventory of Historic Resources identify several sites within the City of Merced. These sites are listed on the Merced Historical Site Survey and maintained by the Merced Historical Society.

According to the environmental review conducted for the General Plan, there are no listed historical sites and no known locations within the project area that contain sites of paleontologic or archeological significance. The General Plan (Implementation Action SD-2.1.a) requires that the City utilize standard practices for preserving archeological materials that are unearthed during construction, as prescribed by the State Office of Historic Preservation.

The project involves the annexation of 8.83 acres of land. One acre is currently developed and no new development would occur in that area. The remaining 7.83 acres would be developed in the future with a retail center consisting of a gas station/mini-market/car wash, a fast-food restaurant, a drive-thru coffee shop/kiosk, and other unknown retail uses.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
E. <u>Cultural Resources.</u> Would the project:				
1) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?		✓		
2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		✓		
3) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✓		
4) Disturb any human remains, including those interred outside of formal cemeteries?		✓		

1) **Less than Significant Impact with Mitigation**

Subsurface construction activities associated with development of the northern portion of the annexation area may damage or destroy previously undiscovered historic resources. The following mitigation measure would reduce any potential impacts to currently undiscovered historic resources to less than significant.

Mitigation Measure CUL-1:

In the event that buried historic or archaeological resources are discovered during construction, operations shall stop within 50 feet of the find and a qualified archaeologist shall be consulted to evaluate the resource in accordance with CEQA Guidelines 15064.5. The applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. If the resource does not qualify as a significant resource, then no further protection or study is necessary. If the resource does qualify as a significant resource then the impacts shall be avoided by project activities. If the resource cannot be avoided, adverse impacts to the resource shall be addressed. The archaeologist shall make recommendations concerning appropriate mitigation measures that shall be implemented to protect the resource, including, but not limited to, excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Any previously undiscovered resources found during construction within the project area should be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and evaluated for significance in terms of CEQA criteria.

2) **Less than Significant Impact with Mitigation**

Subsurface construction activities associated with development of the northern portion of the annexation area may damage or destroy previously undiscovered archeological resources. Implementation of Mitigation Measure CUL-1 would reduce any potential impacts to currently undiscovered archeological resources to less than significant.

3) **Less than Significant Impact with Mitigation**

Subsurface construction activities associated with development of the northern portion of the annexation area may damage or destroy previously undiscovered paleontological resources. Implementation of the following mitigation measure would reduce any potential impacts to currently undiscovered paleontological resources to less than significant.

Mitigation Measure CUL-3:

In the event that fossils or fossil-bearing deposits are discovered during construction activities, excavations within a 50-foot radius of the find shall be temporarily halted or diverted. The project contractor shall notify a qualified paleontologist to examine the discovery. The applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The paleontologist shall document the discovery as needed in accordance with Society of Vertebrate Paleontology standards and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction activities are allowed to resume at the location of the find. If the applicant determines that avoidance is not feasible,

the paleontologist shall prepare an excavation plan for mitigating the effect of construction activities on the discovery. The plan shall be submitted to the City of Merced for review and approval prior to implementation, and the applicant shall adhere to the recommendations in the plan.

4) **Less than Significant Impact with Mitigation**

Subsurface construction activities associated with development of the northern portion of the annexation area may damage or destroy previously undiscovered human burial sites. Implementation of the following mitigation measure would reduce any potential impacts to currently undiscovered human burial sites to less than significant.

Mitigation Measure CUL-4

In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code (PRC) Sections 5097.94 and 5097.98 must be followed. If during the course of project development there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. *There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted and determines if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the most likely descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.*
2. *Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the project site in a location not subject to further subsurface disturbance:*
    - *The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission.*
    - *The descendant identified fails to make a recommendation.*
    - *The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.*

    Additionally, California Public Resources Code Section 15064.5 requires the following with regards to Native American Remains:

When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code Section 5097.98. The applicant may develop a plan for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC.

F. Geology and Soils

SETTING AND DESCRIPTION

The City of Merced is located approximately 150 miles southeast of San Francisco along the west side of the southern portion of the Great Valley Geomorphic Province, more commonly referred to as the San Joaquin Valley. The valley is a broad lowlands bounded by the Sierra Nevada to the east and Coastal Ranges to the west. The San Joaquin Valley has been filled with a thick sequence of sedimentary deposits of Jurassic to recent age. A review of the geologic map indicates that the area around Merced is primarily underlain by the Pleistocene Modesto and Riverbank Formations with Holocene alluvial deposits in the drainages. Miocene-Pliocene Mehrten and Pliocene Laguna Formation materials are present in outcrops on the east side of the SUDP/SOI. Modesto and Riverbank Formation deposits are characterized by sand and silt alluvium derived from weathering of rocks deposited east of the SUDP/SOI. The Laguna Formation is made up of consolidated gravel sand and silt alluvium and the Mehrten Formation is generally a well consolidated andesitic mudflow breccia conglomerate.

Faults and Seismicity

A fault, or a fracture in the crust of the earth along which rocks on one side have moved relative to those on the other side, are an indication of past seismic activity. It is assumed that those that have been active recently are the most likely to be active in the future, although even inactive faults may not be "dead." "Potentially Active" faults are those that have been active during the past two million years or during the Quaternary Period. "Active" faults are those that have been active within the past 11,000 years. Earthquakes originate as movement or slippage occurring along an active fault. These movements generate shock waves that result in ground shaking.

Based on review of geologic maps and reports for the area, there are no known active or potentially active faults, or Alquist-Priolo Earthquake Fault Zones (formerly referred to as a Special Studies Zone) in the SUDP/SOI. In order to determine the distance of known active faults within 50 miles of the Site, the computer program EZ-FRISK was used in the General Plan update.

Soils

Soil properties can influence the development of building sites, including site selection, structural design, construction, performance after construction, and maintenance. Soil properties that affect the load-supporting capacity of an area include depth to groundwater, ponding, flooding, subsidence, shrink-swell potential, and compressibility.

The City of Merced regulates the effects of soils and geological constraints primarily through the enforcement of the California Building Code (CBC), which requires the implementation of engineering solutions for constraints to development posed by slopes, soils, and geology.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
F. <u>Geology and Soils.</u> Would the project:				
1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: a) 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?			✓	
b) Strong seismic ground shaking?			✓	
c) Seismic-related ground failure, including liquefaction?			✓	
d) Landslides?			✓	
2) Result in substantial soil erosion or loss of topsoil?		✓		
3) 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?			✓	
4) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?		✓		
5) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				✓

1) **Less than Significant Impact**

The project site is not located within a mapped fault hazard zone, and there is no record or evidence of faulting on the project site (City of Merced General Plan Figure 11.1). Because no faults underlie the project site, no people or structures would be exposed to substantial adverse effects related to earthquake rupture.

According to the City's *Merced Vision 2030 General Plan EIR*, the probability of soil liquefaction occurring within the City of Merced is considered to be a low to moderate hazard; however, a detailed geotechnical engineering investigation would be required for the project in compliance with the California Building Code (CBC).

There would be no exposure to any geological hazards in the project area.

Ground shaking of moderate severity may be expected to be experienced on the project site during a large seismic event. All building permits are reviewed to ensure compliance with the California Building Code (CBC). In addition, the City enforces the provisions of the Alquist Priolo Special Study Zones Act that limit development in areas identified as having special seismic hazards. All new structures shall be designed and built in accordance with the standards of the California Building Code.

APPLICABLE GENERAL PLAN GOALS AND POLICIES

The City's *Merced Vision 2030 General Plan* contains policies that address seismic safety.

Goal Area S-2: Seismic Safety:	
Goal: Reasonable Safety for City Residents from the Hazards of Earthquake and Other Geologic Activity	
Policies	
S-2.1	Restrict urban development in all areas with potential ground failure characteristics.

The project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.

Landslides generally occur on slopes of 15 percent or greater. The project site's topography is generally of slopes between 0 and 3 percent, which are considered insufficient to produce hazards other than minor sliding during seismic activity.

Therefore, no hazardous conditions related to seismic ground shaking would occur with the implementation of the project. Additionally, the implementation of the project would not lead to offsite effects related to hazards related to seismic groundshaking, nor would any existing offsite hazards be exacerbated.

2) **Less Than Significant Impact with Mitigation**

Construction associated with the proposed project could result in temporary soil erosion and the loss of top soil due to construction activities, including clearing, grading, site preparation activities, and installation of the proposed buildings and other improvements. The City of Merced enforces a Storm Water Management Program in compliance with the Federal Clean Water Act. All construction activities are required to comply with the City's Erosion and Sediment Control Ordinance (MMC §15.50.120.B), including the implementation of Best Management Practices (BMPs) to limit the discharge of sediment into natural waterways and storm water drainage facilities.

Implementation of the following mitigation measures would reduce potential impacts to a less than significant level.

Mitigation Measure GEO-2

Prior to the approval of a tentative subdivision map or building permit, the City shall review plans for drainage and storm water run-off control systems and their component facilities to ensure that these systems are non-erosive in design.

Mitigation Measure GEO-2a:

Upon completion of phased construction, subsequent phases shall re-vegetate all exposed soil surfaces within 30 days, or as otherwise approved by the City, to minimize potential topsoil erosion. Reasonable alternatives to re-vegetation may be employed, especially during peak high temperature periods or to avoid negative impacts to nearby agricultural activities, subject to the approval of the City.

3) **Less than Significant Impact**

The City of Merced is located in the Valley area of Merced County and is, therefore, less likely to experience landslides than other areas in the County. The probability of soil liquefaction actually taking place anywhere in the City of Merced is considered to be a low to moderate hazard. According to the *Merced Vision 2030 General Plan EIR*, no significant free face failures were observed within the SUDP/SOI and the potential for lurch cracking and lateral spreading is, therefore, very low within the SUDP/SOI area.

4) **Less than Significant Impact with Mitigation**

Expansive soils are those possessing clay particles that react to moisture changes by shrinking (when they dry) or swelling (when they become wet). Expansive soils can also consist of silty to sandy clay. The extent of shrinking and swelling is influenced by the environment, extent of wet or dry cycles, and by the amount of clay in the soil. This physical change in the soils can react unfavorably with building foundations, concrete walkways, swimming pools, roadways, and masonry walls.

Implementation of General Plan Policies, adherence to the Alquist-Priolo Act, and enforcement of the California Building Code (CBC) Standards would reduce the effect of this hazard on new buildings and infrastructure associated with the project. Additionally, the mitigation measure below requires a geotechnical study prior to the issuance of a building permit.

Mitigation Measure GEO-4:

A geotechnical study shall be provided prior to the issuance of a building or grading permit for this site. All recommendations for addressing expansive soils and site grading shall be implemented as well as any other recommendations determined relevant by the Chief Building Official or City Engineer.

5) **No Impact**

The project site would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. However, the proposed project would be served by the City's sewer system. No new septic systems are allowed within the City Limits.

G. Hazards and Hazardous Materials

SETTING AND DESCRIPTION

Hazardous Materials

A substance may be considered hazardous due to a number of criteria, including toxicity, ignitability, corrosivity, or reactivity. The term "hazardous material" is defined in law as any material that, because of quantity, concentration, or physical, or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment.

Wildland and Urban Fire Hazards

Both urban and wildland fire hazard potential exists in the City of Merced and surrounding areas, creating the potential for injury, loss of life, and property damage. Urban fires primarily involve the uncontrolled burning of residential, commercial, or industrial structures due to human activities. Wildland fires affect grassland, brush or woodlands, and any structures on or near these fires. Such fires can result from either human made or natural causes.

Urban fires comprise the majority of fires in the City of Merced. The site is adjacent to undeveloped ag land which could be a source for a wildland fire. However, the City of Merced Fire Department has procedures in place to address the issue of wildland fires, so no additional mitigation would be necessary.

Airport Safety

The City of Merced is impacted by the presence of two airports-Merced Regional Airport, which is in the southwest corner of the City, and Castle Airport (the former Castle Air Force Base), located approximately eight miles northwest of the subject site.

The continued operation of the Merced Regional Airport involves various hazards to both flight (physical obstructions in the airspace or land use characteristics which affect flight safety) and safety on the ground (damage due to an aircraft accident). Growth is restricted around the Regional Airport in the southwest corner of the City due to the noise and safety hazards associated with the flight path.

Castle Airport also impacts the City. Portions of the northwest part of the City's SUDP/SOI and the incorporated City are within Castle's safety zones. The primary impact is due to noise (Zones C and D), though small areas have density restrictions (Zone B2). The military discontinued operations at Castle in 1995. One important criterion for determining the various zones is the noise factor. Military aircraft are designed solely for performance, whereas civilian aircraft have extensive design features to control noise.

Potential hazards to flight include physical obstructions and other land use characteristics that can affect flight safety, which include: visual hazards such as distracting lights, glare, and sources of smoke; electronic interference with aircraft instruments or radio communications; and uses which may attract flocks of birds. In order to safeguard an airport's long-term usability, preventing encroachment of objects into the surrounding airspace is imperative.

Railroad

Hazardous materials are regularly shipped on the BNSF and SP/UP Railroad lines that pass through the City. While unlikely, an incident involving the derailment of a train could result in the

spillage of cargo from the train in transporting. The spillage of hazardous materials could have devastating results. The City has little to no control over the types of materials shipped via the rail lines. There is also a safety concern for pedestrians along the tracks and vehicles utilizing at-grade crossings. The design and operation of at-grade crossings allows the City some control over rail-related hazards. Ensuring proper gate operation at the crossings is the most effective strategy to avoid collision and possible derailments.

Public Protection and Disaster Planning

Hospitals, ambulance companies, and fire districts provide medical emergency services. Considerable thought and planning have gone into efforts to improve responses to day-to-day emergencies and planning for a general disaster response capability.

The City's Emergency Plan and the County Hazardous Waste Management Plan both deal with detailed emergency response procedures under various conditions for hazardous materials spills. The City also works with the State Department of Health Services to establish cleanup plans and to monitor the cleanup of known hazardous waste sites within the City.

Project Characteristics

The annexation area is bounded to the south by the BNSF Railroad line. No construction near the lines is expected as part of the annexation and future development. All new construction is proposed on the north side of Santa Fe Drive. The project would include the construction of a gas station/mini-market/car wash, a fast-food restaurant, and drive-thru coffee shop/kiosk. Other retail uses would eventually develop on the site, but those uses are unknown at this time.

Adverse effects of hazards and hazardous materials tend to be localized; therefore, the area near the project area would be most affected by project activities. There are no residential uses within 1,000 feet of the site. There are several industrial uses that employee a large number of people on the south side of the railroad tracks.

The Merced Regional Airport is located approximately 2 miles south of the annexation area. The Castle Airport is located approximately 5-6 miles west of the site.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
G. <u>Hazards and Hazardous Materials.</u> Would the project:				
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
2) 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?			✓	
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓
4) Be located on a site which is included on a list of hazardous materials site compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			✓	
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?		✓		
6) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?			✓	
7) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓
8) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			✓	

1) **Less Than Significant**

Hazards and hazardous materials are extensively regulated at the federal, state, and local levels. The only known land use at this time that would involve the use of a large amount of a hazardous material would be the gas station. However, as previously mentioned, there are federal and state regulations that govern the use and delivery of gasoline.

Construction activities associated with the proposed project would involve the use, storage, transport, and disposal of oil, gasoline, diesel fuel, paints, solvents, and other hazardous materials. Once constructed, the project would be required to adhere to all applicable federal and state health and safety standards. Construction activity must also be in compliance with the California Occupational Safety and Health Administration regulations (Occupational Safety and Health Act of 1970). Compliance with these requirements would reduce the risk of hazards to the public to a **less than significant** level.

2) **Less Than Significant**

There are no residential uses within 1,000 feet of the project site and the nearest industrial use would be over 500 feet away across Santa Fe Drive and over the railroad track. Construction on the project site would be reviewed for the use of hazardous materials at the building permit stage. Implementation of Fire Department and Building Code regulations for hazardous materials, as well as implementation of federal and state requirements, would reduce any risk caused by a future use on the site from hazardous materials to a less than significant level.

APPLICABLE GENERAL PLAN GOALS AND POLICIES:

The City of Merced *Vision 2030 General Plan* contains policies that address hazardous materials.

Goal Area S-7: Hazardous Materials	
Goal **Hazardous Materials Safety for City Residents**	
Policies	
S-2.1	Prevent injuries and environmental contamination due to the uncontrolled release of hazardous materials.
Implementing Actions:	
7.1.a	Support Merced County in carrying out and enforcing the Merced County Hazardous Waste Management Plan.
7.1.b	Continue to update and enforce local ordinances regulating the permitted use and storage of hazardous gases, liquids, and solids.
7.1.d	Provide continuing training for hazardous materials enforcement and response personnel.

The *Merced Vision 2030 General Plan* contains policies that address disaster preparedness.

Goal Area S-1: Disaster Preparedness	
Goal **General Disaster Preparedness**	
Policies	
S-1.1	Develop and maintain emergency preparedness procedures for the City.
Implementing Actions:	
1.1.a	Keep up-to-date through annual review the City's existing Emergency Plan and coordinate with the countywide Emergency Plan.

1.1.b	Prepare route capacity studies and determine evacuation procedures and routes for different types of disasters, including means for notifying residents of a need to evacuate because of a severe hazard as soon as possible.
7.1.d	Provide continuing training for hazardous materials enforcement and response personnel.

3) **No Impact**

There are no schools within one-quarter mile of the school. Therefore, there is no impact.

4) **Less than Significant Impact**

According to a California Department of Toxic Substances Control EnviroStor database search, the project site is not listed as a hazardous waste site. The operation of the gas station could result in the release of hazardous materials that could affect the public or the environment. However, the gas station is required to comply with all federal, state, and local laws for gas. Therefore this impact would be less than significant.

5) **Less than Significant with Mitigation**

The project site is identified as being located in Zone C (refer to map at Attachment I) of the Merced County Airport Land Use Compatibility Plan (ALUCP). As such, development on the site would be required to adhere to any regulations set forth in the ALUCP regarding the number of people per building and uses on the site. The following mitigation measure will ensure compliance with those regulations and reduce this potential impact to a less than significant level.

Mitigation Measure HAZ-5

Prior to the issuance of any subsequent land use entitlement for construction of a building or the issuance of a building permit, the developer shall demonstrate compliance with the requirements of the Merced County Airport Land Use Compatibility Plan (ALUCP). If compliance is not feasible, the development plan shall be modified to make compliance possible.

6) **Less than Significant**

The project site is not located within the vicinity of a private air strip. However the site is approximately 2 miles from the Merced Regional Airport and approximately 5-6 miles from the Castle Airport. The project site is not located within a safety zone for either airport. Therefore, this impact is less than significant.

7) **No Impact**

The proposed project would not adversely affect any adopted emergency response plan or emergency evacuation plan. No additional impacts would result from the development of the project area over and above those already evaluated by the EIR prepared for the *Merced Vision 2030 General Plan.* Refer to the General Plan Policy S-1 above.

8) **Less than Significant Impact**

According to the Cal Fire website, the Merced County Fire Hazard Severity Zone Map shows the project site is designated as a "Local Area of Responsibility" (LRA) with a Hazard Classification of "Moderate."

The City of Merced Fire Department would become the responsible agency for responding to fires at the subject site once annexed. The annexation area may be split and serviced by two different Fire Districts. The northern portion of the annexation area would most likely be served by Fire District #53, with the nearest Fire Station located at 800 Loughborough Drive. The southern portion of the annexation area would be served by District # 51 with the nearest Fire Station located at 99 East 16th Street. However, the City is currently performing a Standards of Coverage study. The results of this study might modify the station responsible for serving the annexation area.

The site is adjacent to ag land that could be susceptible to wildland fires. However, the City of Merced Fire Department has procedures in place to address the issue of wildland fires, so no additional mitigation would be necessary. This potential impact is less than significant.

H. Hydrology and Water Quality

SETTING AND DESCRIPTION

Water Supplies and Facilities

The City's water supply system consists of 22 wells and 14 pumping stations equipped with variable speed pumps that attempt to maintain 45 to 50 psi (pounds per square inch) nominal water pressure. The City is required to meet State Health pressure requirements, which call for a minimum of 20 psi at every service connection under the annual peak hour condition and maintenance of the annual average day demand plus fire flow, whichever is stricter. The first phase of the construction project once annexation is complete (the gas station, mini-market, etc. near the corner of Santa Fe Drive and Highway 59) would be serviced by an existing line in North Highway 59. Subsequent phases of construction may be required to extend the lines down Santa Fe Drive in order to provide service to the site.

Storm Drainage/Flooding

In accordance with the adopted *City of Merced Standard Designs of Common Engineering Structures*, percolation/detention basins are designed to temporarily collect run-off so that it can be metered at acceptable rates into canals and streams which have limited capacity. Storm drain lines would have to be extended to serve the project area. Additionally, a drainage basin would need to be provided on-site to hold storm water generated from the site. The project would be required to comply with all Post Construction Standards for the City's MS IV Permit.

The project site is bounded to the north by Black Rascal Creek. This creek is used for irrigation purposes by the Merced Irrigation District. The creek would not be modified by the project nor would storm drainage enter the creek. All storm drainage would be collected into the City's stormwater system.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
H. Hydrology and Water Quality. Would the project:				
1) Violate any water quality standards or waste discharge requirements?		✓		
2) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			✓	
3) 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 result in substantial erosion or siltation on- or off-site?			✓	
4) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			✓	
5) 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?		✓		
6) Otherwise substantially degrade water quality?			✓	
7) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				✓
8) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?		✓		

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
9) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?		✓		
10) Inundation by seiche, tsunami, or mudflow?			✓	

1) **Less Than Significant Impact with Mitigation**

Short-Term Water Quality

The annexation and General Plan Amendment are not expected to violate any water quality standards or waste discharge requirements. However, the subsequent development of the northwest corner would involve grading, building and construction, and paving activities. Because development would occur in phases, the initial phase would occur at the southeast corner of the site and the western edge of the site. During development of the project there would be the potential for surface water to carry sediment from on-site erosion and other pollutants into the stormwater system and local waterways, specifically Black Rascal Creek.

Construction of the project would also require the use of gasoline- and diesel-powered heavy equipment such as bulldozers, backhoes, water pumps, and air compressors. Chemicals such as gasoline, diesel fuel, lubricating oil, hydraulic oil, lubricating grease, automatic transmission fluid, paints, solvents glues, and other substances would be utilized during construction. An accidental release of any of these substances could degrade the water quality of the surface water runoff and add additional sources of pollution into the drainage system.

The National Pollutant Discharge Elimination System (NPDES) stormwater permitting is required by the State Water Board's Construction General Stormwater permit (General Permit). The General Permit regulates stormwater discharges from construction sites. Under the General Permit, the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) is required for construction activities of 1 acre in area. The SWPPP must identify potential sources of pollution that may be reasonably expected to affect the quality of stormwater discharges as well as identify and implement BMP's that ensure the reduction of these pollutants during stormwater discharges.

Mitigation Measure HYD-1 requires that the project applicant prepare and implement an SWPPP. The implementation of this plan would ensure the potential short-term impacts are reduced to a **less than significant level.**

Long-Term Water Quality

The northwest corner of the annexation area is currently undeveloped and doesn't contain any storm drainage facilities. The southwest corner is currently developed, but does not have any stormwater facilities onsite other. Currently runoff within the annexation area either ponds onsite or sheet flows to Black Rascal Creek.

The proposed development on the north side of the annexation area would result in the development of new commercial buildings and infrastructure on the 7.83-acre parcel. The proposed project would increase the amount of impervious surface area on the project site and would create the potential for discharge of urban pollutants into Black Rascal Creek and downstream waterways. Such pollutants would include sediment and turbidity, nutrients, organic compounds, oxygen demanding substances, trash and debris, bacteria and viruses, oil and grease, pesticides, and metals.

As discussed above, the City will require the project applicant to prepare a Storm Water Mitigation Plan for review and approval that identifies BMP's necessary to control stormwater pollution from operational activities and facilities, and provide for appropriate maintenance over time. The SWMP would include design concepts that are intended to accomplish a "first flush" objective that would remove contaminants from the first 2 inches of stormwater before it enters area waterways. To ensure that stormwater quality measures are implemented Mitigation Measures HYD-1B is proposed which would require the project applicant to prepare and submit an SWMP to the City of Merced for review and approval. The implementation of the mitigation measure would ensure that potential, long-term, operational water quality impacts are reduced to a level of **less than significant**.

Mitigation Measure HYD-1a

Prior to the issuance of grading permits, the project applicant shall file a Notice of Intent with and obtain a facility identification number from the State Water Resources Control Board. The project applicant shall also submit a Stormwater Pollution Prevention Plan (SWPPP) to the City of Merced that identifies specific actions and Best Management Practices (BMPs) to prevent stormwater pollution during construction activities. The SWPPP shall identify a practical sequence for BMP implementation, site restoration, contingency measures, responsible parties, and agency contacts. The SWPPP shall include, but not be limited to, the following elements:

- *Comply with the requirements of the State of California's most current Construction Stormwater Permit.*
- *Temporary erosion control measures shall be implemented on all disturbed areas.*
- *Disturbed surfaces shall be treated with erosion control measures during the October 15 to April 15 rainy season.*
- *Sediment shall be retained on-site by a system of sediment basins, traps, or other BMPs.*
- *The construction contractor shall prepare Standard Operating Procedures for the handling of hazardous materials on the construction site to eliminate discharge of materials to storm drains.*
- *BMP performance and effectiveness shall be determined either by visual means where applicable (e.g., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination (such as inadvertent petroleum release) is required by the Central Valley Regional Water Quality Control Board to determine adequacy of the measure.*

- *In the event of significant construction delays or delays in final landscape installation, native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance, as an interim erosion control measure throughout the wet season.*

Mitigation Measure HYD-1b

Prior to the issuance of building permits, the project applicant shall submit a final Storm Water Mitigation Plan (SWMP) to the City of Merced for review and approval. The plan shall be developed using the California Stormwater Quality Association's "New Development and Redevelopment Handbook." The SWMP shall identify pollution prevention measures and BMPs necessary to control stormwater pollution from operational activities and facilities, and provide for appropriate maintenance over time. The SWMP shall include design concepts that are intended to accomplish a "first flush" objective that would remove contaminants from the first 2 inches of stormwater before it enters area waterways. The project applicant shall also prepare and submit an Operations and Maintenance Agreement to the City identifying procedures to ensure that stormwater quality control measures work properly during operations.

APPLICABLE GENERAL PLAN GOALS AND POLICIES:
The *Merced Vision 2030 General Plan* contains policies that address Water Quality and Storm Drainage.

Goal Area P-5: Storm Drainage and Flood Control	
Goal: An Adequate Storm Drainage Collection and Disposal System in Merced	
Policies	
P-5.1	Provide effective storm drainage facilities for future development.
P-5.2	Integrate drainage facilities with bike paths, sidewalks, recreation facilities, agricultural activities, groundwater recharge, and landscaping.
Implementing Actions:	
5.1.a	Continue to implement the City's Storm Water Master Plan and the Storm Water Management Plan and its control measures.
5.1.c	Continue to require all development to comply with the Storm Water Master Plan and any subsequent updates.

2) **Less Than Significant Impact**

The City of Merced is primarily dependent on groundwater sources that draw from the San Joaquin aquifer. The City has 22 active well sites with one under construction, and 14 pumping stations, which provide service to meet peak hour urban level conditions and the average daily demand plus fire flows.

According to the City of Merced Draft Water Master Plan, the estimated average peak water demand in 2012 was 23.1 mgd.

The proposed project is estimated to use approximately 750 gallons of water per day. This would represent 0.0032% of the estimated average daily water consumption in 2012. Although development of the site would restrict onsite recharge where new impervious

surface areas are created, all alterations to groundwater flow would be captured and routed to the stormwater percolation ponds or pervious surfaces with no substantial net loss in recharge potential anticipated. This reduces this impact to a **less than significant level**.

3) **Less Than Significant Impact**

The proposed project would result in modifications to the existing drainage pattern on the site. The project will be designed to capture all surface water runoff onsite and then drain into the City's existing storm drainage system. Drainage would not go directly to Black Rascal Creek to the north of the site.

The project site is currently vacant and consists of pervious surfaces. The proposed project would create impervious surfaces over a large portion of the project site, thereby preventing precipitation from infiltrating and causing it to pond or runoff. However, stormwater flows would be contained on-site and piped or conveyed to the City's stormwater system, there would be no potential for increased erosion or sedimentation.

Developed storm drainage facilities in the area are adequate to handle this minor increase in flows. The project would not result in a substantial alteration of drainage in the area, and no offsite uses would be affected by the proposed changes. All potential impacts are **less than significant.**

4) **Less Than Significant Impact**

The proposed project would alter the existing drainage pattern of the site, but not in a manner that would result in flooding. The site is currently vacant and any construction on the site would alter the drainage pattern and reduce the absorption capability of the site. There are no streams or rivers that would be affected. Black Rascal Creek to the north of the site would also not be affected. All storm runoff would be captured onsite and conveyed through pipes to the City's stormwater system. Any changes to the site would drain into the City's existing storm drain system which would prevent any onsite or offsite flooding. This potential impact is **less than significant**.

5) **Less Than Significant Impact with Mitigation**

Construction of the development at the northwest corner of Highway 59 and Santa Fe Drive would install a storm drainage system designed to connect to the City's existing storm drain system. Storm drain lines currently existing in Olive Avenue to the east of the site. These lines would be extended to the site to serve the future development. A storm drain basin would be constructed at the northeast corner of the site to provide on-site retention of storm water before it is discharged to the City's storm drain system. The developer would be required to comply with the City's Post-Construction Standards for the City's Phase II MS4 Permit and provide all documentation required by the City Engineer to confirm the proposed basin is of sufficient capacity to serve the development. The following mitigation measure would ensure any impacts are reduced to a **less than** significant level.

Mitigation Measure Hyd-5

Prior to the issuance of a building permit for this project, the applicant shall demonstrate to the City that proposed storm drainage facilities are adequate to meet the Project demands and that improvements are consistent with the City's Storm Drainage Master Plan and the Post Construction Standards for the City's Phase II MS4 permit.

6) **Less Than Significant Impact**

The proposed project would not substantially degrade water quality. The proposed project would be served by the City's water system and all water runoff will be contained onsite then directed out to the City's storm drain system. The construction of the project would not affect the water quality and would not degrade water quality in the area. This potential impact is **less than significant**.

7) **No Impact**

There are no homes within the proposed annexation area and no homes are proposed with the future development.

8) **Less than Significant Impact with Mitigation**

The Flood Insurance Rate Map shows the annexation area within Flood Zone "AE" (100-year) (see the LOMR and revised Flood Insurance Rate Map at Attachment J). The northwest corner of North Highway 59 and Santa Fe Drive was previously in a floodway. However, in 2015, FEMA approved a LOMR for this area which revised the flood zone to an AE zone instead of a floodway. Areas within the AE Flood Zone are areas that have a 1% probability of flooding every year (also known as the "100-year floodplain"), and where predicted flood water elevations above mean sea level have been established. Properties in Zone AE are considered to be at high risk of flooding under the National Flood Insurance Program (NFIP).

In order to build within this flood zone, certification must be provided that the finished floor of all structures are above the base flood elevation (BFE) established for the area (167.4).

In addition to FEMA flood zone requirements, the State of California has adopted the Urban Level of Flood Protection (ULOP) Criteria in response to the Central Valley Flood Protection Act of 2008. These criteria were adopted to help strengthen the link between flood management and land use within California's Central Valley by protecting development from a 200-year flood event. In order to study the impacts of a 200-year event in accordance with the ULOP, a study was prepared by River Focus (Attachment K).

The ULOP study resulted in the following mitigation measures being imposed to ensure the development of the project at the northwest corner of North Highway 59 and Santa Fe Drive is protected from a 200-year flood event as described in the ULOP. Implementation of this mitigation measure would reduce the impacts from all flooding to a **less than significant level.**

Mitigation Measure HYD-8

Development of the site is required to provide fill dirt to raise the elevation of the site and achieve protection from flooding. The fill must be elevated above the computed 200-year flood elevation and freeboard is highly recommended by DWR (note: freeboard is the difference between the fill elevation and the computed flood elevation).

A freeboard of 1-foot or greater will help to account for the inherent uncertainty in estimating peak flood discharges and the computed flood elevations. A summary of

proposed fill elevations is provided in the Table below. The required fill elevation ranges from 168.4 ft. to 168.7 ft. (NAVD88 vertical datum).

Proposed Fill Elevations – Project Site

Location	*200-year Water Surface Elevation (ft. NAVD88)*	*Freeboard Height (ft)*	*Fill Elevation (ft, NAVD88)*
Downstream (Northwest) End of Project Site	*167.4*	*1*	*168.4*
Upstream (East) End of Project Site	*167.7*	*1*	*168.7*

9) **Less than Significant Impact with Mitigation**

Refer to the discussion in item #8 above and Mitigation Measure HYD-8

10) **Less than Significant Impact**

The proposed project is located approximately 80 miles from the Pacific Ocean, distant from any large lakes, and not within the inundation zones for Lake Yosemite or Bear Reservoir at an elevation ranging from approximately 173 feet above MSL. According to the City's General Plan Safety Element, the City of Merced is not subject to inundation by tsnami, seiche, or mudflow. This potential impact is **less than significant**.

I. Land Use and Planning

SETTING AND DESCRIPTION

The annexation area is located at the intersection of North Highway 59 and Santa Fe Drive. A 7.83-acre property lies on the northwest corner and a 1.0-acre site at the southwest corner. The northwest corner of the site is vacant and has a General Plan designation of Open Space due to previous flood plain issues (see Section H).

The proposed annexation would not change the land use at the southwest corner of North Highway 59 and Santa Fe Drive. The Pre-Zoning for this area would be for Light Industrial (I-L). The existing wholesale/retail business would remain and the existing General Plan designation of Industrial would be consistent with the existing land use and proposed zoning.

The proposed Pre-Zoning for the northwest corner of North Highway 59 and Santa Fe Drive would be Thoroughfare Commercial (C-T). The proposed General Plan Amendment would amend the designation this area from Open Space (OS) to Thoroughfare Commercial (CT). The proposed development in this area would be consistent with the General Plan and Zoning designations of Thoroughfare Commercial.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. Land Use and Planning. Would the project:				
1) Physically divide an established community?				✓
2) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				✓
3) Conflict with any applicable habitat conservation plan or natural community conservation plan?				✓

1) **No Impact**

The annexation of this area would not divide an established community. As shown on the location map at Attachment A, the southern and eastern boundaries of the annexation area are adjacent to the current City Limits.

2) **No Impact**

Upon approval of the annexation, the project site would comply with the City's General Plan. Part of the annexation process includes pre-zoning the site to Thoroughfare Commercial (C-T) and amending the General Plan designation from Open Space (OS) to Thoroughfare Commercial (CT). The project would not conflict with any other plans.

3) **No Impact**

The project site is not part of any habitat conservation plan or natural community conservation plan. Therefore, there are no impacts.

J. Mineral Resources

SETTING AND DESCRIPTION

The City of Merced and its SUDP/SOI do not contain any mineral resources that require managed production, according to the State Mining and Geology Board. Based on observed site conditions and review of geological maps for the area, economic deposits of precious or base metals are not expected to underlie the Merced SUDP/SOI. According to the California Geological Survey, Aggregate Availability in California - Map Sheet 52, Updated 2006, minor aggregate production occurs west and north of the City of Merced, but economic deposits of aggregate minerals are not mined within the immediate vicinity of the SUDP/SOI. Commercial deposits of oil and gas are not known to occur within the SUDP/SOI or vicinity.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
J. Mineral Resources. Would the project:				
1) 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?				✓
2) 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?				✓

1) **No Impact**

The project site does not support mineral extraction operations and would not result in the loss of availability of any known mineral resource.

2) **No Impact**

The project site does not support mineral extraction operations and would not result in the loss of availability of any known mineral resource.

K. Noise

SETTING AND DESCRIPTION

Potential noise impacts of the proposed project can be categorized as those resulting from construction and those from operational activities. Construction noise would have a short-term effect; operational noise would continue throughout the lifetime of the project.

Some land uses are considered more sensitive to noise levels than other uses. Sensitive land uses can include residences, schools, nursing homes, hospitals, and some public facilities, such as libraries. The noise level experienced at the receptor depends on the distance between the source and the receptor, the presence or absence of noise barriers and other shielding devices, and the amount of noise attenuation (lessening) provided by the intervening terrain. For line sources such as motor or vehicular traffic, noise decreases by about 3.0 to 4.5A –weighted decibels (dBA) for every doubling of the distance from the roadway.

No residential uses are proposed within this annexation area. The property to the south of Santa Fe Drive is currently developed and no additional expansion is expected. On the north side of Santa Fe Drive, commercial uses including fast-food restaurants, a gas station/mini-market, and other retail uses are proposed. The nearest sensitive uses to the site (i.e., residential) are approximately 1,000 to 1,500 feet away.

Noise from Other Existing Sources

Vehicular noise from North Highway 59 and Santa Fe Drive along with railroad noise from the BNSF Railroad would be the primary existing noise sources at the project site. According to the *Merced Vision 2030 General Plan*, the acceptable noise level for outdoor uses such as a playground

or park is 70db/CNEL for roadways and railroads and 75db/CNEL for aircraft. The General Plan does not address outdoor uses such as outdoor dining associated with a restaurant or pumping gas at a gas station. These uses would typically expose a person to the noise level from the roads, railroad, and aircraft for a much more brief period of time than someone visiting a park or attending an outdoor recreation event. For the purposes of this analysis, 70 db/CNEL and 75 db/CNEL will be used to as a threshold roadway, railroad, and aircraft noise.

According to the *Merced Vision 2030 General Plan*, the existing noise level at a distance of 100 feet from Santa Fe Drive is 66 dB. At a distance of 54 feet from the road, the noise level would reach 70 dB. At 100 feet from North Highway 59, the noise level is 69.3 dB. At a distance of 89 feet, the noise level would increase to 70 dB.

The *Merced Vision 2030 General Plan* states that the noise level from the BNSF railroad is 72 dB at distance of 100 feet from the railroad. At 137 feet the noise level is 70 dB.

The Castle Airport is approximately 5 miles to the west and the Merced Regional Airport is approximately 3.2 miles to the south. The site is located outside the 60db/CNEL for the Castle Airport and outside of the 55db/CNEL for the Merced Regional Airport.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
K. <u>Noise.</u> Would the project result in:				
1) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		✓		
2) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			✓	
3) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			✓	
4) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		✓		
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				✓

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
6) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				✓

1) **Less Than Significant with Mitigation**

Construction Noise

Although no sensitive uses are located adjacent to the site, it is still possible for construction-related noise to impact the residences. In an effort to minimize any impact on those residences the Mitigation Measure NOI 1 is required.

Mitigation Measure NOI 1

The construction contractor shall limit all noise-producing construction activities, including deliveries and warming up of equipment, to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday. No such work shall be permitted on Sundays or federal holidays without prior approval from the City.

Operational Noise

The proposed uses would not generate a large amount of noise to the area. However, given the location, the roads, railroad, and aircraft may have an effect on any outdoor uses. Therefore, Mitigation Measure NOI 2 is required.

Mitigation Measure NOI 2

Any outdoor dining areas or other outdoor uses shall have the following setbacks to maintain an acceptable noise level of 70 dB for outdoor uses:

Road/Railroad	*Required Setback*
Santa Fe Drive	*54 Ft.*
North Highway 59	*89 Ft.*
BNSF Railroad	*137 Ft.*

2) **Less than Significant Impact**

Construction activity can create groundborne vibration and groundborne noise. However, given the distance of the sensitive uses (residences) to the site, the level of groundborne vibration and noise would be less than significant.

3) **Less than Significant Impact**

Implementation of the project after annexation would introduce new noise sources to the area. Commercial uses such as a fast-food restaurant, gas station/mini-market, car wash, and drive-through coffee shop/kiosk would replace the vacant lot at the northwest corner of Santa Fe Drive and North Highway 59. It is likely that traffic to this area would increase and the uses themselves would generate a certain amount of noise during daily operations.

Given the distance of the sensitive uses to the site, this impact would be less than significant.

4) **Less Than Significant with Mitigation**

Temporary or periodic noise levels would increase with construction of the project. Construction noise was analyzed under item #1 above. Implementation of Mitigation Measure NOI 1 would reduce this impact to a less than significant level.

Mitigation Measure NOI 1

See description above.

5) **No Impact**

The project site is not located within two miles of a public airport or public use airport, therefore, there is no impact.

6) **No Impact**

The project site is not located within the vicinity of a private airstrip, therefore, there is no impact.

L. Population and Housing

SETTING AND DESCRIPTION

The proposed annexation would add area to the City Limit of the City of Merced. No residential uses exist or are proposed within the annexation area. The project proposed for the northwest corner of Highway 59 and Santa Fe Drive would include commercial uses which would generate new jobs within the City of Merced.

Expected Population and Employment Growth

According to the State Department of Finance, the City of Merced's population in 2018 was estimated to be 86,750. Population projections estimate that the Merced SUDP/SOI area will have a population of 159,900 by the Year 2030. According to the *Merced Vision 2030 General Plan*, the City of Merced is expected to experience significant employment growth by the Year 2030.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
L. Population and Housing. Would the project:				
1) Induce substantial 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)?				✓

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
2) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				✓
3) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				✓

1) **No Impact**

The annexation area does not include any residential uses nor does the proposed commercial project for the northwest corner. The project does not include the construction or extension of any new roads, but water, sewer, and storm drain lines would be extended across the full frontage of the property. The extension of these lines would not produce an increase in the population of the City. Therefore, there is no impact.

2) **No Impact**

There are no housing units within the annexation or the future project area. No one would be displaced by this project.

3) **No Impact**

See item 2.

M. Public Services

SETTING AND DESCRIPTION

Fire Protection

The City of Merced Fire Department provides fire protection, rescue, and emergency medical services from five fire stations throughout the urban area. The City's Central Fire Station (Station 51) is located in the downtown area at 16th and G Streets. There are four other stations within the City: Station 52 is located at the Merced Regional Airport on Falcon Way; Station 53 is located on Loughborough Drive between M and R Streets, just north of the Merced Mall; Station 54 is on East 21st Street; and Station 55 is located at the intersection of Parsons and Silverado Avenues in North Merced.

The annexation area would be served by Station 53 on Loughborough Drive. This station is approximately 1.5 miles from the annexation area.

Police Protection

The City of Merced Police Department provides police protection for the entire City. The Police Department employs a mixture of sworn officers, non-sworn officer positions (clerical, etc.), and unpaid volunteers (VIP's). The service standard used for planning future police facilities is approximately 1.37 sworn officers per 1,000 population, per the Public Facilities Financing Plan.

The Police Department has two stations: the Main Station located at 611 West 22nd Street, and the South Station located at 470 West 11th Street.

Schools

The public school system in Merced is served by three districts: 1) Merced City School District (elementary and middle schools); 2) Merced Union High School District (MUHSD); and, 3) Weaver Union School District (serving a small area in the southeastern part of the City with elementary schools). The districts include various elementary schools, middle (junior high) schools, and high schools.

Parks

The City of Merced has a well-developed network of parks and recreation facilities throughout the City. A Class III bike path is located on the east side of Highway 59 that connects the annexation area to the north/northeast and central portions of the city.

Project Characteristics

The annexation area is located at the northwest corner of North Highway 59 and Santa Fe Drive. There is an existing retail/wholesale business at the southwest corner of North Highway 59 and Santa Fe Drive and a vacant lot at the northwest corner. A commercial development is proposed for the northwest corner once annexation is complete. Refer to the project description section of this document for details.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
M. <u>Public Services.</u> Would the project:				
1) 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 following public services:				
a) Fire Protection?			✓	
b) Police Protection?			✓	
c) Schools?			✓	
d) Parks?			✓	
e) Other Public Facilities?			✓	

1) **Less than Significant Impact**

a) <u>Fire Protection</u>

The proposed annexation area and subsequent commercial project would be served by the Station 53 on Loughborough Drive. This station would be able to adequately serve the

annexation area and maintain the Fire Department's goal of a 4-6 minute response time for the first crew to arrive at a fire or medical emergency. The proposed annexation and subsequent development of the vacant parcel would not significantly affect fire protection services, and no new or modified fire facilities would be needed. Construction within the annexation area would be required to meet all requirements of the California Fire Code and the Merced Municipal Code. Compliance with these requirements would reduce any future impacts to a less than significant level.

At the time a building permit is issued, the developer would be required to pay the fees required by the Public Facility Financing Plan (PFFP). A portion of this fee goes to cover the City's costs for fire protection such as fire stations, etc. In addition, the developer would be required to annex into the City's Community Facilities District for Services (CFD #2003-2). This would result in an assessment paid with property taxes in which a portion of the tax would go to pay for fire protection services.

Compliance with all Fire, Building, and Municipal Code requirements as well as payment of the Impact Fees required by the Public Facilities Financing Program, and annexation into the City's CFD for services would reduce any potential impacts to a **less than significant level**).

b) Police Protection

The proposed annexation area and subsequent commercial project would be adequately served by the City's Police Department. The same requirements for paying Public Facility Impact Fees and annexation into the City's Community Facilities District for Services (CFD #2003-2) would apply with a portion of the fees and taxes collected going toward the costs for police protection. Therefore, this potential impact is reduced to a **less than significant** level.

c) Schools

The public school system in Merced is served by three districts: 1) Merced City School District (elementary and middle schools); 2) Merced Union High School District (MUHSD); and, 3) Weaver Union School District (serving a small area in the southeastern part of the City with elementary schools). The districts include various elementary schools, middle (junior high) schools, and high schools. The Project site falls within the Merced City School District and Merced Union High School District (MUHSD).

As the City grows, new schools will need to be built to serve our growing population. According to the Development Fee Justification Study for the MUHSD, Merced City Schools students are generated by new multi-family development at the following rate:

Student Generation Rates		
Commercial/Industrial Category	**Elementary (K-8) (Students per 1,000 sq.ft.)**	**High School (9-12) (Students per 1,000 sq.ft.)**
Retail	0.13	0.038
Restaurants	0.00	0.157
Offices	0.28	0.048
Services	0.06	0.022
Wholesale/Warehouse	0.19	0.016
Industrial	0.30	0.147
Multi-Family	0.559 (per unit)	0.109 (per unit)

Based on the table above, the proposed commercial project would add 2.33 high school students and 4.66 K-8 students. This change would not create a significant impact on the school system. Therefore, this impact is less than significant.

d) Parks

Payment of the fees required under the Public Facilities Financing Program (PFFP) as described above would be required at time of building permit issuance to help fund future parks and maintenance of existing parks as well as the payment of fees in lieu of land dedication for future parks would be required at the building permit stage. The proposed amenities onsite and the payment of fees would reduce this potential impact to **less than significant**.

e) Other Public Facilities

The development of the project could impact the maintenance of public facilities and could generate impacts to other governmental services. Payment of the fees required under the Public Facilities Financing Program (PFFP) as described above would mitigate these impacts to a **less than significant** level.

N. Recreation

SETTING AND DESCRIPTION

The City of Merced has a well-developed network of parks and recreation facilities. Fahrens Park and Carol Gabriault Park are both located within a one-mile radius of the annexation area. Additionally, a Class III bike path runs along the east side of North Highway 59 connecting the area to the north/northeast and central portions of the city.

No residential development is proposed within the annexation area.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
N. Recreation. Would the project:				
1) Increase the use of neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			✓	
2) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				✓

1) **Less Than Significant Impact**

The annexation and commercial project do not include the addition of any dwelling units. It is unlikely that the use of parks would increase due to the annexation or subsequent project. The use of the bike path might increase due to the new commercial uses, but it is unlikely that the increase would be substantial. Therefore, this impact would be less than significant.

2) **No Impact**

The project is not responsible for the construction or expansion of any recreational facilities. However, as described above, new construction would pay impact fees required under the PFFP, a portion of which goes to fund parks facilities.

O. Transportation/Traffic

SETTING AND DESCRIPTION

This project is for the annexation of 8.83 acres of land at the northwest and southwest corners of North Highway 59 and Santa Fe Drive. North Highway 59 in this area is a two-lane state highway and Santa Fe Drive is currently a 4-lane road (two east-bound and two west-bound lanes). Santa Fe Drive is the extension of Olive Avenue (east of North Highway 59), which is a 6 lane road with three lanes in each direction. The number 3 west-bound lane becomes a dedicated right-turn lane at the intersection of Olive Avenue and North Highway 59.

There is a signalized intersection at the corner of North Highway 59 and Santa Fe Drive/Olive Avenue. Just south of the intersection is a railroad crossing for the BNSF railroad.

The proposed annexation would not change the layout of the road. However, the subsequent development on the north side of Santa Fe Drive would require improvements such as curb, gutter, and sidewalk along the project frontage on Santa Fe Drive and North Highway 59. The project also proposes two driveways on Santa Fe Drive and one driveway on North Highway 59 (refer to the site plan at Attachment C).

A Traffic Impact Analysis was prepared by KD Anderson & Associates, Inc. (Attachment L). This analysis was reviewed by Caltrans due to the proximity of the project to a state highway. Caltrans concurs with the analysis and has no additional comments.

The traffic analysis analyzed the development of approximately 42,800 s.f. of retail commercial uses, including a gasoline station with a convenience store, fast food restaurants, coffee kiosk, and other retail uses.

The traffic analysis included traffic conditions occurring on weekday a.m. and p.m. commute periods. The analysis addressed the operation of seven (7) existing intersections:

1. SR 59/Yosemite Avenue – Traffic Signal
2. SR 59/Buena Vista Drive – Traffic Signal
3. SR 59/Santa Fe Drive/W. Olive Avenue – Traffic Signal
4. W. Olive Avenue/Loughborough Drive – Traffic Signal
5. W. Olive Avenue/Austin Avenue – Traffic Signal

6. SR 59/Cooper Avenue/Willowbrook Drive – Traffic Signal
7. SR 59/W. 16th Street – All-Way Stop

The analysis also addresses conditions on SR 59, Olive Avenue, and Santa Fe Drive based on daily traffic volumes.

The analysis considers the following scenarios:

- Existing Conditions
- Existing Conditions Plus Project Build out with access as proposed
- Year 2035 Cumulative Conditions without the Project
- Year 2035 Cumulative Conditions with Project Build Out

Existing Conditions

The City establishes Level of Service (LOS) D as the minimum acceptable standard for intersections and roadways.

Traffic counts were conducted in 2017 to establish existing conditions. Two safety intersection improvement projects are pending and are expected to be completed before the proposed project proceeds. These improvements are included in the analysis of existing conditions at the SR 59/Olive Avenue/Santa Fe Drive intersection and the SR 59/W. 16th Street intersection.

With anticipated improvements, all study intersections operate at LOS D or better during the study hours. However, SR 59 between W. 16th Street and Olive Avenue carries daily traffic volumes that are indicative of LOS F conditions.

The existing system of pedestrian and bicycle facilities in this area includes limited sidewalks and Class I bike paths, but pedestrians and bicycles use paved shoulders elsewhere. A gap exists in the pedestrian system on the west side of SR 59 between Cooper Avenue and Santa Fe Drive, and right of way would need to be acquired to improve the situation in this area.

Alternative Transportation

Public Transportation

The City of Merced is served by the Merced Transit System known as "The Bus." This system includes a number of fixed routes throughout the City. The project site would be part of the M1-Merced West Route. This route originates at the Merced Transportation Center in downtown Merced and covers the southwest and northwest areas of the City.

Bicycles

The City of Merced General Plan includes a Bicycle Master Plan which identifies existing and planned facilities. A Class 1 bike path exists on the east side of Highway 59 and extends to the northeastern section of the City as well as the central part of the City.

Pedestrians

Sidewalks would be installed as part of the development of the northwest corner of North Highway 59 and Santa Fe Drive. Sidewalks would be required to be installed along the property frontage on Santa Fe Drive and North Highway 59.

Currently, there are no sidewalks on Highway 59 from Olive Avenue south to the railroad tracks. However, the City is currently working on a project that would provide a safe pedestrian crossing at the railroad tracks as well as sidewalks.

Sidewalks exists on the south side of Olive Avenue all the way to the intersection with North Highway 59. On the north side of Olive Avenue, the sidewalk stops approximately 400 feet west of the intersection.

Truck Access

The proposed development at the northwest corner would require truck access for delivery of fuel and other goods. As proposed trucks would have access to enter and exit the site from one of the two driveways on Santa Fe Drive or the driveway on North Highway 59. The eastern driveway on Santa Fe Drive and the driveway on Highway 59 are both right-in/right-out driveways. If a truck is leaving the site and wants to go eastbound, they would have to use the western driveway to make a left turn out of the site. Access to Highway 99 is available from North Highway 59. Most truck traffic will most likely use the Highway 59 driveway to exit the site and either continue on Highway 59 or use Highway 59 to access Highway 99.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
O. Transportation/Traffic. Would the project:				
1) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant component of the circulation system including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?		✓		
2) Conflict with an applicable congestion management program including but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?		✓		

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?		✓		
4) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?			✓	
5) Result in inadequate emergency access?			✓	
6) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)?		✓		

1) **Less than Significant with Mitigation**

The threshold of significance for this impact is a project ADT (Average Daily Trips) contribution equal or greater than 5% of the current ADT for an "arterial roadway" that is, or will be operating at an unacceptable LOS "E" or "F."

The threshold of significance for a collector road is an amount where the Project contributes more than 20% of the current ADT on roads carrying at least 3,000 ADT. Thus, a significant impact would occur if a Project adds 601 ADT to a collector road that currently has 3,000 ADT.

All the roadway segments studied (SR 59, Santa Fe Drive, and Olive Avenue) are arterial roadways. Thus, the threshold of significance would be the addition of 5% of the current ADT for roadways operating at LOS "E" or "F." As shown in the table below, SR 59 from Olive Avenue to W. 16th Street is currently operating at LOS F.

Existing Roadway Segments Volumes and Levels of Service				
Street	**From**	**To**	**Daily Volume**	**LOS**
SR 59	Buena Vista Dr.	W. Olive Ave	13,379	D
	W. Olive Ave.	BNSF RR	21,954	**F**
	BNSF RR	W. 16th St.	20,462	**F**
Santa Fe Dr.	Beachwood Dr.	SR 59	19,733	C
W. Olive Ave	SR 59	Loughborough Dr.	25,131	C

Phase One of the proposed development at the northwest corner of North Highway 59 and Santa Fe Drive would add approximately 1,116 daily trips to the area. Phase Two would add an additional 1,924 trips for a total of 4,040 daily trips at full build-out of the project. The table on the following page shows the comparison of the existing traffic volumes to the expected traffic volumes with build-out of the project. As shown, the additional traffic

generated from the project would not decrease the level of service for these roadway segments below the existing LOS. As shown below, no segment of the SR 59 that currently operates at LOS F exceeds a 5% increase in traffic volume. Therefore the project would not result in a significant impact.

Existing Roadway Segments Plus Project Volumes and Levels of Service							
Street	**From**	**To**	**Existing Daily Volume**	**Project Daily Volume**	**Total Daily Volume**	**Percent Increase**	**LOS**
SR 59	Buena Vista Dr.	W. Olive Ave	13,379	1,010	14,749	7.0%	D
	W. Olive Ave.	BNSF RR	21,954	808	22,762	3.7%	**F**
	BNSF RR	W. 16th St.	20,462	404	20,866	2.0%	**F**
Santa Fe Dr.	Beachwood Dr.	SR 59	19,733	606	20,339	3.1%	C
W. Olive Ave	SR 59	Loughborough Dr.	25,131	2,015	27,146	8.0%	C

Intersections

Although SR 59 between Olive Avenue and W. 16th Street would continue to operate at an LOS F, the existing off-site intersections studied would all operate at an LOS D. However, the proposed western driveway is forecasted to operate at an LOS F in the p.m. peak hour (4-6 p.m.) In order to improve this condition, the traffic analysis offers three possible alternatives. Each scenario would have ramifications on the project.

Similarly, the SR 59 access is expected to occasionally be blocked by the queue of southbound traffic extending from the Santa Fe Drive traffic signal. Alternative measures to alleviate this issue are also noted, along with their ramifications on the site. The traffic analysis recommends Alternative #1 as the preferred mitigation measure for this impact.

Western Driveway Alternatives

Alternative	**Ramification**
Install a Two-Way Left-Turn lane on Santa Fe Drive.	Requires moving driveway or reconstructing SR 59 intersection.
Prohibit outbound left turns.	Exacerbates problem at SR 59 driveway.
Install traffic signal.	Location is problematic and would likely require moving the driveway.

SR 59 Access Alternatives

Alternative	Ramification
Lengthen southbound left turn lane.	Facilitates access but does not shorten queues (*mitigation recommended by traffic analysis*).
Move access to the north.	Affects Black Rascal Creek as well as property not included in project.
Close SR 59 access.	Exacerbates issues at western access and makes site untenable as a retail center.

The additional traffic on the roadways does not reach the level of significance since the amount of traffic added to the sections of road currently operating at LOS F are less than 5%. However the on-site impacts described above would require mitigation to reduce them to a **less than significant level (see Mitigation Measures TRA 1 and TRA 1a).**

Cumulative Conditions

The analysis of the Cumulative Plus Project analysis determined that in order to improve the level of service at SR 59 and Olive Avenue, improvements would be needed. As mitigation for the project's proportional impact on this roadway segment, the analysis determined the development should contribute its fair share to the cost of intersection improvements. Therefore, the following mitigation measure TRA-1b is recommended to bring this impact to a **less than significant level.**

Mitigation Measure TRA-1

Prior to construction, the Site Plan Review Committee shall review the site design and determine which alternative at the western driveway is best to reduce the expected impacts. The alternatives may include those alternatives included in the traffic analysis or another alternative such as moving the driving further to the west. The developer shall provide any additional documentation or studies needed for the Site Plan Review Committee to make this determination.

Mitigation Measure TRA-1a

The southbound left-turn lane on SR 59 shall be lengthened as determined by the City Engineer and approved by Caltrans.

Mitigation Measure TRA-1b

The development shall contribute its fair share to the cost of improvements for the intersection of SR 59 and Olive Avenue:

- *Reconstruct westbound Olive Avenue to provide dual left turn lanes on southbound SR 59; and,*
- *Reconfigure the westbound right turn lane to create a combination through and right turn lane, and extend that through lane across SR 59 along the project's frontage; and,*
- *Reconstruct the existing northbound right turn lane as a "free" right turn with median island separating eastbound and right turning traffic. Reconstruct the eastbound Santa Fe Drive approach to provide dual left turn lanes.*

The additional traffic on the roadways does not reach the level of significance since the amount of traffic added to the sections of road currently operating at LOS F are less than 5%. However the on-site impacts described above would require mitigation to reduce them to a **less than significant level.**

2) **Less Than Significant with Mitigation**

Refer to item #1 above.

3) **Less Than Significant with Mitigation**

The project site is identified as being located in Zone C (refer to map at Attachment I) of the Merced County Airport Land Use Compatibility Plan (ALUCP). As such, development on the site would be required to adhere to any regulations set forth in the ALUCP regarding the number of people per building and uses on the site. Mitigation Measure HAZ-5 will ensure compliance with those regulations and reduce this potential impact to a less than significant level.

4) **Less than Significant**

The annexation and proposed project would not substantially increase hazards due to a design feature or incompatible uses. There are no design features that would increase a hazard at the site. The proposed western driveway on Santa Fe Drive would operate at an LOS F without mitigation which could present a hazard due to impatient drivers not wanting to wait for long queuing times. However, Mitigation Measure TRA-1 requires mitigation to alleviate that impact. Therefore, this impact is **less than significant.**

5) **Less than Significant**

The proposed development has access from two driveways on Santa Fe Drive and one on North Highway 59. Typically, the Fire Department requires a minimum of two access points to serve a site. This project meets that minimum. Emergency services can access the site from the north via Highway 59, from the south also via Highway 59, and from the east and west via Santa Fe Drive and Olive Avenue, respectively. This impact is **less than significant.**

6) **Less Than Significant with Mitigation**

The project site is served by the M-1 bus route and would be easily accessible to the City's existing bike path. The City's Design Standards provide standards for constructing streets with bicycle facilities and the Zoning Ordinance requires on-site bicycle parking facilities. Compliance with these requirements and the implementation of the following mitigation measure would reduce any impacts to a **less than significant level**.

TRA -6

Prior to the issuance of a building permit, the developer shall work with the Merced County Transit Authority (aka: The Bus) to determine if a bus stop is needed at this location. If a bus stop is required, the stop shall be in an area to allow the bus to move completely out of the travel lanes. The location of all bus stops shall be subject to approval by the City Engineer and Caltrans if along SR 59.

P. Utilities and Service Systems

SETTING AND DESCRIPTION

Water

The City's water system is composed of 23 groundwater production wells located throughout the City, approximately 350 miles of main lines, and 4 water tower tanks for storage. Well pump operators ensure reliability and adequate system pressure at all times to satisfy customer demand. Diesel powered generators help maintain uninterrupted operations during power outages. The City of Merced water system delivered more than 24 million gallons of drinking water per day in 2013 to approximately 20,733 residential, commercial, and industrial customer locations. The City is required to meet State Health pressure requirements, which call for a minimum of 20 psi at every service connection under the annual peak hour condition and maintenance of the annual average day demand plus fire flow, whichever is stricter. The City of Merced Water Division is operated by the Public Works Department.

The City of Merced's wells have an average depth of 414 feet and range in depth from 161 feet to 800 feet. The depth of these wells would suggest that the City of Merced is primarily drawing water from a deep aquifer associated with the Mehrten geologic formation. Increasing urban demand and associated population growth, along with an increased shift by agricultural users from surface water to groundwater and prolonged drought have resulted in declining groundwater levels due to overdraft. This condition was recognized by the City of Merced and the Merced Irrigation District (MID) in 1993, at which time the two entities began a two-year planning process to assure a safe and reliable water supply for Eastern Merced County through the year 2030. Integrated Regional Water Planning continues today through various efforts.

Wastewater

Wastewater (sanitary sewer) collection and treatment in the Merced urban area is provided by the City of Merced. The wastewater collection system handles wastewater generated by residential, commercial, and industrial uses in the City.

The City Wastewater Treatment Plant (WWTP), located in the southwest part of the City about two miles south of the airport, has been periodically expanded and upgraded to meet the needs of the City's growing population and new industry. The City's wastewater treatment facility has a

capacity of 11.5 million gallons per day (mgd), with an average 2006 flow of 8.5 mgd. The City has recently completed an expansion project to increase capacity to 12 mgd and upgrade to tertiary treatment with the addition of filtration and ultraviolet disinfection. Future improvements would add another 8 mgd in capacity (in increments of 4 mgd), for a total of 20 mgd. This design capacity can support a population of approximately 174,000. The collection system will also need to be expanded as development occurs.

Treated effluent is disposed of in several ways depending on the time of year. Most of the treated effluent (75% average) is discharged to Hartley Slough throughout the year. The remaining treated effluent is delivered to a land application area and the on-site City-owned wetland area south of the treatment plant.

Storm Drainage

The Draft *City of Merced Storm Drainage Master Plan* addresses the collection and disposal of surface water runoff in the City's SUDP. The study addresses both the collection and disposal of storm water. Systems of storm drain pipes and catch basins are laid out, sized, and costed in the plan to serve present and projected urban land uses.

It is the responsibility of the developer to ensure that utilities, including storm water and drainage facilities, are installed in compliance with City regulations and other applicable regulations. Necessary arrangements with the utility companies or other agencies will be made for such installation, according to the specifications of the governing agency and the City (Ord. 1342 § 2 (part), 1980: prior code § 25.21(f)). The City requires the construction of storm water percolation/detention basins with new development. Percolation basins are designed to collect storm water and filter it before it is absorbed into the soil and reaches groundwater tables. Detention basins are designed to temporarily collect runoff so it can be metered at acceptable rates into canals and streams which have limited capacity. The disposal system is mainly composed of MID facilities, including water distribution canals and laterals, drains, and natural channels that traverse the area.

The City of Merced has been involved in developing a Storm Water Management Plan (SWMP) to fulfill requirements of storm water discharges from Small Municipal Separate Storm Sewer System (MS4) operators in accordance with Section 402(p) of the Federal Clean Water Act (CWA). The SWMP was developed to also comply with General Permit Number CAS000004, Water Quality Order No. 2003-0005-DWQ.

Solid Waste

The City of Merced is served by the Highway 59 Landfill and the Highway 59 Compost Facility, located at 6040 North Highway 59, one and one-half miles north of Old Lake Road. The County of Merced is the contracting agency for landfill operations and maintenance, while the facilities are owned by the Merced County Association of Governments. The City of Merced provides services for all refuse pick-up within the City limits and franchise hauling companies collect in the unincorporated areas. In addition to these two landfill sites, there is one private disposal facility, the Flintkote County Disposal Site, at SR 59 and the Merced River. This site is restricted to concrete and earth material.

Project Characteristics

The new construction portion of the annexation area would be required to connect to the City's water, sewer, and storm drain system. All lines would be required to run along the full length of the project frontage. The existing business at the southwest corner of North Highway 59 and Santa Fe Drive would not be required to connect to City services at this time. However, if in the future, the water well or septic tank failed, they would be required to connect to the City's services at that time. Additionally, if the owner of the property proposed a large remodel or new construction on the site, connection to City services would then be required.

A 16-inch diameter water line exists in North Highway 59 which would be sufficient to serve the annexation area. A 21-inch sewer line exists in Olive Avenue, east of North Highway 59. In order to serve the proposed new construction site, this line would have to be extended down Santa Fe Drive. The same is true for the storm drain system. A line exists in Olive Avenue, but would have to be extended in order to serve the project site.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
P. Utilities and Service Systems. Would the project:				
1) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			✓	
2) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			✓	
3) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			✓	
4) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			✓	
5) Result in a determination by the wastewater treatment provider which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			✓	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
6) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			✓	
7) Comply with federal, state, and local statues and regulations related to solid waste?			✓	

1) **Less Than Significant Impact**

The project site would be served by the City sewer system. There is sufficient capacity for serving this project. This potential impact is **less than significant.**

2) **Less Than Significant Impact**

The City's current water and wastewater system is capable of handling this project and other future developments within the City of Merced. There is an existing sewer line in Olive Avenue. The project would be required to extend the main line to their site and across the entire frontage of their property (approximately 1,000 feet). However, this extension would be done within an existing roadway and no significant environmental impacts would result from the extension of the line. A water line currently exists in North Highway 59 along the property frontage. No new construction for water facilities would be required. This potential impact is **less than significant**.

3) **Less Than Significant Impact**

The project would be required to provide storm drainage facilities that would capture storm water onsite and be routed to the City's storm drain system. There are existing storm drain lines in Olive Avenue east of the project site. Extension of the storm drain lines would be done within an existing roadway and no significant environmental impacts would result from the extension of the line. This potential impact is **less than significant**.

4) **Less Than Significant Impact**

As explained above, no new water facilities are needed for this project. The existing water system is sufficient to serve the development. Potential impacts are **less than significant**.

5) **Less Than Significant Impact**

Refer to item 2 above.

6) **Less Than Significant Impact**

The City of Merced uses the Highway 59 Landfill. Sufficient capacity is available to serve the future project. According to the *Merced Vision 2030 General Plan* DEIR, the landfill has capacity to serve the City through 2030. Potential impacts are **less than significant**.

7) **Less Than Significant Impact**

All construction on the site would be required to comply with all local, state, and federal regulations regarding solid waste, including recycling. Potential impacts are **less than significant**.

Q. Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Q. Mandatory Findings of Significance. Would the project:				
1) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			✓	
2) 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?)			✓	
3) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			✓	

1) **Less than Significant**

As previously discussed in this document, the project does not have the potential to adversely affect biological resources or cultural resources because such resources are lacking on the project site, and any potential impacts would be avoided with implementation of the mitigation measures and other applicable codes identified in this report. Also, the project would not significantly change the existing urban setting of the project area. Thus, this impact would be **less than significant**.

2) **Less Than Significant Impact**

The Program Environmental Impact Report conducted for the *Merced Vision 2030 General Plan, the General Plan Program EIR* (SCH# 2008071069), has recognized that future development and build-out of the SUDP/SOI will result in cumulative and unavoidable impacts in the areas of Air Quality and Loss of Agricultural Soils. In conjunction with this conclusion, the City has adopted a Statement of Overriding Considerations for these impacts (Resolution #2011-63) which is herein incorporated by reference.

The certified General Plan EIR addressed and analyzed cumulative impacts resulting from changing agricultural use to urban uses. No new or unaddressed cumulative impacts will result from the Project that have not previously been considered by the certified General Plan EIR or by the Statement of Overriding Considerations, or mitigated by this Expanded Initial Study. This Initial Study does not disclose any new and/or feasible mitigation measures which would lessen the unavoidable and significant cumulative impacts.

The analysis of impacts associated with the project will contribute to the cumulative impacts identified in the General Plan EIR. The nature and extent of these impacts, however, falls within the parameters of impacts previously analyzed in the General Plan EIR. No individual or cumulative impacts will be created by the Project that have not previously been considered at the program level by the General Plan EIR or mitigated by this Initial Study.

3) **Less Than Significant Impact**

Development anticipated by the *Merced Vision 2030 General Plan* will have significant adverse effects on human beings. These include the incremental degradation of air quality in the San Joaquin Basin, the loss of prime agricultural soils, the incremental increase in traffic, and the increased demand on natural resources, public services, and facilities. However, consistent with the provisions of CEQA previously identified, the analysis of the Project is limited to those impacts which are peculiar to the Project site or which were not previously identified as significant effects in the prior EIR. The previously-certified General Plan EIR and the Statement of Overriding Considerations addressed those cumulative impacts; hence, there is no requirement to address them again as part of this Project.

This previous EIR has concluded that these significant adverse impacts are accounted for in the mitigation measures incorporated into the General Plan EIR. In addition, a Statement of Overriding Considerations has been adopted by City Council Resolution #2011-63 that indicates that the significant impacts associated with development of the Project are offset by the benefits that will be realized in providing necessary jobs for residents of the City. The analysis and mitigation of impacts has been detailed in the Environmental Impact Report prepared for the *Merced Vision 2030 General Plan*, which are incorporated into this document by reference.

While this issue was addressed and resolved with the General Plan EIR in an abundance of caution, in order to fulfill CEQA's mandate to fully disclose potential environmental consequences of projects, this analysis is considered herein. However, as a full disclosure document, this issue is repeated in abbreviated form for purposes of disclosure, even though it was resolved as a part of the General Plan.

Potential impacts associated with the Project's development have been described in this Initial Study. All impacts were determined to be no impact or less than significant.

R. Greenhouse Gas Emissions

SETTING AND DESCRIPTION

The issue of project-generated Greenhouse Gas (GHG) Emissions is a reflection of the larger concern of Global Climate Change. While GHG emissions can be evaluated on a project level, overall, the issue reflects a more regional or global concern. CEQA requires all projects to discuss a project's GHG contributions. However, from the standpoint of CEQA, GHG impacts on global climate change are inherently cumulative. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; however, it can safely be assumed that existing conditions do not measurably contribute to a noticeable incremental change in the global climate.

THRESHOLDS OF SIGNIFICANCE

The proposed project would result in a significant impact on the environment if it would:

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

A study on the impacts of greenhouses gases as a result of this project was prepared by BaseCamp Environmental (Attachment G). The information contained in this section is based on this study.

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

1) **Less Than Significant Impact**

Based on results from the CalEEMod run (see Appendix A of Attachment G), total construction GHG emissions (Phase 1 and Phase 2) from the proposed project would be approximately 233.77 metric tons CO_2e. Unmitigated (business-as-usual) operational GHG

emissions, mainly from vehicle use, are estimated to generate approximately 3,642.57 metric tons CO_2e annually. With incorporation of project features that would reduce GHG emissions, the total operational GHG emissions would be 2,354.89 metric tons CO2e annually. This would be a reduction of approximately 35.3% from unmitigated levels, which exceeds the reduction target set by the City of Merced. Based on this, project impacts related to GHG emissions are considered **less than significant**.

2) **Less Than Significant Impact**

As noted above, GHG emissions associated with the project would be reduced by an amount that would exceed the City's GHG reduction target. Because of this, the project would be consistent with the GHG reduction objectives of the City's Climate Action Plan (CAP). It is also consistent with the 29% GHG reduction target established by the SJVAPCD in its Climate Change Action Plan. Project impacts related to GHG reduction plans are considered **less than significant.**

S. Environmental Determination

On the basis of this initial environmental evaluation:

X I find that the project could have a significant effect on the environment, and that a MITIGATED NEGATIVE DECLARATION HAS BEEN PREPARED for public review.

May 14, 2018

Julie Nelson, Associate Planner

for

Scott McBride, Director of Development Services
Environmental Coordinator
City of Merced

Distributed for Public Review: May 17, 2018

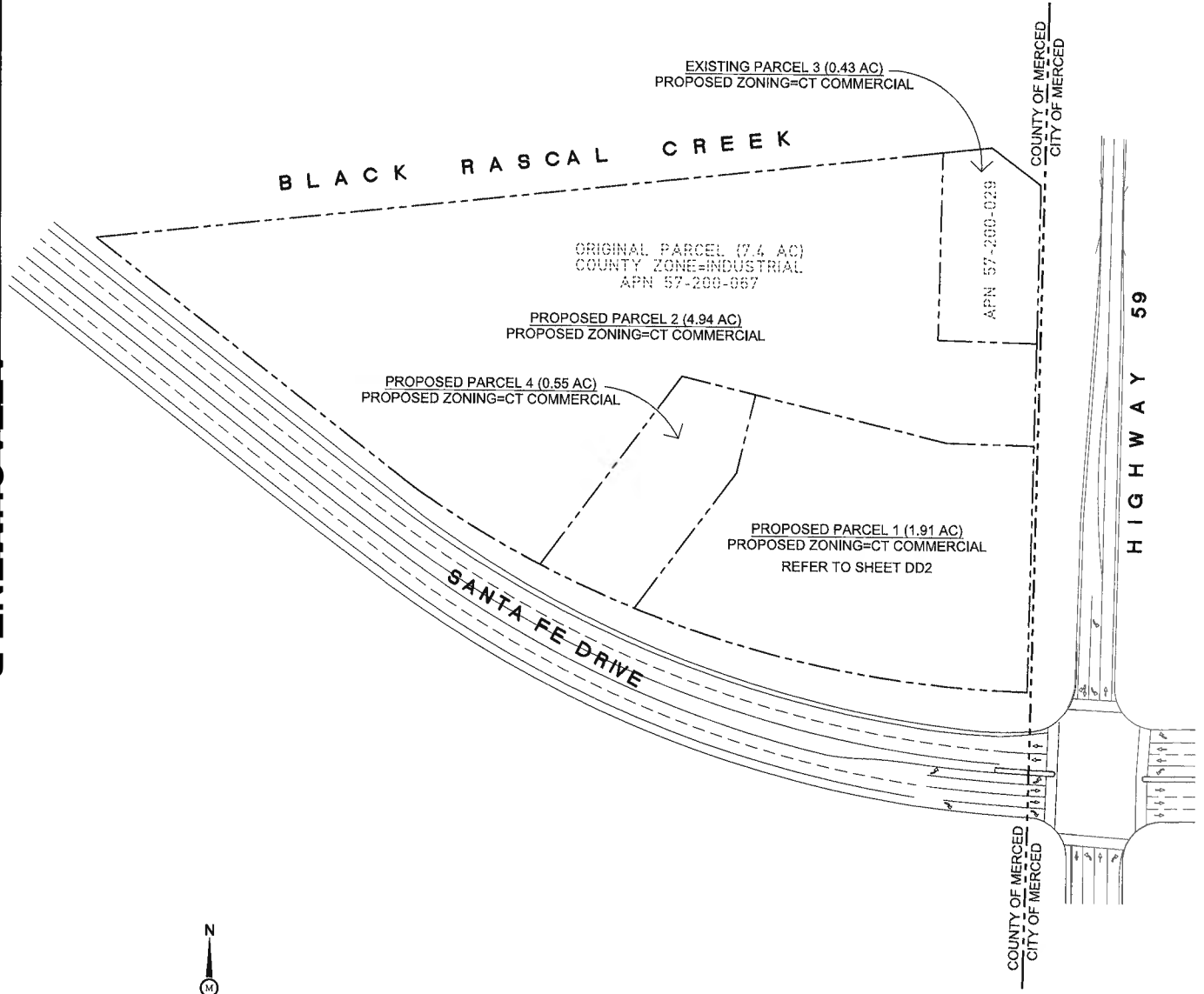
Attachments:

A) Location Map
B) Tentative Map
C) Site Plan
D) C-T Zoning
E) I-L Zone
F) Important Farmland Map
G) Air Quality/Greenhouse Gas Report

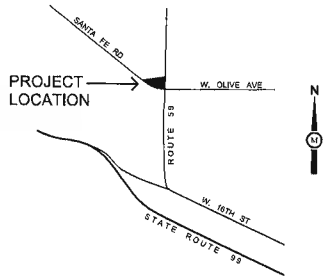
H) Biological Assessment
I) Airport Compatibility Zone Map
J) Flood Zone Map
K) Urban Level of Flood Protection Study
L) Traffic Study
M) Public Hearing Notice
N) Map of Notice Area


ATTACHMENT A
Black Rascal Creek
BLACK RASCAL BP
SANTA FE
SANTA FE
C-T
I-L
59
OLIVE
N
Legend
Proposed Annexation Boundary
railroad
City Limit
Proposed Zone
Throughfare Commercial (C-T)
Light Industrial (I-L)

ATTACHMENT B



PROPOSED TENTATIVE MAP
SCALE: 1" = 50'



VICINITY MAP
NOT TO SCALE

LOT DATA:

A.P.N.:	57-200-067 & 57-200-029
TOTAL ACREAGE:	341,075 SF (7.83 AC)
EXISTING PARCELS:	2
PROPOSED PARCELS:	4
EXISTING ZONE:	INDUSTRIAL (COUNTY)
PROPOSED ZONE:	C-T DISTRICT COMMERCIAL (CITY)
EXISTING USE:	VACANT
PROPOSED USE:	CONVENIENCE STORE, GASOLINE SALES, CARWASH, COFFEE DRIVE THRU, AND QUICK SERVE RESTAURANT (QSR) W/ DRIVE THRU

PARCEL	BLDG. SQ. FT.	ACREAGE
1	7,226	1.91
2	FUTURE DEVELOPMENT	4.94
3	FUTURE DEVELOPMENT	0.43
4	FUTURE DEVELOPMENT	0.55
TOTAL	7,226	7.83

PROPERTY DESCRIPTION
A PORTION OF LOT 96 AND A PORTION OF THE WEST 40 FEET OF THE 100 FOOT WIDE SOUTHERN PACIFIC RAILROAD-OAKDALE BRANCH RIGHT-OF-WAY (NOW ABANDONED) AS SHOWN ON THE MAP ENTITLED, MAP OF THE CROCKER COLONY, RECORDED IN VOLUME 5 OF OFFICIAL PLATS, PAGE 6, MERCED COUNTY RECORDS

SITE UTILITIES:	PROVIDED BY:
SEWAGE DISPOSAL:	CITY
WATER SUPPLY:	CITY
DRAINAGE:	CITY

APPLICANT
NORCAL CAJUN FOODS II, INC.
CONTACT: SANDY MANN
2190 MERIDIAN PARK BLVD, STE. G
CONCORD, CA 94520
PHONE: (925) 446-6806

DESIGN FIRM
MILESTONE ASSOCIATES
CONTACT: JULIO TINAJERO
1000 LINCOLN ROAD, STE. H202
YUBA CITY, CA 95991
PHONE: (530) 755-4700

CLIENT:
NORCAL CAJUN FOODS, INC.
2190 MERIDIAN PARK BLVD, SUITE G
CONCORD, CA 94520
CONTACT: SURINA MANN
PHONE: (925) 446-6806

ARCO
BP WEST COAST PRODUCTS, LLC

Milestone Associates

NO.	DATE	REVISION DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
SEAL		

DEVELOPMENT INFORMATION:
ARCO NTI
3800 AM/PM
PROTOTYPE

SITE ADDRESS:
SANTA FE DRIVE
HIGHWAY 59
MERCED, CA

FACILITY # TBD

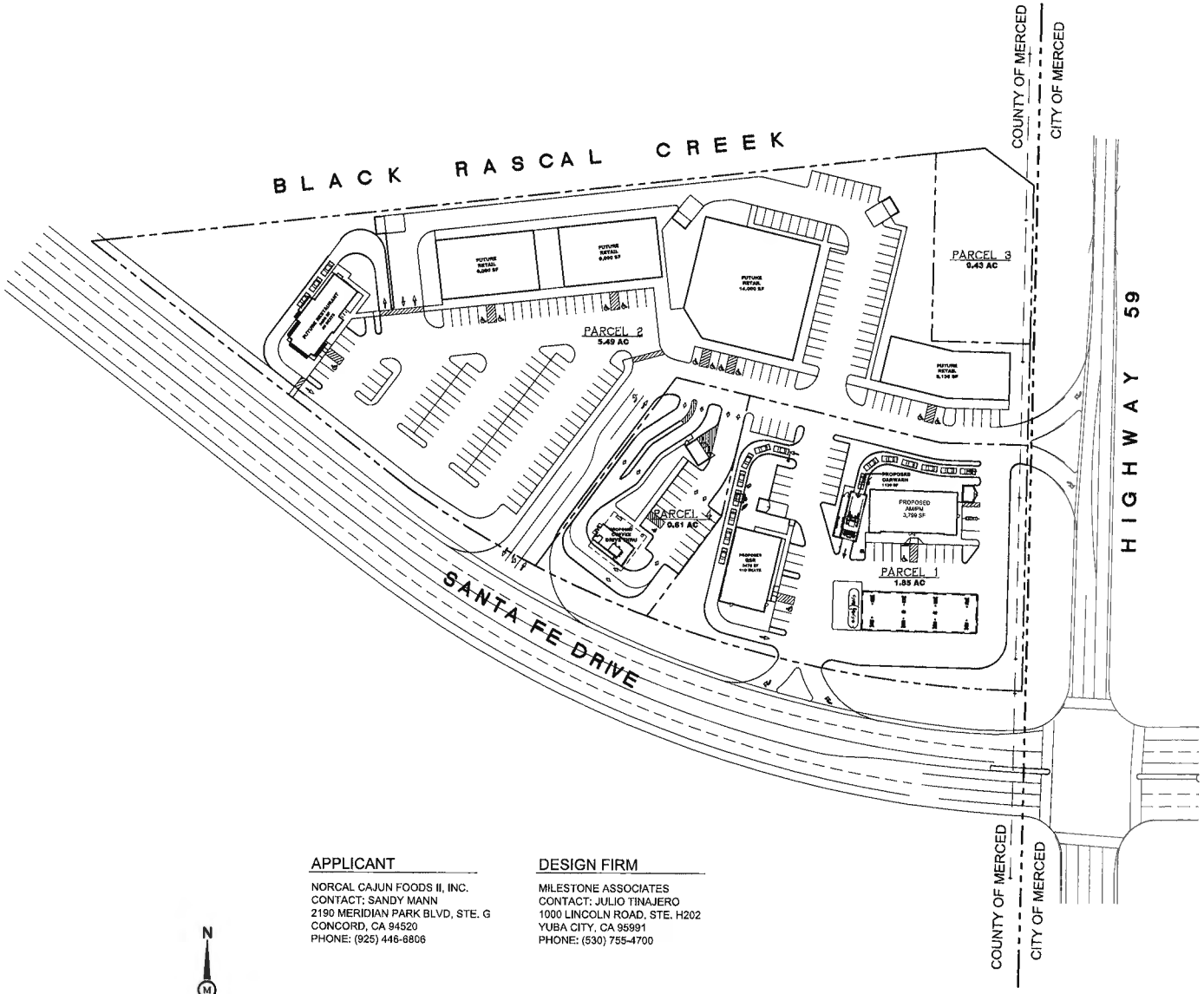
DESIGNED BY:	ARCO
CHECKED BY:	JT
DRAWN BY:	STAFF
REVISION: 07-07-16	PROJECT NO.: 15-916

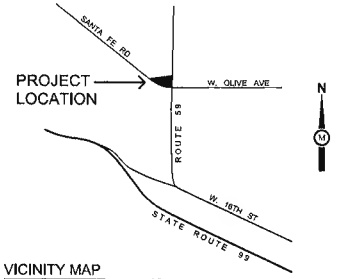
DRAWING TITLE:
TENTATIVE MAP

SHEET NO:
TM

SUBMITTAL DATE: 1-19-16

ATTACHMENT C





VICINITY MAP
NOT TO SCALE

LOT DATA:

A.P.N.:	57-200-067 & 57-200-029
TOTAL ACREAGE:	341,075 SF (7.83 AC)
EXISTING PARCELS:	2
PROPOSED PARCELS:	4
EXISTING ZONE:	INDUSTRIAL (COUNTY)
PROPOSED ZONE:	C-T DISTRICT COMMERCIAL (CITY)
EXISTING USE:	VACANT
PROPOSED USE:	CONVENIENCE STORE, FUEL SALES, CARWASH, QUICK SERVE RESTAURANT, WITH DRIVE THRU (QSR), AND COFFEE DRIVE THRU

PARCEL	BLDG. SQ. FT.	ACREAGE
1	FUEL / QSR	1.85
2	FUTURE DEVELOPMENT	4.94
3	FUTURE DEVELOPMENT	0.43
4	FUTURE DEVELOPMENT	0.61
TOTAL	7,275	7.83

PARCEL 1 PARKING DATA:

REQUIRED:	
C-STORE (3799/250 SF):	15 SPACES
QSR (110 SEATS/2.5):	44 SPACES
CARWASH	2 SPACES
REQUIRED:	61 SPACES
PROVIDED:	
STANDARD SPACE (9'x20')	35 SPACES
SPACES AT FUEL PUMPS	16 SPACES
RECIPROCAL SPACES	8 SPACES
ACCESSIBLE SPACE (9'x20')	2 SPACES
PROVIDED:	61 SPACES

PROPERTY DESCRIPTION

A PORTION OF LOT 96 AND A PORTION OF THE WEST 40 FEET OF THE 100 FOOT WIDE SOUTHERN PACIFIC RAILROAD-OAKDALE BRANCH RIGHT-OF-WAY (NOW ABANDONED) AS SHOWN ON THE MAP ENTITLED, MAP OF THE CROCKER COLONY, RECORDED IN VOLUME 5 OF OFFICIAL PLATS, PAGE 6, MERCED COUNTY RECORDS

SITE UTILITIES:	PROVIDED BY:
SEWAGE DISPOSAL:	CITY
WATER SUPPLY:	CITY
DRAINAGE:	CITY

APPLICANT

NORCAL CAJUN FOODS II, INC.
CONTACT: SANDY MANN
2190 MERIDIAN PARK BLVD, STE. G
CONCORD, CA 94520
PHONE: (925) 446-6806

DESIGN FIRM

MILESTONE ASSOCIATES
CONTACT: JULIO TINAJERO
1000 LINCOLN ROAD, STE. H202
YUBA CITY, CA 95991
PHONE: (530) 755-4700

N

SCALE 1" = 50'
0 50 100

OVERALL PROJECT SITE
SCALE: 1" = 50'

CLIENT:
NORCAL CAJUN FOODS, INC.
2190 MERIDIAN PARK BLVD, SUITE G
CONCORD, CA 94520
CONTACT: SURINA MANN
PHONE: (925) 446-6806

ARCO
BP WEST COAST PRODUCTS, LLC

Milestone Associates

NO.	DATE	REVISION DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

SEAL:

DEVELOPMENT INFORMATION:
ARCO NTI
3800 AM/PM
PROTOTYPE

SITE ADDRESS:
SANTA FE DRIVE
HIGHWAY 59
MERCED, CA

FACILITY # TBD

DESIGNED BY:	ARCO
DRAWN BY:	JT
CHECKED BY:	STAFF
VERSION:	PROJECT NO.
07-07-16	15-916

DRAWING TITLE:
OVERALL SITE PLAN

SHEET NO.
DD1

SUBMITTAL DATE: 1-19-18

REVISED 11/6/18
REVISED 12/6/18

Chapter 20.10 - COMMERCIAL ZONING DISTRICTS

Sections:

20.10.010 Purpose of the Commercial Zoning Districts

20.10.020 Land Use Regulations for Commercial Zoning Districts

20.10.030 Development Standards and Guidelines for Commercial Zoning Districts

20.10.010 Purpose of the Commercial Zoning Districts

A. Neighborhood Commercial (C-N). The C-N zoning district provides areas for shopping centers and other commercial uses that serve the day-to-day needs of residential neighborhoods. The C-N districts shall have a minimum area of three acres and shall be located only where analysis of the residential population demonstrates that the facilities are justified.

B. Shopping Center Commercial (C-SC). The C-SC zoning district provides areas for grocery stores, supermarkets, and other retail establishments selling groceries to serve local residents as well as the larger regional market. The C-SC districts shall have a minimum area of five acres.

C. Regional/Central Commercial (C-C). The C-C zoning district provides areas for a diversity of commercial and residential land uses in the central business district and regional centers. These uses help to support a vibrant retail destination, provide jobs for residents, and accommodate commercial and service uses to meet the needs of community and regional businesses and residents.

D. Office Commercial (C-O). The C-O zoning district provides a location for a broad range of office uses including professional offices, business offices, medical offices, and regional or "back" offices. The C-O zoning district can also accommodate limited "accessory" restaurant, retail, and service uses that cater to the needs of on-site employees and visitors.

E. Thoroughfare Commercial (C-T). The C-T zoning district provides areas for auto-oriented commercial uses that accommodate the needs of people traveling on highways and local motorists. The C-T zoning district also accommodates large recreational facilities and heavy commercial uses that benefit from proximity to the highway.

F. General Commercial (C-G). The C-G zoning district provides areas for heavy commercial and light industrial uses that may impact neighboring uses and often require large parcels and benefit from separation from retail uses. The C-G districts are to be established in areas of four acres or larger.

G. Business Park (B-P). The B-P zoning district provides a location for employment-intensive uses within an attractive campus-like setting. The B-P zoning district shall primarily allow "back" offices, research and development businesses but also limited commercial retail uses to serve employees in the area. The B-P zoning district shall have a minimum area of five acres.

20.10.020 Land Use Regulations for Commercial Zoning Districts

A. Permitted Uses. Table 20.10-1 identifies land uses permitted in commercial zoning districts.

TABLE 20.10-1 PERMITTED LAND USES IN THE COMMERCIAL ZONING DISTRICTS

Key	Zoning District [1]							
P Permitted Use **M** Minor Use Permit Required **SP** Site Plan Review Permit Required **C** Conditional Use Permit Required **X** Use Not Allowed	**C-O**	**C-N**	**C-C**	**C-SC**	**C-T**	**C-G**	**B-P**	**Additional Regulations**
RESIDENTIAL USES								
Group/Transitional/Supportive Housing	X	X	P [3]	X	X	X	X	
Live/Work Units	C	C	P [2]	X	X	X	X	Sec. 20.44.080
Multiple-Family Dwellings	C	C	P	X	X	X	X	
Residential Care Facilities, Small *(6 or Less)*	X	X	P [3]	X	X	X	X	
Residential Care Facilities, Large *(More than 6 residents)*	X	X	P [3]	X	X	X	X	
Single-Room Occupancy	X	X	P [3]	X	X	X	X	Sec. 20.44.120
COMMUNITY USES								
Community Assembly	C	C	C	X	C	C	C	
Community Garden	SP	SP	SP	X	X	SP	X	
Colleges and Trade Schools	C	C	C	X	X	C	C	
Convalescent or Nursing Homes	C	C	C	X	X	X	X	
Cultural Institutions	C	C	C	X	C	C	C	
Day Care Centers (Children & Adults)	M	M	M	X	X	X	SP	
Emergency Shelters	X	X	C	X	C	P	X	Sec.20.44.150
Government Offices	P	P	P	X	C	C	C	
Hospitals and Surgery Centers	C	C	C	X	X	X	C	
Instructional Services	P	P	P	X	X	X	SP	
Medical Offices and Clinics	P	P	P	X	X	X	C	
Parks and Recreational Facilities	C	C	C	X	X	X	C	
Public Safety Facilities	SP	SP	P	C	SP	SP	SP	
Rehabilitation Centers	P	P [6]	P[10]	X	X	C	C	
Social Assistance Services	C	C	C	X	SP	P	X	

Key	Zoning District [1]							
P Permitted Use **M** Minor Use Permit Required **SP** Site Plan Review Permit Required **C** Conditional Use Permit Required **X** Use Not Allowed	C-O	C-N	C-C	C-SC	C-T	C-G	B-P	Additional Regulations
COMMERCIAL USES								
Alcoholic Beverage Sales [7]	X	P [7][8]	P [7]	C [7][8]	P [7]	P [7]	SP [7]	Sec.20.44.010
Bail Bond Businesses	C	X	C [10]	X	C	C	C	
Bars and Nightclubs	X	C	C	X	C	C	C	
Banks, Retail	P	P	P	P [9]	SP	SP	SP	
Bed and Breakfast	X	X	C	X	C	C	X	Sec.20.44.030
Building Supplies/Home Improvement	X	X	C	X	SP	P	SP	
Business Support Services	X	C	M	X	P	P	SP	
Cardrooms [5]	X	X	C [5]	X	C [5]	C [5]	X	Chapter 9.08
Cemeteries and Mausoleums	X	X	C	X	C	P	X	
Check Cashing/Payday Loan Establishments	C	X	C [10]	X	C	C	C	Sec.20.44.040
Commercial Recreation, Indoor (Except Below)	X	SP	SP	X	P	SP	C	
Multi-Screen (6 or More) Movie Theaters	X	C	P	X	C	X	C	
Commercial Recreation, Outdoor	X	X	X	X	P	C	C	
Drive-Through and Drive-Up Sales	C	C	SP	X	P	P	SP	
Equipment Sales and Rental	X	X	X	X	P	P	SP	
Farmer's Market	C	SP	SP	SP	SP	SP	SP	Sec.20.50.030B
Flea Market	X	X	X	X	C	C	C	
Funeral Parlors and Mortuaries	C	C	C	X	C	P	C	
Gas and Service Stations/Car Washes	X	C	SP	C [9]	P	P	SP	Sec.20.44.070
Hotels and Motels	X	X	P	X	P	C	C	
Hookah Lounges	X	C	C	X	C	C	C	
Kennels	X	X	X	X	C	P	C	
Maintenance and Repair Services	X	X	X	X	P	P	SP	
Massage Establishments	C [16]	C [16]	C [16]	X	C [16]	C [16]	X	Chapter 5.44
Massage Therapy—Sole Practitioner	P[17]	P[17]	P[17]	X	C [16]	C [16]	X	Chapter 5.44
Medical Marijuana Dispensaries	C [19]	X	X	X	X	X	X	Sec. 20.44.170
Mobile Food Vendors	C	C	C [10]	X	SP [11]	SP	C	Sec. 5.54 & 20.44.020
Mobile Home Sales	X	X	X	X	P	P	SP	
Office, Professional	P	P	P	C [9]	SP	SP	SP	

Key	Zoning District [1]							
P Permitted Use **M** Minor Use Permit Required **SP** Site Plan Review Permit Required **C** Conditional Use Permit Required **X** Use Not Allowed	C-O	C-N	C-C	C-SC	C-T	C-G	B-P	Additional Regulations
COMMERCIAL USES (Continued)								
Pawn Shops	X	X	C [10]	X	X	P	X	
Personal Services	SP	P	P	P [9]	SP	SP	SP [12]	
Retail, General	SP[12]	P	P	P [9]	P	SP	SP	
Restaurants	C [13]	P [8]	P	C [9]	P	M	SP [12] [13]	
Tattoo Parlors	X	SP	M	X	M	M	SP	
Tobacco Retailers [18]	X	P [18]	P [18]	P [18]	P [18]	P [18]	SP[18]	Sec.20.44.160
Vehicle Parts and Accessories Sales	X	P	P	X	P	P	SP	
Vehicle Rentals	X	X	M	X	P	P	SP	
Vehicle Repair and Maintenance, Major	X	X	X	X	C	P	C	
Vehicle Repair and Maintenance, Minor	X	SP	P	X	P	P	C	
Vehicle Sales	X	X	P [10] [14]	X	P	P	C	
INDUSTRIAL USES								
Manufacturing and Processing, General	X	X	X	X	X	M	C	
Manufacturing and Processing, Light	X	X	X	X	X	P	SP	
Research and Development	C	X	C	X	SP	SP	P	
Warehousing, Wholesaling, and Distribution	X	X	SP[15]	X	P	P	SP	
Wrecking & Salvage Establishments	X	X	X	X	C	C	X	Sec.20.44.140
TRANSPORTATION, COMMUNICATION, AND UTILITY USES								
Airports	X	X	X	X	C	C	C	
Freight Terminals	X	X	X	X	C	C	C	
Heliports	C	X	C	X	C	C	C	
Parking Facilities	P	P	P	P[9]	P	P	P	
Public/Mini Storage	X	X	X	X	M	M	SP	
Recycling Collection Facilities								Sec.20.44.090
Reverse Vending Machines	P	P	P	M[9]	P	P	P	
Small Collection Facilities	SP	SP	SP	SP[9]	SP	SP	SP	
Large Collection Facilities	X	X	X	X	C	C	C	
Utilities, Major	C	C	C	X	C	C	C	
Utilities, Minor	P	P	P	P[9]	P	P	P	
Wireless Communications Facilities	**See Chapter 20.58**							

Notes:

[1] A Site Plan Review Permit may be required per Chapter 20.32 (Interface Regulations) regardless of the uses shown in Table 20.10-1.

[2] Residential use on the ground floor is prohibited unless it is located on the back of the property where it is not visible or approved with a Conditional Use Permit.

[3] Prohibited as a single use. Permitted as part of a residential mixed-use project.

[4] Use shall not exceed 20,000 square feet.

[5] 24 hour operations limited to C-T and C-C zones per Chapter 9.08 (Gaming).

[6] Rehabilitation centers for drug, methadone, and alcohol are prohibited.

[7] A Conditional Use Permit is required for establishments smaller than 20,000 square feet.

[8] A Conditional Use Permit is required for alcoholic beverage sales for on-site consumption.

[9] Permitted only as part of a shopping center or other retail establishment with a minimum of 5,000 square feet of floor area devoted to the sale of groceries.

[10] Prohibited in the City Center area between 19th and 16th Streets and O Street and Martin Luther King, Jr. Way, including properties fronting on either side of each of the above streets, except vehicle sales showrooms can be allowed.



[11] Includes refreshment stands.

[12] Permitted only as an ancillary use to serve employees, not to occupy more than 5,000 square feet.

[13] Conditional Use Permit required unless the use is ancillary to a principal permitted use. For restaurants, Conditional Use Permit is required unless the uses are conducted in and entered from within the building with no outside advertising.

[14] A Site Plan Review Permit is required for used vehicle sales.

[15] Temporary warehousing and storage only is allowed per the requirements of Section 20.10.030(D).

[16] Provided that a massage establishment permit has not been revoked at that location within 12 months of the application for a conditional use permit and a massage establishment permit is obtained pursuant to Chapter 5.44.

[17] Must have valid certificate from State of California as a massage therapist or massage practitioner pursuant to the Massage Therapy Act (Business and Professions Code Section 4600 *et seq.)*.

[18] Prohibited within 1,000 feet of schools and other uses per Sec. 20.44.160, unless building over 20,000 square feet.

[19] Limited to no more than 4 dispensaries. Prohibited within 600 feet of schools; 500 feet of public parks, playgrounds, and sports fields; and 500 feet of youth centers, City-owned and operated recreational center, or public library. See Section 20.44.170 for details.

20.10.030 Development Standards and Guidelines for Commercial Zoning Districts

A. General Standards. Table 20.10-2 identifies development standards that apply to all parcels and structures located in commercial zoning districts. See Figure 20.10-1.

B. Outdoor Operation of Uses.

1. The outdoor operation of a land use in the C-C and C-N zoning districts shall require approval of a Site Plan Review Permit. Outdoor dining in accordance

Chapter 20.12 - INDUSTRIAL ZONING DISTRICTS

Sections:	
20.12.010	Purpose of the Industrial Zoning Districts
20.12.020	Land Use Regulations for Industrial Zoning Districts
20.12.030	Development Standards for Industrial Zoning Districts

20.12.010 Purpose of the Industrial Zoning Districts

A. Light Industrial (I-L). The I-L zoning district provides areas for manufacturing, wholesale, and storage activities that meet City standards to ensure compatibility with surrounding areas and that maintain and strengthen the economic base of the City. I-L districts shall have a minimum size of 5 acres.

B. Heavy Industrial (I-H). The I-H zoning district provides areas for a full range of industrial land uses, including operations that necessitate the storage of hazardous or unsightly materials, and encourages sound industrial development by providing and protecting an environment exclusively to insure the protection of surrounding areas. I-H districts shall have a minimum size of 10 acres.

20.12.020 Land Use Regulations for Industrial Zoning Districts

A. Permitted Uses. Table 20.12-1 identifies land uses permitted in industrial zoning districts.

TABLE 20.12-1 PERMITTED LAND USES IN THE INDUSTRIAL ZONING DISTRICTS

Key	Zoning District [1]		
P Permitted Use M Minor Use Permit Required SP Site Plan Review Permit Required C Conditional Use Permit Required X Use Not Allowed	I-L	I-H	Additional Regulations
RESIDENTIAL USES			
Caretaker's Home	SP	X	
COMMUNITY USES			
Colleges and Trade Schools	C	X	
Instructional Services	C [2]	X	
Public Safety Facilities	SP	C	

Key	Zoning District [1]		
P Permitted Use **M** Minor Use Permit Required **SP** Site Plan Review Permit Required **C** Conditional Use Permit Required **X** Use Not Allowed	**I-L**	**I-H**	**Additional Regulations**
COMMERCIAL USES			
Adult Entertainment Businesses	**SP**	**SP**	Chapters 5.58 and 20.60
Building Supplies/Home Improvement Stores	**SP**	**X**	
Business Support Services	**SP**	**X**	
Commercial Cannabis Businesses	Refer to Table 20.44-1 in Section 20.44.170		
Equipment Sales and Rental	**SP**	**X**	
Gas and Service Stations/Car Washes	**SP [5]**	**SP [5]**	Section 20.44.070
Horticultural Nurseries, Retail	**C**	**X**	
Horticultural Nurseries, Wholesale	**SP**	**X**	
Mobile Food Vendors	**C**	**C**	Chapter 5.54 & 20.44.020
Restaurants	**C [4]**	**C [4]**	
Retail (Products Manufactured On-site Only)	**SP [3]**	**SP [3]**	
Vehicle Repair and Maintenance	**SP [5]**	**SP [5]**	
INDUSTRIAL USES			
Construction and Material Yards	**SP**	**SP**	
Manufacturing and Processing, Light	**SP**	**SP**	
Manufacturing and Processing, General	**SP**	**SP**	
Manufacturing and Processing, Heavy	**X**	**SP [6]**	Section 20.12.020.B
Research and Development	**SP**	**SP**	
Wrecking and Salvage Establishments	**X**	**C**	Section 20.44.140
TRANSPORTATION, COMMUNICATION, AND UTILITY USES			
Freight Terminals	**X**	**SP**	
Public/Mini Storage	**SP**	**X**	
Recycling Collection Facilities, Small	**SP**	**X**	Section 20.44.090
Recycling Collection Facilities, Large	**SP**	**SP**	Section 20.44.090
Recycling Processing Facilities	**SP**	**SP**	Section 20.44.090
Utilities, Major	**C**	**SP**	
Utilities, Minor	**SP**	**SP**	
Warehousing, Wholesaling and Distribution	**SP**	**SP**	
Wireless Communications Facilities	See Chapter 20.58		

Notes:

[1] A Site Plan Review Permit may be required per Chapter 20.32 (Interface Regulations) regardless of the uses shown in Table 20.12-1.

[2] Limited to fitness, gymnastics, and other similar recreational sports and health facilities.

[3] Permitted only as an ancillary showroom use for goods manufactured onsite, not to occupy more than 10 percent of the total building floor area unless a Site Plan Review Permit is obtained for additional floor area.

[4] May be permitted only as an ancillary use to serve employees, not to occupy more than 2,500 square feet with no outside advertising, unless a Conditional Use Permit is obtained.

[5] Limited to fleet operations only.

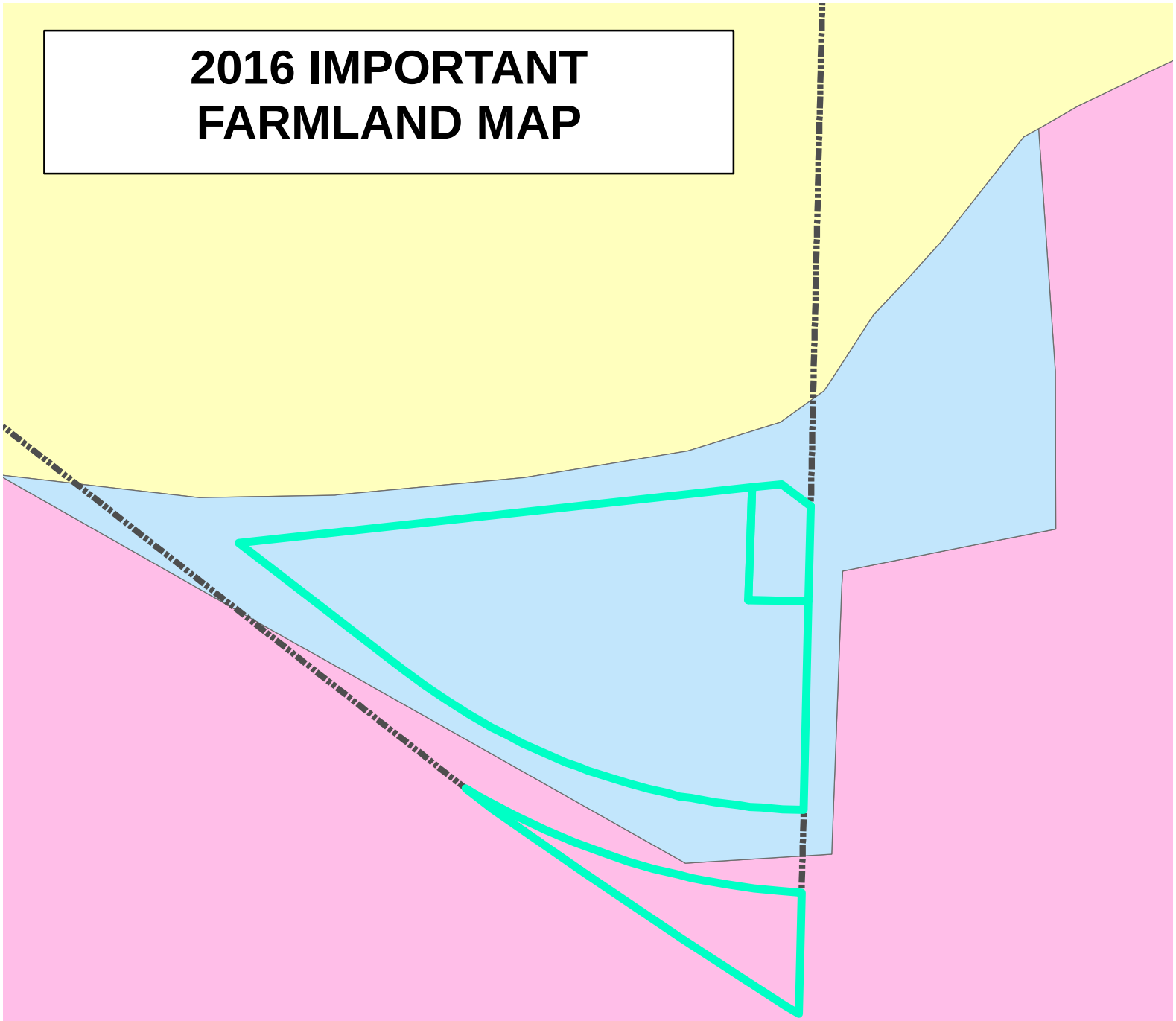
[6] All manufacturing of materials listed in the Section 20.12.020.B is prohibited unless the Planning Commission determines otherwise through a Conditional Use Permit.

B. Prohibited Uses. The manufacturing of the following materials are prohibited unless the Planning Commission determines otherwise through a Conditional Use Permit process.



1. Asphalt, cement, charcoal, and fuel briquettes.
2. Aniline dyes, ammonia, carbide, caustic soda, cellulose, chlorine, carbon black and bone black, creosote, hydrogen and oxygen, industrial alcohol, nitrates of an explosive nature, potash, pyroxylin, rayon yarn, and hydrochloric, nitric phosphoric, picric, and sulphuric acids.
3. Coal, coke, and tar products, including use in other manufacturing; explosives, fertilizers, gelatin, animal glue, and size.
4. Turpentine, matches, and other than water-based paint.
5. Rubber and soaps, including fat rendering.
6. Flour mill.
7. Processing of nitrating of cotton or other materials; magnesium foundry; reduction, refining, smelting and alloying of metal or metal ores; refining petroleum products, such as gasoline, kerosene, naphtha, lubricating oil, distillation of wood or bones; storage, curing or tanning of raw, green or salted hides or skins.
8. Stockyards or slaughterhouses, except for poultry, animal feed or sales yard, fertilizer yard; slag piles.
9. Storage of fireworks or explosives, except where incidental to a permitted use.
10. Any other use which is determined by the Planning Commission to be of the same general character as the above uses.

2016 IMPORTANT FARMLAND MAP



Legend

- Annexation Area
- City Limit
- FARMLAND OF LOCAL IMPORTANCE
- URBAN AND BUILT-UP LAND
- VACANT OR DISTURBED LAND

N

0 62.5 125 250 375 500 Feet

ATTACHMENT F

AIR QUALITY/GREENHOUSE GAS REPORT

FOR

ANNEXATION/PRE-ZONE #15-01, NORTH HIGHWAY 59 AND SANTA FE

Merced, CA

July 18, 2017

Prepared for:

59 Petroleum, Inc.
Attn: Surina Mann
2190 Meridian Park Blvd., Suite G
Concord, CA 94520

Prepared by:

BaseCamp Environmental
115 S. School Street, Suite 14
Lodi, CA 95240
209-224-8213

BaseCamp Environmental

ATTACHMENT G

1.0 INTRODUCTION

1.1 Report Summary

This report contains an analysis of the air quality and greenhouse gas (GHG) emission impacts of the proposed Annexation/Pre-Zone #15-01, North Highway 59 and Santa Fe Project (project). The project proposes to annex 8.83 acres into the City of Merced and subsequently develop the site for commercial uses. The development would occur in two phases. The first phase would consist of an ARCO AM/PM gasoline station and convenience store with an automated car wash, and a quick-serve restaurant. The second phase would consist of additional retail buildings and another quick-serve restaurant. Figures 1 and 2 show the location of the project site, and Figure 3 depicts the site plan for the project at buildout.

An analysis of the air quality and GHG impacts of the project was conducted using the CalEEMod computer model and comparing model results with impact significance thresholds established by the City of Merced, the San Joaquin Valley Air Pollution Control District (SJVAPCD), and the State CEQA Guidelines. The results of the analysis indicated that the project would have no significant impacts on air quality at buildout. The project would have no significant impact relative to GHG emissions and their impacts on global climate change.

1.2 Project Description

The project site is located northwest of the intersection of SR 59 and West Olive Avenue/Santa Fe Avenue in western Merced. The site is on a property that is currently in Merced County but is proposed for annexation by the City of Merced. This property consists of three parcels totaling 8.83 acres. Only one of the parcels, totaling 7.4 acres, would be used for the project. This 7.4-acre parcel is proposed to be subdivided into two parcels - one approximately 1.91 acres in size, and the other 5.49 acres. The parcels are currently zoned by Merced County as M-1, Light Manufacturing. Upon annexation, the City would zone the parcels as Thoroughfare Commercial (C-T). The City of Merced General Plan has designated the project site as General Commercial. The project site is located north of an industrial park and northwest of a shopping center with a Walmart. Residential land uses are located nearby and to the east.

The project proposes two phases of development. Phase 1 of the project proposes to construct a commercial development on the proposed 1.91-acre parcel, located adjacent to the intersection. The Phase 1 development would consist of two buildings totaling 7,333 square feet in floor area. One building, approximately 3,764 square feet in floor area, would accommodate an ARCO AM/PM gasoline station and convenience store with an automated car wash. The gasoline station would have eight pumps with two fueling positions each, for a total of 16 fueling positions. The pumps would be sheltered beneath a canopy installed south of the convenience store building. The car wash, approximately 1,130 square feet in surface area, would be installed adjacent to the convenience store building, and a drive-through lane would direct cars to the car wash. The other building, approximately 3,462 square feet in floor area, would accommodate a quick-serve restaurant with drive-through service. The restaurant would have 110 seats in its indoor dining area.

Phase 2 of the project proposes to construct 34,833 square feet of retail commercial space on the proposed 5.49-acre parcel adjacent to and northwest of the Phase 1 development site. No specific tenants have been identified for this space to date. For illustrative purposes, the project site plan shows 32,138 square feet of general retail space and a 2,695-square-foot quick-serve restaurant with a drive-through that would have 60 seats indoors. The proposed Thoroughfare Commercial zone allows the following as permitted uses on these parcels (for a complete list, please refer to the Merced Zoning Ordinance Table 20.10-1):

- Retail, General (i.e., drug stores, general merchandise stores, pet stores, department stores, etc.)
- Business Support Services
- Indoor Commercial Recreation, except multi-screen (6 or more) movie theaters
- Outdoor Commercial Recreation
- Drive-Through and Drive-Up Sales
- Equipment Sales and Rental
- Gas Station/Car Wash
- Hotel/Motel
- Maintenance and Repair Services
- Mobile Home Sales
- Restaurants
- Vehicle Parts and Accessories Sales
- Vehicle Rentals
- Minor Vehicle Repair and Maintenance
- Vehicle Sales
- Warehousing, Wholesaling, and Distribution

For the purposes of this report, the 32,138 square feet of Phase 2 commercial space will be analyzed as general retail. The proposed restaurant space will be analyzed as a quick-serve restaurant. Both types of land uses are consistent with the proposed Thoroughfare Commercial zoning designation. The proposed Phase 1 land uses also are consistent with the Thoroughfare Commercial designation.

The proposed development would have three access points. The primary entrance/exit for the Phase 1 development would be a right-in/right-out driveway on Santa Fe Drive approximately 200 feet west of the intersection. An additional right-in/right-out driveway is proposed along SR 59 approximately 230 feet north of the intersection. Access to Phase 2 development would involve the installation of a full-access driveway on Santa Fe Drive, approximately 475 feet west of the intersection. Vehicle and pedestrian circulation would be provided on-site by using striped drive aisles, parking stalls, and pedestrian walkways. Parking spaces would be installed for both Phase 1 and Phase 2 land uses as development occurs, in accordance with City of Merced parking requirements.

1.3 Approach to the Project Analysis

The project's potential environmental effects on air quality and GHG emissions are evaluated in Chapter 2.0. The evaluation is based on environmental impact considerations included in the Air Quality and Greenhouse Gas Emissions sections of the Environmental Checklist in CEQA Guidelines Appendix G. For each question, Chapter 2.0 determines whether the project would involve: 1) a Potentially Significant Impact, 2) a Less Than Significant Impact With Mitigation Incorporated, 3) a Less Than Significant Impact, or 4) No Impact., defined as follows:

A Potentially Significant Impact occurs when there is substantial evidence that the project would involve a substantial adverse change to the physical environment, i.e., that the environmental effect may be significant, and mitigation measures have not been defined that would reduce the impact to a less than significant level. If there are one or more Potentially Significant Impact entries in the Initial Study, an EIR is required.

An environmental effect that is Less Than Significant With Mitigation Incorporated is a Potentially Significant Impact that can be avoided or reduced to a level that is less than significant with the application of mitigation measures.

A Less Than Significant Impact occurs when the project would involve effects on a particular resource, but the project would not involve a substantial adverse change to the physical environment, and no mitigation measures are required.

A determination of No Impact is self-explanatory.

An environmental evaluation ordinarily would prescribe mitigation measures for any potentially significant environmental effects of the project. Mitigating requirements that are established in law, regulation, and practice are taken into consideration in the analysis.



BaseCamp Environmental

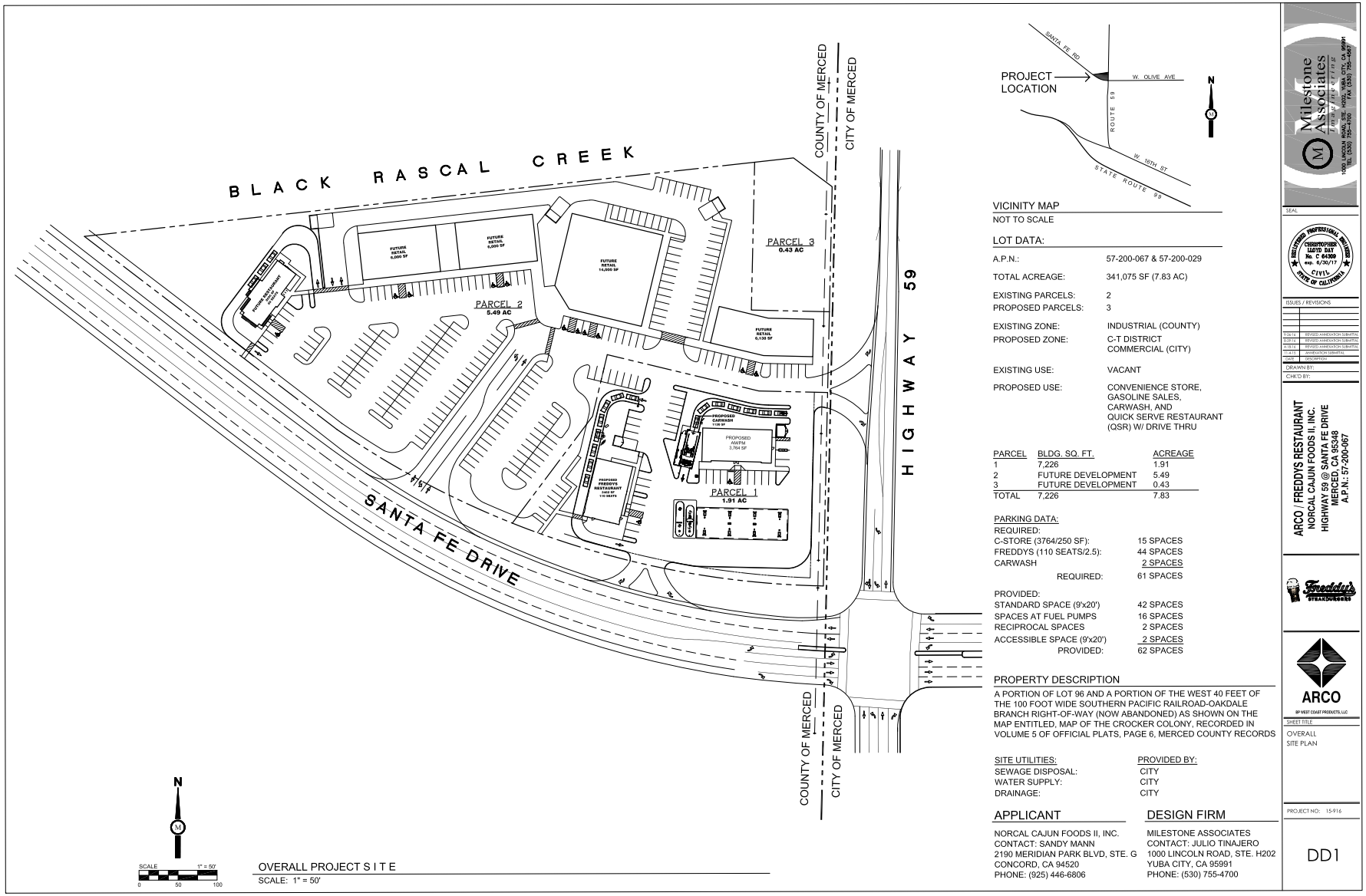
Figure 1
REGIONAL MAP



SOURCE: Google Maps

BaseCamp Environmental

Figure 2
VICINITY MAP



VICINITY MAP
NOT TO SCALE

LOT DATA:

A.P.N.:	57-200-067 & 57-200-029
TOTAL ACREAGE:	341,075 SF (7.83 AC)
EXISTING PARCELS:	2
PROPOSED PARCELS:	3
EXISTING ZONE:	INDUSTRIAL (COUNTY)
PROPOSED ZONE:	C-T DISTRICT COMMERCIAL (CITY)
EXISTING USE:	VACANT
PROPOSED USE:	CONVENIENCE STORE, GASOLINE SALES, CARWASH, AND QUICK SERVE RESTAURANT (QSR) W/ DRIVE THRU

PARCEL	BLDG. SQ. FT.	ACREAGE
1	7,226	1.91
2	FUTURE DEVELOPMENT	5.49
3	FUTURE DEVELOPMENT	0.43
TOTAL	7,226	7.83

PARKING DATA:

REQUIRED:	
C-STORE (3764/250 SF):	15 SPACES
FREDDYS (110 SEATS/2.5):	44 SPACES
CARWASH	2 SPACES
REQUIRED:	61 SPACES
PROVIDED:	
STANDARD SPACE (9'x20')	42 SPACES
SPACES AT FUEL PUMPS	16 SPACES
RECIPROCAL SPACES	2 SPACES
ACCESSIBLE SPACE (9'x20')	2 SPACES
PROVIDED:	62 SPACES

PROPERTY DESCRIPTION

A PORTION OF LOT 96 AND A PORTION OF THE WEST 40 FEET OF THE 100 FOOT WIDE SOUTHERN PACIFIC RAILROAD-OAKDALE BRANCH RIGHT-OF-WAY (NOW ABANDONED) AS SHOWN ON THE MAP ENTITLED, MAP OF THE CROCKER COLONY, RECORDED IN VOLUME 5 OF OFFICIAL PLATS, PAGE 6, MERCED COUNTY RECORDS

SITE UTILITIES:	PROVIDED BY:
SEWAGE DISPOSAL:	CITY
WATER SUPPLY:	CITY
DRAINAGE:	CITY

APPLICANT

NORCAL CAJUN FOODS II, INC.
CONTACT: SANDY MANN
2190 MERIDIAN PARK BLVD, STE. G
CONCORD, CA 94520
PHONE: (925) 446-6806

DESIGN FIRM

MILESTONE ASSOCIATES
CONTACT: JULIO TINAJERO
1000 LINCOLN ROAD, STE. H202
YUBA CITY, CA 95991
PHONE: (530) 755-4700

Milestone Associates
Planning Group
1000 LINCOLN ROAD, STE. H202, YUBA CITY, CA 95991
(530) 755-4700 FAX (530) 755-4720

SEAL

REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER LLOYD DAY
No. C 64309
exp. 6/30/17
CIVIL
STATE OF CALIFORNIA

ISSUES / REVISIONS

DATE	DESCRIPTION
7/31/14	REVISED ANNEXATION SUBMITTAL
9/29/14	REVISED ANNEXATION SUBMITTAL
4/18/16	REVISED ANNEXATION SUBMITTAL
11-4-16	ANNEXATION SUBMITTAL

DRAWN BY:
CHK'D BY:

ARCO / FREDDYS RESTAURANT
NORCAL CAJUN FOODS II, INC.
HIGHWAY 59 @ SANTA FE DRIVE
MERCED, CA 95348
A.P.N.: 57-200-067

Freddy's Steakburgers

ARCO
BP WEST COAST PRODUCTS, LLC

SHEET TITLE
OVERALL SITE PLAN

PROJECT NO: 15-916

DD1

2.0 IMPACT ANALYSIS

This chapter presents BaseCamp's analysis of the air quality and GHG impacts of the proposed project. The analysis of air quality impacts is presented in Section 2.1, and the analysis of GHG impacts is presented in Section 2.2.

2.1 Air Quality Impacts

2.1.1 Environmental Setting

The project site is located within the San Joaquin Valley Air Basin, which includes the City of Merced. The SJVAPCD has jurisdiction over most air quality matters in the Air Basin. It is tasked with implementing programs and regulations required by the federal and California Clean Air Acts. Under their respective Clean Air Acts, both the federal government and the State of California have established ambient air quality standards for six criteria air pollutants: ozone, particulate matter, carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead. California has four additional pollutants for which it has established standards. Table 2-1 shows the attainment status of the Air Basin relative to federal and State ambient air quality standards.

TABLE 2-1
SAN JOAQUIN VALLEY AIR BASIN ATTAINMENT STATUS

	Designation/Classification	
Criteria Pollutant	**Federal Primary Standards**	**State Standards**
Ozone - One hour	No Federal Standard	Nonattainment/Severe
Ozone - Eight hour	Nonattainment/Extreme	Nonattainment
PM_{10}	Attainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide (NO_x)	Attainment/Unclassified	Attainment
Sulfur Dioxide (SO_x)	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

Note – federal primary standards established to protect human health.
Source: SJVAPCD 2015a.

As shown in Table 2-1, the Air Basin is considered a nonattainment area for ozone under both State and federal 8-hour standards and under the State 1-hour standard, for particulate matter less than 10 micrometers in diameter (PM_{10}) under the State standard, and for particulate matter less than 2.5 micrometers in diameter ($PM_{2.5}$) under the federal standard. The Air Basin is in attainment of, or unclassified for, all other federal and State criteria pollutant standards.

Ozone is not directly produced by automobile fuel combustion; rather, it is a secondary pollutant that is formed from reactive organic gases (ROG) and nitrogen oxides (NO_x) in the presence of sunlight. The principal sources of ROG and NO_x (known as "ozone precursors") are the combustion of fuels and the evaporation of solvents, paints, and fuels. Ozone is a strong irritant that can cause constriction of the airways, forcing the respiratory system to work harder to provide oxygen. It also can lead to aggravated respiratory diseases and lung damage, and it can cause substantial damage to vegetation and to manmade products such as rubber and plastics. Applicable attainment plans of the SJVAPCD include the 2007 Ozone Plan and the 2013 Plan for the Revoked 1-Hour Ozone Standard for the Air Basin.

Particulate matter is a complex mixture of solids and liquids that may contain soot, smoke, metals, nitrates, sulfates, dust, water, and tire rubber. It can be directly emitted, or it can form in the atmosphere from reactions of gases such as NO_x. There are many sources of particulate matter emissions, including combustion, industrial and agricultural processes, grading and construction, and motor vehicle use. The size of the particles is directly linked to their potential for causing health problems, including respiratory, pulmonary, and cardiovascular diseases. $PM_{2.5}$ poses the greatest health threat because it can get deep into the lungs and even enter the bloodstream. Applicable attainment plans of the SJVAPCD include the 2015 PM2.5 Plan for the 1997 federal $PM_{2.5}$ standard, the 2012 PM2.5 Plan for the 2006 federal $PM_{2.5}$ standard, the 2016 Moderate Area Plan for the 2012 federal $PM_{2.5}$ standard, and the 2007 PM10 Maintenance Plan to maintain the Air Basin's attainment status of federal PM_{10} standards.

Another criteria pollutant of concern is carbon monoxide (CO). CO is an odorless, colorless gas that is formed by incomplete combustion of fuels and is emitted directly into the air. The main source of CO in the San Joaquin Valley is on-road motor vehicles. At high concentrations, CO reduces the oxygen-carrying capacity of the blood and can cause dizziness, headaches, unconsciousness, and even death. Problems associated with CO are localized in character, so both ARB and EPA designate urban areas as CO nonattainment areas instead of the entire Air Basin (SJVAPCD 2015b). The project site is not within an urban area designated as nonattainment for CO.

In addition to the criteria pollutants, the California Air Resources Board (ARB) has identified a class of air pollutants known as toxic air contaminants (TACs) - pollutants that even at low levels may cause acute serious, long-term health effects, such as cancer. Diesel particulate matter is the most commonly identified TAC, generated mainly as a product of combustion in diesel engines. Other TACs are less common and are typically associated with industrial activities. However, gasoline contains toxic substances such as benzene, toluene and naphthalene, among others.

2.1.2 Regulatory Framework

As previously noted, the SJVAPCD has jurisdiction over most air quality matters in the San Joaquin Valley Air Basin, including the City of Merced. It implements the federal and California Clean Air Acts, and the applicable attainment and maintenance plans, through local regulations. The SJVAPCD regulations that would be applicable to the project are summarized below.

Regulation VIII (Fugitive Dust PM10 Prohibitions)

Rules 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 track out, landfill operations, etc.

Rule 4101 (Visible Emissions)

This rule prohibits emissions of visible air contaminants to the atmosphere and applies to any source operation that emits or may emit air contaminants.

Rule 9510 (Indirect Source Review)

Rule 9510, also known as the Indirect Source Rule (ISR), is intended to reduce or mitigate emissions of NO_x and PM_{10} from new development in the SJVAPCD including construction and operational emissions. This rule requires specific percentage reductions in estimated on-site construction and operation emissions, and/or payment of off-site mitigation fees for required reductions that cannot be met on the project site. ISR fees are used to provide offsetting mitigation. Construction emissions of NO_x and PM_{10} exhaust must be reduced by 20% and 45%, respectively. Operational emissions of NO_x and PM_{10} must be reduced by 33.3% and 50%, respectively. The ISR applies to commercial development projects of 2,000 square feet and larger. Based on this criteria, the project would be subject to Rule 9510.

In addition, the SJVAPCD regulates the construction and improvement of facilities with potential air toxic emissions, including gasoline stations. SJVAPCD rules applicable to gasoline stations include:

Rule 2201 (New and Modified Stationary Source Review Rule)

New stationary sources and modifications of existing stationary sources that may emit criteria pollutants must obtain an Authority to Construct and Permit to Operate the proposed facility. Emissions that exceed impact thresholds must include emission controls and may require additional mitigation.

Rule 4621 (Gasoline Transfer into Stationary Storage Containers, Delivery Vessels and Bulk Plants)

Rule 4621 prohibits the transfer of gasoline from a delivery vessel into a stationary storage container unless the container is equipped with an ARB-certified permanent submerged fill pipe and ARB certified pressure-vacuum relief valve, and utilizes an ARB-certified Phase I vapor recovery system.

Rule 4622 (Transfer of Gasoline into Vehicle Fuel Tanks)

Rule 4622 prohibits the transfer of gasoline from a stationary storage container into a motor vehicle fuel tank with a capacity greater than 5 gallons, unless the gasoline dispensing unit used to transfer the gasoline is equipped with and has in operation an ARB-certified Phase II vapor recovery system.

2.1.3 Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on the environment if it would do the following:

- Conflict with or obstruct implementation of an applicable air quality plan.
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
- 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.
- Expose sensitive receptors to substantial pollutant concentrations.
- Create objectionable odors affecting a substantial number of people.

CEQA Guidelines Appendix G also states that, where available, significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make significance determinations. In 2015, the SJVAPCD adopted an updated Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI). The GAMAQI defines methodology and thresholds of significance for the assessment of air quality impacts for projects within SJVAPCD's jurisdiction, along with potential mitigation measures for identified impacts.

Table 2-2 shows the significance thresholds for criteria air pollutant emissions within the SJVAPCD, both for construction emissions and emissions from project operations. As stated in the GAMAQI, the basis for the significance thresholds are the New Source Review (SJVAPCD Rule 2201) offset thresholds. The SJVAPCD's attainment plans demonstrate that project-specific emissions below these offset thresholds would have air quality impacts that are less than significant (SJVAPCD 2015b). It should be noted that a project may still have significant air quality impacts even if its estimated emissions are below significance thresholds, depending on its location and adjacent land uses.

TABLE 2-2
SJVAPCD SIGNIFICANCE THRESHOLDS

	Emissions (tons per year)	
Pollutant	**Construction**	**Operational**
Carbon Monoxide	100	100
Nitrogen Oxides (NOx)	10	10
Reactive Organic Gases (ROG)	10	10
Sulfur Oxides (SOx)	27	27
Particulate Matter (PM_{10})	15	15
Fine Particulate Matter ($PM_{2.5}$)	15	15

Source: SJVAPCD 2015b.

For CO emissions, the GAMAQI states that project operational emissions would have an impact that is less than significant if neither of the following criteria are met:

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

- A traffic study indicates that the project will substantially worsen an already existing LOS F on one or more streets or at one or more intersections in the project vicinity.

If either of these criteria can be associated with any intersection affected by the project, then a CO analysis would need to be conducted to determine the significance of the project's impacts (SJVAPCD 2015b). For TACs, the GAMAQI states that carcinogenic emissions from project operations are considered to have a significant impact if the maximally exposed individual risk equals or exceeds 10 in 1 million.

2.1.4 Environmental Impacts and Mitigation Measures

The proposed project is expected to generate air pollutant emissions, mainly from vehicles entering and exiting the project site. Project construction would also generate emissions, mainly through the use of heavy equipment powered by diesel or other internal combustion engines. The occupation of terminal buildings would also involve air emissions from heating and ventilating systems, known as "area emissions."

Project emissions were estimated using the CalEEMod computer program, a modeling program recommended by SJVAPCD. The CalEEMod results are shown in Appendix A of this report and summarized in Table 2-3 below. Construction emissions were estimated for the entire construction period, while operational emissions are annual emissions. The CalEEMod run incorporated the following site conditions and laws and regulations that would mitigate environmental impacts:

- The project would be located near an existing transit stop.

- The project would construct sidewalks that would become part of an existing sidewalk network in the vicinity, as well as other improvements with the effects of calming traffic, such as crosswalks.

- The project would be constructed in an area with a mix of land uses, including commercial and residential.

- In accordance with SBX7-7, the project would implement water conservation measures that lead to a 20% reduction in indoor and outdoor water use.

- In accordance with AB 341, the project would divert 75% of its solid waste stream through recycling and other measures.

- Dust control measures during construction are implemented per SJVAPCD Regulation VIII.

In running the CalEEMod program for the project, it was discovered that the default fleet mix values overstated the amount of truck traffic in the area. A review of truck traffic volumes on SR 59 at the West Olive Avenue/Santa Fe Drive intersection indicated that the percentage of traffic

comprised by all trucks was approximately 6.5% (Caltrans 2015). By contrast, the CalEEMod defaults assumed approximately 15% of vehicles were heavy trucks alone. The vehicle fleet mix in CalEEMod was adjusted to reflect truck traffic percentages based on the Caltrans figures.

TABLE 2-3
PROJECT AIR POLLUTANT EMISSIONS

	ROG	NOx	CO	SOx	PM10	PM2.5
Phase 1						
Construction Emissions (total tons)[1]	0.17	1.14	0.93	<0.01	0.08	0.07
Operational Emissions (tons/yr)	1.20	4.17	6.34	0.01	0.57	0.16
Phase 2						
Construction Emissions (total tons)[2]	0.17	0.92	0.70	<0.01	0.06	0.05
Operational Emissions (tons/yr)	0.86	2.80	4.69	0.01	0.71	0.20
Total Operational Emissions (tons/yr)	**2.06**	**6.97**	**11.03**	**0.02**	**1.28**	**0.36**

[1] Construction emissions for Phase 1 based on construction period of 120 working days.
[2] Construction emissions for Phase 2 based on construction period of 180 working days.
Source: CalEEMod Version 2016.3.1.

POTENTIAL AIR QUALITY IMPACT 1: AIR QUALITY PLAN CONSISTENCY

As indicated in Table 2-3, project construction air pollutant emissions under both Phase 1 and Phase 2 would be substantially below the significance thresholds adopted by the SJVAPCD. Operational emissions at project builout also would be below SJVAPCD significance thresholds. As noted in Section 2.1.2, the SJVAPCD's attainment plans demonstrate that project-specific emissions below New Source Review offset thresholds, which are the basis for the SJVAPCD significance thresholds, would have air quality impacts that are less than significant. On this basis, the project would be consistent with attainment plans for the Air Basin. Project impacts regarding consistency with the applicable air quality plans are considered **less than significant**.

POTENTIAL AIR QUALITY IMPACT 2: VIOLATION OF AIR QUALITY STANDARDS

As mentioned under Impact 1 and as indicated in Table 2-3, the proposed project would have construction emissions that are substantially below the SJVAPCD significance thresholds under both phases. Project construction may generate localized dust emissions at levels above existing ambient conditions, which is of concern if "sensitive receptors" are located in proximity to the project site. As defined in the GAMAQI, sensitive receptors include residential units, schools, parks and playgrounds, day care centers, hospitals, and nursing homes. None of these land uses are near the project site. Furthermore, dust emissions would be reduced through the required implementation of SJVAPCD Regulation VIII, which contains the following dust emission control measures:

- Air emissions related to the project shall be limited to 20% opacity (opaqueness, lack of transparency) or less, as defined in SJVAPCD Rule 8011. The dust control measures specified below shall be applied as required to maintain the Visible Dust Emissions standard.

- The contractor shall pre-water all land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and phase earthmoving.

- The contractor shall apply water, chemical/organic stabilizer/suppressant, or vegetative ground cover to all disturbed areas, including unpaved roads, throughout the period of soil disturbance.

- The contractor shall restrict vehicular access to the disturbance area during periods of inactivity.

- The contractor shall apply water or chemical/organic stabilizers/suppressants, construct wind barriers and/or cover exposed potentially dust-generating materials.

- When materials are transported off-site, the contractor shall stabilize and cover all materials to be transported and maintain six inches of freeboard space from the top of the container.

- The contractor shall remove carryout and trackout of soil materials on a daily basis unless it extends more than 50 feet from site; carryout and trackout extending more than 50 feet from the site shall be removed immediately. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden. If the project would involve more than 150 construction vehicle trips per day onto the public street, additional restrictions specified in Section 5.8 of SJVAPCD Rule 8041 would apply.

As previously noted, operational emissions at project buildout would not exceed SJVAPCD significance thresholds. The project would be subject to the ISR, which requires development projects to reduce NO_x operational emissions by 33.3%. Application of this reduction requirement would further reduce NO_x emissions that are already below the SJVAPCD significance threshold. Phase 2 NO_x emissions would be reduced further below the significance threshold. Project impacts related to air quality standards are considered **less than significant**.

POTENTIAL AIR QUALITY IMPACT 3: CUMULATIVE EMISSIONS

Cumulative impacts of project emissions focus on operational emissions, as construction emissions cease with completion of project work. As indicated in Table 2-3 above, operational emissions at project buildout would not exceed the significance thresholds established by SJVAPCD. As discussed under Impact 2, NOx emissions would be further reduced by compliance with the ISR. Cumulative project impacts on air quality are considered **less than significant**.

POTENTIAL AIR QUALITY IMPACT 4: EXPOSURE OF SENSITIVE RECEPTORS

As noted in the discussion under Impact 2, there are no sensitive receptors in the immediate project vicinity. The nearest sensitive receptor to the project site is a residential area more than 1,000 feet to the east. At that distance, dispersion of criteria pollutant emissions would likely occur before emissions reached the residential area.

CO in high concentrations would have adverse health impacts, as previously described. The project site is located adjacent to the intersection of SR 59 and West Olive Avenue/Santa Fe Avenue, a major intersection in the area. According to the City of Merced General Plan, the intersection operated at LOS F in 2010 (City of Merced 2012a), so the project could potentially

contribute to that LOS with its attendant CO impacts. As previously noted, there are no sensitive receptors in the vicinity of the intersection, so no sensitive receptors would be exposed to CO emissions, either with or without the project.

Project construction emissions would likely include diesel particulate matter, which is classified as a TAC. Diesel particulate emissions can have adverse health effects on residents if they experience long-term exposure. Construction emissions of diesel particulate matter would cease once construction is completed and would not result in any long-term exposure for sensitive receptors, the closest of which is more than 1,000 feet away. Project construction emissions of diesel particulate matter would not have a significant health effect.

As previously described, gasoline contains toxic substances such as benzene, toluene and naphthalene. Gasoline vapor emissions may contain some of these substances, some of which are considered carcinogens. Projects that could emit substantial amounts of carcinogens are required to submit a Health Risk Assessment (HRA) if there are nearby sensitive receptors (e.g., residences or schools) that could be exposed to carcinogenic emissions.

The California Air Pollution Control Officers Association (CAPCOA) prepared a Gasoline Service Station Industrywide Risk Assessment Guidelines for the State's Air Toxics "Hot Spots" Program. The CAPCOA Guidelines were based on modeling results indicating that benzene in gasoline can cause a cancer risk to people living near gasoline stations greater than 10 in 1 million when large amounts of gasoline are dispensed (CAPCOA 1997). A risk assessment procedure described in the CAPCOA Guidelines has resulted in the development of tables that provide a risk score based on the location of the station (urban or rural), the type of station, and the distance to the nearest sensitive receptor. Based on Table 2B in Appendix E of the CAPCOA Guidelines, the cancer risk posed by the project would be 0.74 per 1 million, which is below the SJVAPCD significance threshold.

As noted, SJVAPCD Rules 4621 and 4622 require the installation of vapor recovery systems, which would limit the amount of vapors that would be emitted into the atmosphere. This would further reduce potential impact related to gasoline vapors. Overall, project impacts related to exposure of sensitive receptors to emissions are considered **less than significant**.

POTENTIAL AIR QUALITY IMPACT 5: ODORS

Odors are more of a nuisance than an environmental hazard. Nevertheless, the Environmental Checklist in CEQA Guidelines Appendix G regards objectionable odors as a potentially significant environmental impact. In accordance with this, the GAMAQI states that a project should be evaluated to determine the likelihood that it would result in nuisance odors. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, there are no quantitative or formulaic methodologies to determine if potential odors would have a significant impact. Rather, projects must be assessed on a case-by-case basis (SJVAPCD 2015b).

Odors that could be generated potentially at the project site include releases of gasoline vapors and cooking odors from the quick-serve restaurant. Such odors in general would be confined mainly to the project site and would readily dissipate. As discussed under Impact 4, vapor recovery systems that would limit vapor emissions would be required. Restaurants are generally not considered significant sources of objectionable odors. Future land uses that would occupy Phase 2 development generally would be retail in nature, and thus unlikely to generate odors that would be considered a nuisance. Project impacts related to odors are considered **less than significant**.

2.2 Greenhouse Gas Emissions

2.2.1 Environmental Setting

Greenhouse gases (GHGs) are gases that absorb and emit radiation within the thermal infrared range, trapping heat in the earth's atmosphere. GHGs are both naturally occurring and are emitted by human activity. GHGs include carbon dioxide (CO_2), the most abundant GHG, as well as methane, nitrous oxide and other gases. GHG emissions in California in 2014 were estimated at 441.5 million metric tons carbon dioxide equivalent (CO_2e) – a decrease of 9.4% from the peak level in 2004. Major GHG sources in California include transportation (36%), industrial (21%), electric power generation (20%), commercial and residential (9%), and agriculture (8%) (ARB 2016).

In 2008, total GHG emissions from the City of Merced were 405,748 metric tons CO_2e (City of Merced 2012b). Of the total emissions, approximately 36% were transportation-related emissions. Another 36% were emissions from commercial/industrial uses, and 26% were from residential uses (City of Merced 2011).

Increased atmospheric concentrations of GHGs are considered a main contributor to global climate change, which is a subject of concern for the State of California. Potential impacts of global climate change in California include reduced Sierra Nevada snowpack, more intensive storms and runoff, increased wildfire hazards, greater number of hot days with associated decreases in air quality, and potential decreases in agricultural production (Climate Action Team 2010).

Unlike the criteria air pollutants, GHGs have no "attainment" standards established by the federal or State government. In fact, GHGs are not generally thought of as traditional air pollutants because their impacts are global in nature, while criteria air pollutants and TACs are of regional and local concern (SJVAPCD 2015b). Nevertheless, the U.S. Environmental Protection Agency (EPA) has found that GHG emissions endanger both the public health and public welfare under Section 202(a) of the Clean Air Act due to their impacts associated with climate change (EPA 2009).

2.2.2 Regulatory Framework

The State of California has implemented GHG emission reduction programs through AB 32, the Global Warming Solutions Act of 2006, which requires total statewide GHG emissions to reach the 1990 level by 2020, or an approximately 29% reduction from the 2004 level of GHG emissions. In compliance with AB 32, the State adopted the Climate Change Scoping Plan in 2008 and updated the plan in 2014. Primary strategies addressed in the original Scoping Plan included new industrial and emission control technologies; alternative energy generation technologies; advanced energy conservation in lighting, heating, cooling and ventilation; fuels with reduced carbon content; hybrid and electric vehicles; and methods for improving vehicle mileage (ARB 2008). As part of the Scoping Plan, California adopted the Low Carbon Fuel Standard, which requires a 10% reduction in the carbon content of gasoline and diesel fuels by 2020. The 2014 update highlighted California's progress toward meeting the 2020 GHG emission reduction goal and established a broad framework for continued emission reductions beyond 2020, on the path to 80% below the 1990 level by 2050 (ARB 2014).

In 2016, the State Legislature passed and Governor Brown signed SB 32, which extends the state's greenhouse gas reduction program initiated by AB 32. SB 32 codifies the 2030 GHG reduction target of Executive Order B-30-15, which is 40% below 1990 emission levels. The

ARB has recently released for public review a draft Scoping Plan that sets forth strategies for achieving the SB 32 target. The draft Scoping Plan proposes to continue many of the strategies that were part of the previous Scoping Plans, including the cap-and-trade program, low-carbon fuel standards, renewable energy, and methane reduction strategies. It also would require a 20% reduction in GHG emissions from refineries by 2030 and would address for the first time GHG emissions from the natural and working lands of California, including the agriculture and forestry sectors (ARB 2017).

The SJVAPCD adopted a Climate Change Action Plan in 2008 and issued guidance for development project compliance with the plan in 2009. The guidance adopted an approach that relies on the use of Best Performance Standards to reduce GHG emissions. Projects implementing Best Performance Standards would be determined to have a less than cumulatively significant impact. For projects not implementing Best Performance Standards, demonstration of a 29% reduction in project-specific (i.e., operational) GHG emissions from business-as-usual conditions is required to determine that a project would have a less than cumulatively significant impact (SJVAPCD 2009).

The City of Merced adopted a Climate Action Plan (CAP) in 2012. The goal of the CAP is to reduce City emissions to 1990 levels by 2020, consistent with the goal of AB 32. This would mean a reduction in the City's emission levels to 349,981 metric tons CO2e – a reduction of approximately 29.7% from "business as usual" levels (City of Merced 2012b). The CAP sets forth strategies designed to meet its emission reduction goal. According to the CAP, approximately 30% of the GHG emissions targeted for reduction will be accomplished through energy conservation habits and equipment, 23% through utilization of renewable resources, and 21% through enhanced mobility programs and projects (City of Merced 2012b). The remaining reductions will be accomplished through strategies related to sustainable community design, water conservation and technology, protection of air resources, waste reduction, and public outreach and involvement. Of the 156 actions recommended in the CAP, 73 are business-related, with most of these based on incentives, improved communication, and encouragement by the City (City of Merced 2012b).

2.2.3 Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on the environment if it would do the following:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

CEQA Guidelines Appendix G states that, where available, significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make significance determinations. Aside from the 29.7% reduction in GHG emissions, the City of Merced has not established any significance thresholds.

2.2.4 Environmental Impacts and Mitigation Measures

The proposed project is expected to generate GHG emissions, mainly from vehicles entering and exiting the project site. Other potential GHG sources include building energy use and waste sent

to a landfill. Project construction would also generate emissions, mainly through the use of heavy equipment powered by diesel or other internal combustion engines.

Project GHG emissions were estimated using the CalEEMod computer program. The CalEEMod results are shown in Appendix A of this report and summarized in Table 2-4 below. Construction emissions were estimated for the entire construction period, while operational emissions are annual emissions. For the mitigated GHG emissions, the CalEEMod run incorporated the same site conditions, laws and regulations, and mitigation measures used in estimating air pollutants emissions in Section 2.1.4 of this report. None of these conditions or mitigation measures were applied to estimate unmitigated, or business-as-usual, GHG emissions.

TABLE 2-4
PROJECT GHG EMISSIONS

Emission Types	**GHG Emissions**
Phase 1	
Construction Emissions (total tons)[1]	122.92
Operational Emissions (tons/yr)	
Unmitigated	1,841.60
Mitigated	1,164.23
Phase 2	
Construction Emissions (total tons)[2]	110.85
Operational Emissions (tons/yr)	
Unmitigated	1,800.97
Mitigated	1,190.66
Total Operational Emissions (tons/yr)	
Unmitigated	**3,642.57**
Mitigated	**2,354.89**

[1] Construction emissions for Phase 1 based on construction period of 120 working days.
[2] Construction emissions for Phase 2 based on construction period of 180 working days.
Source: CalEEMod Version 2016.3.1.

POTENTIAL GHG IMPACT 1: PROJECT GHG EMISSIONS

Based on results from the CalEEMod run (see Appendix A), total construction GHG emissions (Phase 1 and Phase 2) from the proposed project would be approximately 233.77 metric tons CO_2e. Unmitigated (business-as-usual) operational GHG emissions, mainly from vehicle use, are estimated to generate approximately 3,642.57 metric tons CO_2e annually. With incorporation of project features that would reduce GHG emissions, the total operational GHG emissions would be 2,354.89 metric tons CO2e annually. This would be a reduction of approximately 35.3% from unmitigated levels, which exceeds the reduction target set by the City of Merced. Based on this, project impacts related to GHG emissions are considered **less than significant**.

POTENTIAL GHG IMPACT 2: CONSISTENCY WITH GHG REDUCTION PLANS

As noted above, GHG emissions associated with the project would be reduced by an amount that would exceed the City's GHG reduction target. Because of this, the project would be consistent with the GHG reduction objectives of the City's CAP. It is also consistent with the 29% GHG reduction target established by the SJVAPCD in its Climate Change Action Plan. Project impacts related to GHG reduction plans are considered **less than significant**.

3.0 CONCLUSION AND REFERENCES

3.1 Conclusion

This report analyzed the potential air quality and GHG emission impacts of proposed future development of an 8.83-acre site that is proposed for annexation to the City of Merced. The project proposes two phases of development. The first phase would consist of an ARCO AM/PM gasoline station and convenience store with an automated car wash, and a quick-serve restaurant. The second phase would consist of a retail center with a quick-serve restaurant, as indicated on the site plan.

The project would generate air pollutant and GHG emissions, mainly from vehicle traffic. Estimates of these emissions were developed using CalEEMod, with inputs based on project information and County recommendations. The results of the CalEEMod runs indicate that the project would not generate air pollutant emissions that would exceed the significance thresholds established by SJVAPCD. The project would not generate any significant amounts of TACs or odors. Project impacts on air quality are considered less than significant.

The project would generate GHG emissions that would be less than business-as-usual levels by approximately 35.3%. This reduction would exceed the reduction targets set by the City of Merced in its CAP and by the SJVAPCD in its Climate Change Action Plan. GHG impacts of the project are considered less than significant.

3.2 References Cited

California Air Resources Board (ARB). 2008. Climate Change Scoping Plan: A Framework for Change. Adopted December 2008.

_____. 2014. First Update to the Climate Change Scoping Plan: Building on the Framework. May 2014.

_____. 2016. California Greenhouse Gas Emissions for 2000-2014 – Trends of Emissions and Other Indicators. June 17, 2016.

_____. 2017. The 2017 Climate Change Scoping Plan Update: The Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target (draft). January 20, 2017.

California Climate Action Team. 2010. Climate Action Team Biennial Report – Executive Summary. April 2010.

California Department of Transportation (Caltrans). 2015. 2015 Daily Truck Traffic.

City of Merced. 2011. City of Merced Climate Action Plan Background Report. January 6, 2011.

_____. 2012a. Merced Vision 2030 General Plan. January 2012.

_____. 2012b. Merced Climate Action Plan. October 1, 2012.

San Joaquin Valley Air Pollution Control District. 2009. Final Staff Report – Climate Change Action Plan: Addressing Greenhouse Gas Emissions Impact under the California Environmental Quality Act. December 17, 2009.

_____. 2015a. Ambient Air Quality Standards & Valley Attainment Status. SJVAPCD website, http://www.valleyair.org/aqinfo/attainment.htm. Accessed December 7, 2015.

_____. 2015b. Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI). March 19, 2015.

U.S. Environmental Protection Agency (EPA). 2009. Endangerment and Cause of Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act. Federal Register Vol. 74, No. 239, pp. 66496-66546. December 15, 2009.

MOORE BIOLOGICAL CONSULTANTS

July 17, 2017

Mr. Charlie Simpson
BaseCamp Environmental
115 South School Street, Ste.14
Lodi, CA 95240

Subject: "ANNEXATION/PRE-ZONE #15-01, NORTH HIGHWAY 59 & SANTA FE", MERCED, CALIFORNIA: BIOLOGICAL ASSESSMENT

Dear Charlie:

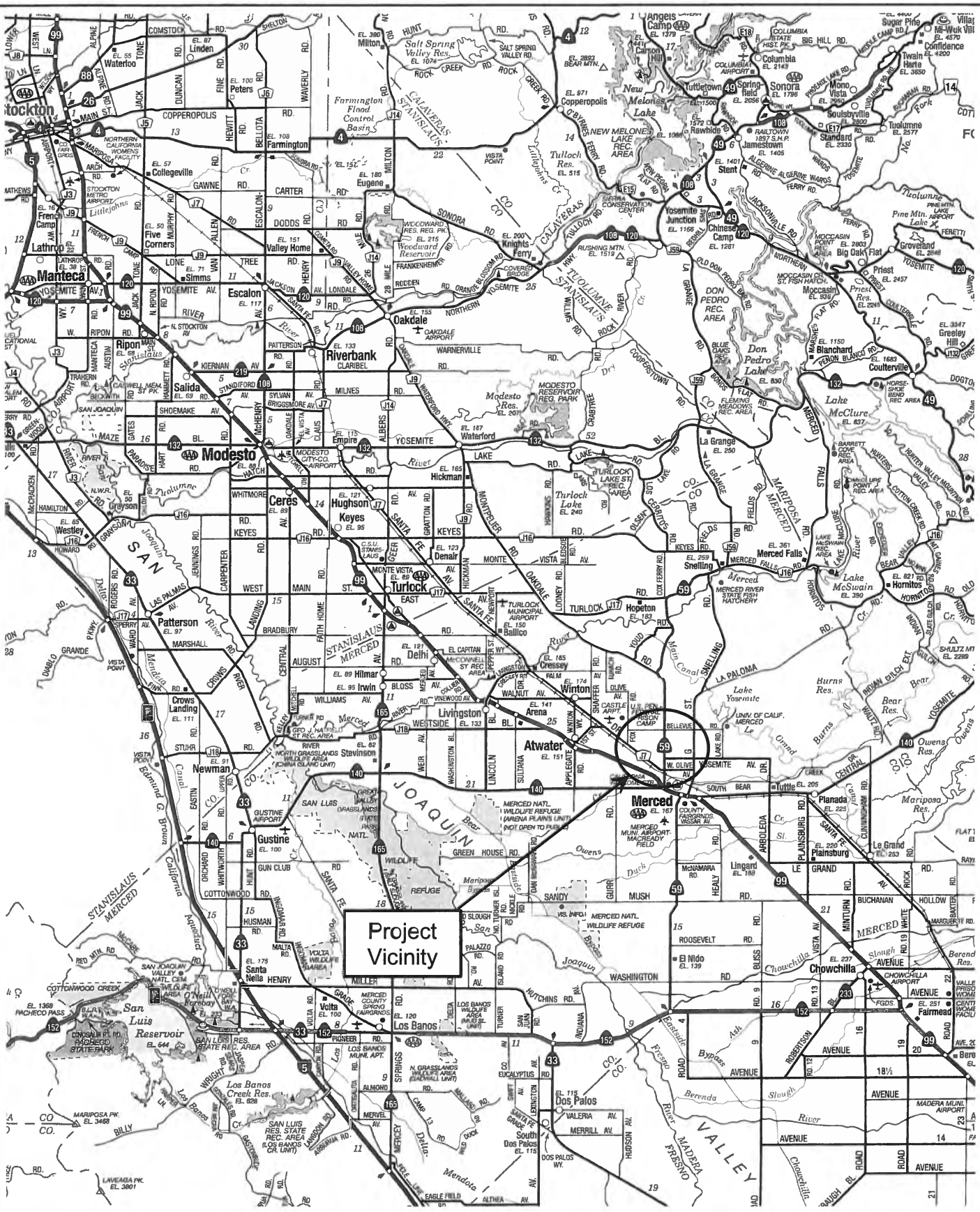
Thank you for asking Moore Biological Consultants to prepare this biological assessment for the Annexation/Pre-Zone #15-01 at North Highway 59 and Santa Fe Drive project in Merced County, California (Figures 1 and 2). The purpose of this assessment is to describe existing biological resources in the site, identify potentially significant impacts to biological resources from commercial development, and provide recommendations for how to reduce those impacts to a less-than-significant level. The work involved reviewing databases, aerial photographs, and documents, and conducting a field survey to document vegetation communities, potentially jurisdictional Waters of the U.S. and/or wetlands, and potentially suitable habitat for or presence of special-status species. This report details the methodology and results of our investigation.

Project Overview

The proposed commercial project consists of annexing 3 parcels totaling approximately 8.83 acres of land and a portion of Black Rascal Creek from Merced County to the City of Merced (see Tentative Map and Site Plan in Attachment A). Phase 1 of the project will include construction of a 7,333-square-foot retail project on approximately 1.78 acres of the 7.4-acre parcel 057-200-067 located at the northwest corner of North Highway 59 and Santa Fe

10330 Twin Cities Rd., Ste. 30 • Galt, CA 95632
(209) 745-1159 • Fax (209) 745-7513
e-mail: moorebio@softcom.net

ATTACHMENT H



Source: Calif. State Automobile Association

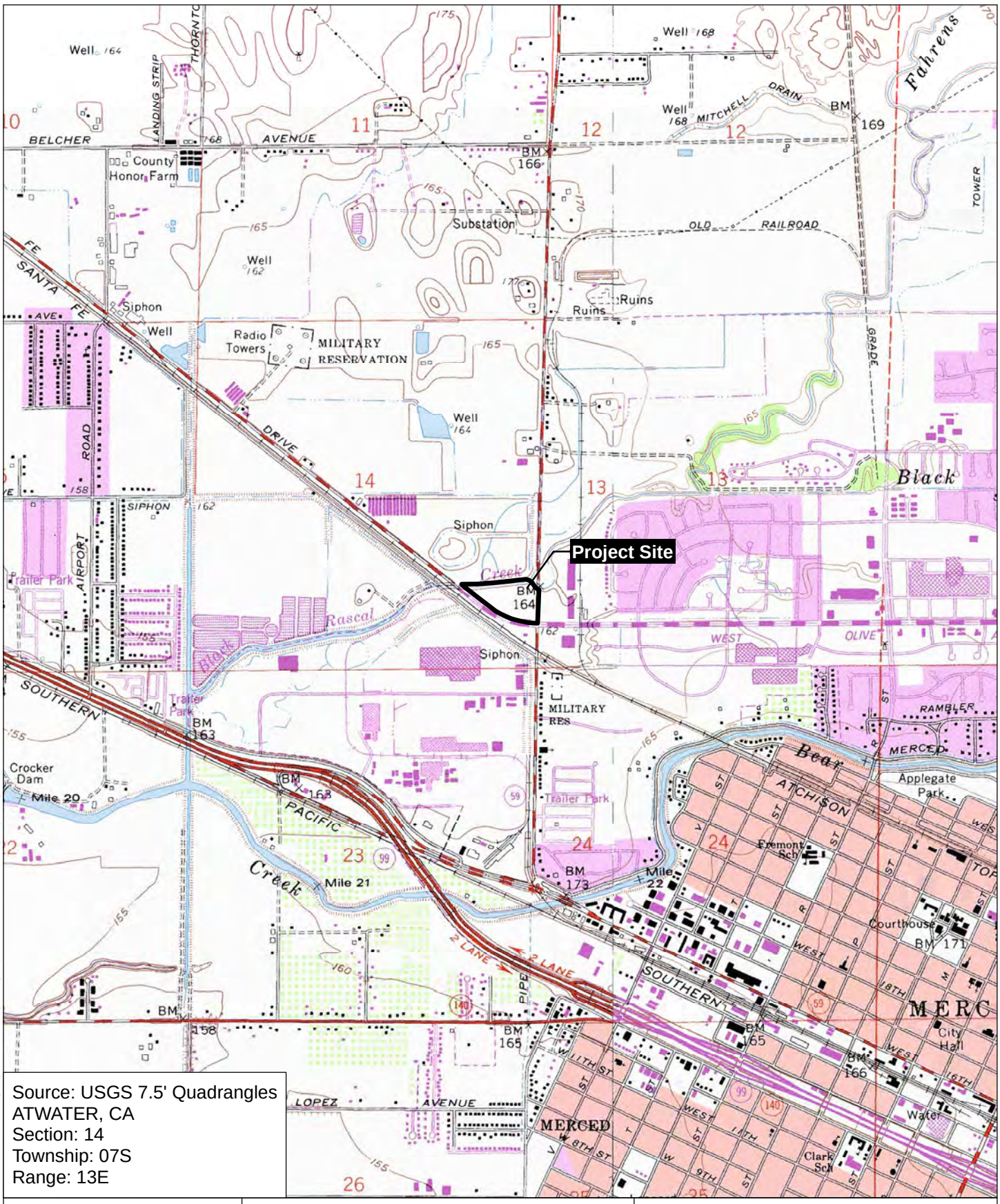
Moore Biological Consultants

0 18 Miles

N W E S

FIGURE 1

PROJECT VICINITY



Source: USGS 7.5' Quadrangles
ATWATER, CA
Section: 14
Township: 07S
Range: 13E

Figure 2

Moore Biological Consultants

0 1,000 2,000

1 inch = 2,000 feet

N
W E
S

USGS

Highway 59 at Santa Fe Drive

Merced County, CA

Map Date: 04/05/2017

C:\Users\owner\Documents\Fremont Environmental Consulting\Projects\Moore Biological\Highway 59 at Santa Fe Drive\MXD\highway 59_figure 2x.mxd

Drive. Phase 2 of the project would involve of an additional 34,833 square feet of retail development on the remaining 5.62 acres of the same parcel. The 1.0-acre parcel, located at the southwest corner of the intersection, would be annexed but is not proposed for development; this parcel has an existing business that would remain.

The proposed retail center would have three access points. The primary entrance/exit for Phase 1, the proposed gas station, car wash, convenience market, and restaurant on the 1.78 acres at the corner of the site, would be located on Santa Fe Drive approximately 200 feet west of the intersection. The driveway would be right-in/right-out only. Access for Phase 2 would involve development of a full access driveway into the future commercial area from Santa Fe Drive, which would be located 475 feet west of the intersection. An additional right-in/right-out driveway is proposed along North Highway 59 approximately 230 feet north of the intersection as part of Phase 1.

Methods

Prior to the field survey, we conducted a search of California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB, 2017). The CNDDB search was conducted on the USGS 7.5-minute Atwater and Merced topographic quadrangles, encompassing approximately 120+/- square miles surrounding the site (Attachment B). The United States Fish and Wildlife Service (USFWS*)* IPaC Trust Resource Report of Federally Threatened and Endangered species that may occur in or be affected by projects in the project vicinity was also reviewed (Attachment B). This information was used to identify special-status wildlife and plant species that have been previously documented in the vicinity or have the potential to occur based on suitable habitat and geographical distribution. Additionally, the CNDDB depicts the locations of sensitive habitats. The USFWS on-line-maps of designated critical habitat in the area were also downloaded.

A field survey of the site was conducted on April 27, 2017. The survey consisted of driving and walking throughout the site making observations of habitat conditions and noting surrounding land uses, habitat types, and plant and wildlife species. The fieldwork included an assessment of potentially jurisdictional Waters of the U.S. and wetlands as defined by the U.S. Army Corps of Engineers (ACOE, 1987; 2008) and a search for special-status species and suitable habitat for special-status species (e.g., blue elderberry shrubs, vernal pools). Trees in and near the site were assessed for the potential use by nesting raptors, especially Swainson's hawk (*Buteo swainsoni*). The cropland and grasslands in the site and adjacent areas visible from the site were searched for burrowing owls (*Athene cunicularia*) or ground squirrel burrows with evidence of past occupancy.

Results

GENERAL SETTING: The project site is located just north of Merced, in Merced County, California (Figure 1). The site is in Section 14, Township 7 South, Range 13 East of the USGS 7.5-minute Atwater topographic quadrangle (Figure 2). The site is nearly level and is at an elevation of approximately 160 feet above mean sea level. The site was likely farmed in crops in the past, but has been fallow for years. The body of the site is currently disturbed weedy grassland (Figure 3 and photographs in Attachment C).

Surrounding land uses in this portion of Merced County are primarily agricultural and commercial. North Highway 59 bounds the site on the east and Santa Fe Drive bounds the site on the south and west. There are open fields to the east and southeast of the site, and a commercial or industrial property to the southwest of the site (Figure 3 and photographs in Attachment C). Black Rascal Creek flows along the north edge of the site, and there is open grassland to the north of the site, across Black Rascal Creek.

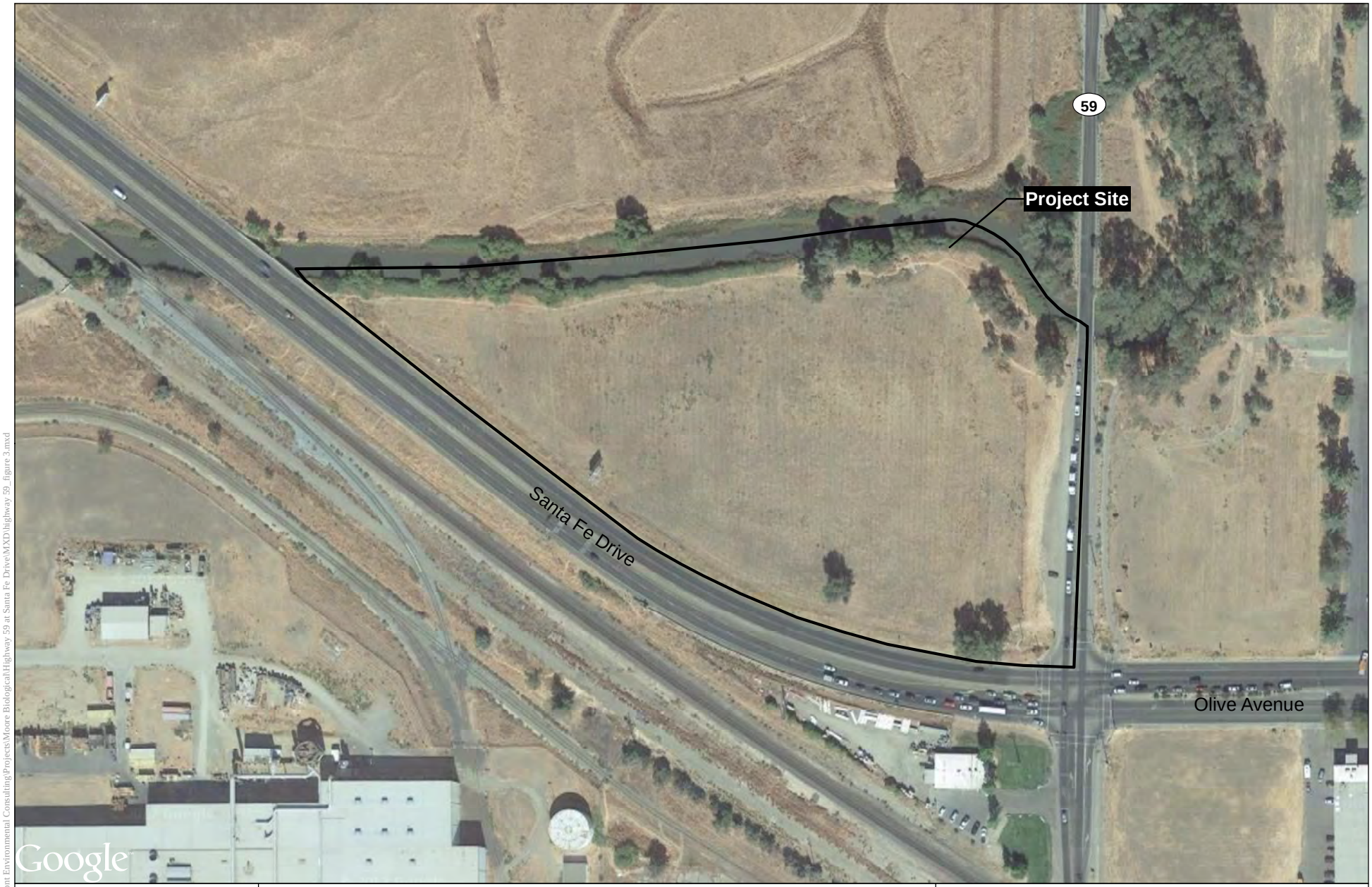


Figure 2

Moore Biological Consultants

0 100 200

1 inch = 200 feet

N
W E
S

Map Date: 04/05/2017

AERIAL

Highway 59 at Santa Fe Drive

Merced County, CA

C:\Users\owner\Documents\Fremont Environmental Consulting\Projects\Moore Biological\Highway 59 at Santa Fe Drive\MXD\highway 59_figure 3.mxd

VEGETATION: Due to the amount of disturbance from past agriculture, surrounding development, and periodic mowing and/or disking for weed abatement, vegetation in the project site is primarily annual grass and weed species. California annual grassland series (Sawyer and Keeler-Wolf, 1995) best describes the disturbed grassland vegetation. Grasses including oats (*Avena* sp.), soft chess brome (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), foxtail barley (*Hordeum murinum*), and perennial ryegrass (*Lolium perenne*) are dominant grass species. Other grassland species such as black mustard (*Brassica nigra*), hairy fleabane (*Conyza bonariensis*), prickly lettuce (*Lactuca serriola*), yellow star-thistle (*Centaurea solstitialis*), filaree (*Erodium botrys*), and common mallow (*Malva neglecta*) are intermixed with the grasses. Table1 is a list of plant species observed in the site.

The only trees in the body of the site are along Black Rascal Creek; there are also three blue gum (*Eucalyptus* sp.) in the southeast part of the site (Figure 3 and photographs in Attachment C). The trees along the creek corridor are primarily willows (*Salix* sp.); there is also a cluster of blue gums just south of the creek near North Highway 59.

No blue elderberry (*Sambucus mexicana*) shrubs were observed in or adjacent to the site.

WILDLIFE: A variety of bird species were observed during the field survey; all of these are common species found in agricultural and riparian areas of Merced County (Table 2). Red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), northern mockingbird (*Mimus polyglottos*), western kingbird (*Tyrannus verticalis*), and red-winged blackbird (*Agelaius phoeniceus*) are representative of the avian species observed in the site.

TABLE 1

PLANT SPECIES OBSERVED IN THE PROJECT SITE

Amsinckia menziesii	rancher's fireweed
Avena fatua	wild oat
Brassica nigra	black mustard
Bromus diandrus	ripgut brome
Bromus hordeaceus	soft chess brome
Carduus pycnocephalus	Italian thistle
Centaurea solstitialis	yellow star-thistle
Cerastium glomeratum	mouse-eared chickweed
Chamomilla suaveolens	pineapple weed
Cirsium vulgare	bull thistle
Conium maculatum	poison hemlock
Convolvulus arvensis	morning glory
Conyza bonariensis	hairy fleabane
Conyza canadensis	horseweed
Cynodon dactylon	Bermuda grass
Cyperus eragrostis	umbrella sedge
Datura innoxia	datura
Eremocarpus setigerus	dove weed
Erodium botrys	filaree
Eucalyptus sp.	blue gum
Grindelia squarrosa	curlycup gumweed
Hordeum marinum	Mediterranean barley
Hordeum murinum	foxtail barley
Lactuca serriola	prickly lettuce
Lolium perenne	perennial ryegrass
Malva neglecta	common mallow
Melilotus officinalis	yellow sweet clover

TABLE 1 (continued)
PLANT SPECIES OBSERVED IN THE PROJECT SITE

Plantago lanceolata	plantain
Polygonum lapathifolium	water smartweed
Polygonum persicaria	lady's thumb
Polypogon monspeliensis	rabbit's foot grass
Raphanus sativus	wild radish
Rosa californica	California wild rose
Rubus discolor	Himalayan blackberry
Rumex crispus	curly dock
Salix exigua	narrow-leaved willow
Salix sp.	willow
Salsola iberica	Russian thistle
Scirpus acutus	tule
Senecio vulgaris	common groundsel
Silybum marianum	milk thistle
Sonchus asper	prickly sow thistle
Trifolium hirtum	rose clover
Typha sp.	cattail
Vicia americana	winter vetch

There are several potential nest trees in and near the site that are suitable for nesting raptors and other protected migratory birds, including Swainson's hawk. A few stick nests were observed within some of the trees within and near the site. Given the presence of large trees and raptor foraging habitat (i.e., open fields) in and near the site, it is likely one or more pairs of raptors, plus a variety of songbirds, nest in trees in the site each year. Further, it is considered likely that songbirds nest within the vegetation along Black Rascal Creek and in the grassland habitats in the site each year.

TABLE 2

WILDLIFE SPECIES DOCUMENTED IN THE PROJECT SITE

Birds	
Turkey vulture	*Cathartes aura*
Red-tailed hawk	*Buteo jamaicensis*
American kestrel	*Falco sparverius*
Killdeer	*Charadrius vociferous*
Mourning dove	*Zenaida macroura*
Western scrub jay	*Aphelocoma coerulescens*
Western kingbird	*Tyrannus verticalis*
American crow	*Corvus brachyrhynchos*
Northern mockingbird	*Mimus polyglottos*
Red-winged blackbird	*Agelaius phoeniceus*
Brewer's blackbird	*Euphagus cyanocephalus*
House finch	*Carpodacus mexicanus*
Mammals	
Black-tailed hare	*Lepus californicus*
Raccoon	*Procyon lotor*
Reptiles	
Western fence lizard	*Sceloporus occidentalis*

A limited variety of mammals common to agricultural areas likely occur in the project site. Black-tailed hare (*Lepus californicus*) was the only mammal observed during the recent survey; sign of raccoon (*Procyon lotor*) was also observed. Coyote (*Canis latrans*), striped skunk (*Mephitis mephitis*), desert cottontail (*Sylvilagus audubonii*), and Virginia opossum (*Didelphis virginiana*) are expected to occur in the project site on occasion. California ground squirrels

(*Spermophilus beecheyi*) are common in the area and may occur on-site. No California ground squirrels or their burrows were observed during the recent survey.

Due to lack of suitable habitat, few amphibians and reptiles are expected to use habitats in the site. Western fence lizard (*Sceloporus occidentalis*) was the only reptile observed in the site; no amphibians were observed. Common species such as Pacific chorus frog (*Pseudacris regilla*) and western terrestrial garter snake (*Thamnophis elegans*) may occur in the site on occasion. Black Rascal Creek also provides suitable habitat for western pond turtle (*Emmys marmorata*).

WATERS OF THE U.S. AND WETLANDS: Waters of the U.S., including wetlands, are broadly defined under 33 Code of Federal Regulations (CFR) 328 to include navigable waterways, their tributaries, and adjacent wetlands. State and federal agencies regulate these habitats and Section 404 of the Clean Water Act requires that a permit be secured prior to the discharge of dredged or fill materials into any waters of the U.S., including wetlands. ACOE, CDFW, and the California Regional Water Quality Control Board (RWQCB) have jurisdiction over modifications to riverbanks, lakes, stream channels and other wetland features.

"Waters of the U.S.", as defined in 33 CFR 328.4, encompasses Territorial Seas, Tidal Waters, and Non-Tidal Waters; Non-Tidal Waters includes interstate and intrastate rivers and streams, as well as their tributaries. The limit of federal jurisdiction of Non-Tidal Waters of the U.S. extends to the "ordinary high water mark". The ordinary high water mark is established by physical characteristics such as a natural water line impressed on the bank, presence of shelves, destruction of terrestrial vegetation, or the presence of litter and debris.

Jurisdictional wetlands are vegetated areas that meet specific vegetation, soil, and hydrologic criteria defined by the ACOE *Wetlands Delineation Manual* and Regional Supplement (ACOE, 1987; 2008). Jurisdictional wetlands are usually

adjacent to or hydrologically associated with Waters of the U.S; isolated wetlands are outside federal jurisdiction.

Jurisdictional wetlands and Waters of the U.S. include, but are not limited to, perennial and intermittent creeks and drainages, lakes, seeps, and springs; emergent marshes; riparian wetlands; and seasonal wetlands. Wetlands and Waters of the U.S. provide critical habitat components, such as nest sites and a reliable source of water, for a wide variety of wildlife species.

Black Rascal Creek is a jurisdictional Water of the U.S. subject to Section 404 of the Clean Water Act. The limit of federal jurisdiction is the ordinary high water mark. This waterway also falls under the jurisdiction of CDFW, RWQCB, and the Central Valley Flood Protection Board (CVFPB). Riparian wetlands and woodlands along the bank of Black Rascal Creek are also jurisdictional due to their adjacency to the river.

There is a short section of a shallow constructed ditch in the southeast corner of the parcel that conveys water from the east side of North Highway 59 and directs the water west and into a culvert under Santa Fe Drive (see photographs in Attachment C). This ditch appears to have been constructed in uplands for the purpose of draining areas to the east of the site and possibly also collects water from the adjacent roads. Under this scenario, the ditch does not meet the technical and regulatory criteria of jurisdictional Waters of the U.S.

Beyond Black Rascal Creek, no other potentially jurisdictional wetlands or Waters of the U.S. were observed in or adjacent to the project site. The body of the site is vegetated with upland grasses and weeds.

SPECIAL-STATUS SPECIES: Special-status species are plants and animals that are legally protected under the state and/or federal Endangered Species Act or other regulations. The Federal Endangered Species Act (FESA) of 1973 declares that all federal departments and agencies shall utilize their authority to conserve

endangered and threatened plant and animal species. The California Endangered Species Act (CESA) of 1984 parallels the policies of FESA and pertains to native California species.

Special-status species also include other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitat. The presence of species with legal protection under the Endangered Species Act often represents a major constraint to development, particularly when the species are wide-ranging or highly sensitive to habitat disturbance and where proposed development would result in a take of these species.

Special-status plants are those which are designated rare, threatened, or endangered and candidate species for listing by the USFWS. Special-status plants also include species considered rare or endangered under the conditions of Section 15380 of the California Environmental Quality Act Guidelines, such as those plant species identified on Lists 1A, 1B and 2 in the Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2017). Finally, special-status plants may include other species that are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those included on CNPS List 3.

The likelihood of occurrence of listed, candidate, and other special-status species in the site is generally low. Table 3 provides a summary of the listing status and habitat requirements of special-status species that have been documented in the greater project vicinity or for which there is potentially suitable habitat in the greater project vicinity. This table also includes an assessment of the likelihood of occurrence of each of these species in the site. The evaluation of the potential for occurrence of each species is based on the distribution of regional occurrences (if any), habitat suitability, and field observations.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED IN THE GREATER PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[1]	CNPS List[2]	Habitat	Likeliness of Occurrence in the Project Site
PLANTS						
Vernal pool smallscale	*Atriplex persistens*	None	None	1B	Alkaline vernal pools.	Unlikely: there is no suitable habitat in the site for vernal pool smallscale. The nearest occurrence of this species in the CNDDB (2017) search area is approximately 4 miles southwest of the site.
Round-leaved filaree	*California macrophylla*	None	None	1B	Cismontane woodland and valley and foothill grassland.	Unlikely: due to historical farming and routine disking, the site does not provide suitable habitat for round-leaved filaree. The nearest occurrence of this species in the CNDDB (2017) search area is approximately 1 mile southeast of the project site.
Succulent owl's clover	*Castilleja campestris ssp. succulenta*	T	E	1B	Vernal pools.	Unlikely: there are no vernal pools or seasonal wetlands in the site. The nearest occurrence of succulent owl's clover in the CNDDB (2017) search area is approximately 2 miles northeast of the site. The site is not in designated critical habitat for this species (USFWS, 2005a).
Dwarf downingia	*Downingia pusilla*	None	None	2	Vernal pools.	Unlikely: there are no vernal pools or seasonal wetlands in the site. The nearest occurrence of dwarf downingia in the CNDDB (2017) search area is approximately 6 miles northeast of the site.
Spiny-sepaled button-celery	*Eryngium spinosepalum*	None	None	1B	Vernal pools or valley and foothill grassland.	Unlikely: there is no suitable habitat in the site for spiny-sepaled button-celery. The nearest occurrence of this species in the CNDDB (2017) search area is approximately 6 miles northeast of the site.
Forked hareleaf	*Lagophylla dichotoma*	None	None	1B	Cismontane woodland, valley and foothill grassland; sometimes on clay.	Unlikely: due to historical farming and periodic disking, the project site does not provide suitable habitat for this species. The nearest occurrence of forked hareleaf in the CNDDB (2017) search area is approximately 1.5 miles southeast of the site.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED IN THE GREATER PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[1]	CNPS List[2]	Habitat	Likeliness of Occurrence in the Project Site
Shining narvarretia	*Navarretia nigelliformis ssp. radians*	None	None	1B	Cismontane woodland, valley and foothill grassland, vernal pools, usually in clay soils.	Unlikely: due to historical farming and periodic disking, the project site does not provide suitable habitat for shining narvarretia. The site is also below the known elevation range of this species (CNPS, 2017). The nearest occurrence shining narvarretia in the CNDDB (2017) search area is approximately 4 miles northeast of the site.
Colusa grass	*Neostapfia colusana*	T	E	1B	Large, deep vernal pools.	Unlikely: there are no vernal pools or seasonal wetlands in the site. The nearest occurrence of Colusa grass in the CNDDB (2017) search area is approximately 4 miles northeast of the site. The site is not in designated critical habitat for Colusa grass (USFWS 2005a).
San Joaquin Valley Orcutt grass	*Orcuttia inaequalis*	T	E	1B	Vernal pools.	Unlikely: there are no vernal pools or seasonal wetlands in the site. The nearest occurrence of San Joaquin Valley Orcutt grass in the CNDDB (2017) search area is approximately 6.5 miles northeast of the site. The site is not in designated critical habitat this species (USFWS 2005a).
Hairy Orcutt grass	*Orcuttia pilosa*	E	E	1B	Vernal pools.	Unlikely: there are no vernal pools or seasonal wetlands in the site. The nearest occurrence of hairy Orcutt grass in the CNDDB (2017) search area is approximately 3 miles northeast of the site. The site is not in designated critical habitat this species (USFWS 2005a).
Sanford's arrowhead	*Sagittaria sanfordii*	None	None	1B	Standing or slow moving freshwater ponds, marshes and ditches.	Low: Black Rascal Creek provides potentially suitable aquatic habitat for Sanford's arrowhead. The nearest occurrence of this species in the CNDDB (2017) search area is approximately 2.5 miles northeast of the site.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED IN THE GREATER PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[1]	CNPS List[2]	Habitat	Likeliness of Occurrence in the Project Site
WILDLIFE						
BIRDS						
Burrowing owl	*Athene cunicularia*	None	None	N/A	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation.	Unlikely: while the site provides suitable foraging habitat for burrowing owls, no ground squirrels or their burrows were observed in the site. The nearest occurrence of burrowing owl in the CNDDB (2017) search area is approximately 3 miles south of the site
Swainson's hawk	*Buteo swainsoni*	None	T	N/A	Nesting: large trees, usually within riparian corridors. Foraging: agricultural fields and annual grasslands.	Unlikely: the site provides marginally suitable foraging habitat and large trees in and near the site could be used for nesting. Due to periodic disking, it is unlikely Swainson's hawks forage in the site intensively, but they may use it on an occasional basis. The nearest occurrence of nesting Swainson's hawks in the CNDDB (2017) search area is approximately 2.5 miles northwest of the site.
Tricolored blackbird	*Agelaius tricolor*	None	CE/SC	N/A	Nests in dense brambles and emergent wetland vegetation associated with open water habitat.	Unlikely: the emergent wetland and scrub shrub vegetation in and along Black Rascal Creek is suitable suitable nesting habitat. This species may occasionally fly over or forage in the area. The nearest occurrence of tricolored blackbird in the CNDDB (2017) search area is approximately 1 mile southeast of the site.
Bald eagle	*Haliaeetus leucocephalus*	None	E	N/A	Nests in large trees along rivers, ocean shores, and lake margins.	Unlikely: bald eagles were not observed at the project site during the recent surveys but could conceivably fly over the site on occasion. The nearest occurrence of this species approximately 1 mile southeast of the site at Yosemite Lake (CNDDB, 2017).

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED IN THE GREATER PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[1]	CNPS List[2]	Habitat	Likeliness of Occurrence in the Project Site
Mountain plover	*Charadrius alexandrinus nivosus*	T	SC	N/A	Winters in agricultural lands in the Central Valley.	Unlikely: mountain plover may occasionally fly over or forage in the project site. The nearest occurrence of this species in the CNDDB (2017) search area is approximately 6.5 miles southeast of the site.
MAMMALS						
San Joaquin kit fox	*Vulpes macrotis mutica*	E	T	N/A	Annual grasslands or grassy open stages with scattered shrubby vegetation.	Unlikely: the grassland in the site provides potentially suitable foraging habitat for San Joaquin kit fox. However, this species is not known from the Merced region. The only occurrence of San Joaquin kit fox in the CNDDB (2017) search area is an observation approximately 6 miles northwest of the site along a canal in Atwater.
Western mastiff bat	*Eumops perotis californicus*	None	SC	N/A	Open, dry habitats with crevices in cliff faces, high buildings, trees and tunnels for roosting.	Unlikely: there is no suitable roosting habitat in the site for western mastiff bat. This species may occasionally fly over or forage in the site. The nearest occurrence of western mastiff bat in the CNDDB (2017) search area is approximately 1.5 miles southeast of the site.
AMPHIBIANS AND REPTILES						
Giant garter snake	*Thamnophis gigas*	T	T	N/A	Freshwater marsh and low gradient streams; adapted to drainage canals and irrigation ditches, primarily for dispersal or migration.	Unlikely: Black Rascal Creek provides marginally suitable aquatic habitat for giant garter snake. However, this species is not known from the Merced region. The only occurrence of giant garter snake in the CNDDB (2017) search area is an historical (1908) occurrence mapped non-specifically in downtown Merced, approximately 1.5 miles southeast of the site.
Blunt-nosed leopard lizard	*Gambelia sila*	E	E	N/A	Sparsely vegetated alkali and desert scrub habitats in areas of low topographic relief. Requires small mammal burrows for cover.	Unlikely: the site does not contain suitable habitat for blunt-nosed leopard lizard. There are no occurrences of this species recorded in the CNDDB (2017) search area.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED IN THE GREATER PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[1]	CNPS List[2]	Habitat	Likeliness of Occurrence in the Project Site
California tiger salamander	*Ambystoma californiense*	T	T	N/A	Breeds in seasonal water bodies such as deep vernal pools or stock ponds. Requires small mammal burrows for summer refugia.	Unlikely: there are no potentially suitable breeding ponds for California tiger salamander in the site and the disked grassland throughout the site is not suitable for aestivation. The nearest occurrence of this species in the CNDDB (2017) search area is in vernal pool grasslands approximately 5 miles northeast of the site. The site is not within designated critical habitat for California tiger salamander (USFWS, 2005b).
California red-legged frog	*Rana aurora draytonii*	T	SC	N/A	Lowlands and foothills in or near permanent sources of water with vegetation.	Unlikely: Black Rascal Creek provides marginally suitable aquatic habitat for California red-legged frog, however this species is restricted to foothill streams and is not present in creeks on the Central Valley floor. There are no occurrences of California red-legged frog in the CNDDB (2017) search area. The site is not in designated for California red-legged frog critical habitat (USFWS, 2006).
Western pond turtle	*Emys marmorata*	None	SC	N/A	Permanent or semi-permanent water bodies; require basking sites such as logs.	Low: Black Rascal Creek provides potentially suitable habitat for western pond turtle and the on-site grasslands could be used for nesting. The nearest occurrence of this species in the CNDDB (2017) search area is approximately 3.5 miles northwest of the site.
FISH						
Central Valley steelhead	*Oncorhynchus mykiss*	T	None	N/A	Riffle and pool complexes with adequate spawning substrates within Central Valley drainages.	Unlikely: Black Rascal Creek does not provide suitable habitat for Central Valley steelhead. There are no occurrences of this species recorded in the CNDDB (2017) within the search area. The site is not within designated critical habitat for Central Valley steelhead (NOAA, 2005).

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED IN THE GREATER PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[1]	CNPS List[2]	Habitat	Likeliness of Occurrence in the Project Site
Delta smelt	*Hypomesus transpacificus*	T	T	N/A	Shallow lower delta waterways with submersed aquatic plants and other suitable refugia.	None: there is no suitable habitat in the site for delta smelt. There are no occurrences of this species recorded in the CNDDB (2017) within the search area. The site is not within designated critical habitat for delta smelt (USFWS, 1994).
INVERTEBRATES						
Vernal pool fairy shrimp	*Branchinecta lynchi*	T	None	N/A	Vernal pools and seasonally inundated depressions in the Central Valley.	Unlikely: there are no vernal pools or seasonal wetlands in the site. The nearest occurrence of vernal pool fairy shrimp in the CNDDB (2017) search area is approximately 1 mile north of the site. The site is not in designated critical habitat of this species (USFWS, 2005a).
Conservancy fairy shrimp	*Branchinecta conservatio*	E	None	N/A	Vernal pools	Unlikely: there are no vernal pools or seasonal wetlands in the site. The nearest occurrence of Conservancy fairy shrimp in the CNDDB (2017) search area is approximately 6.5 miles northeast of the site. The site is not in designated critical habitat of this species (USFWS, 2005a).
Vernal pool tadpole shrimp	*Lepidurus packardi*	E	None	N/A	Vernal pools and seasonally wet depressions within the Central Valley	Unlikely: there are no vernal pools or seasonal wetlands in the site. The nearest occurrence of vernal pool tadpole shrimp in the CNDDB (2017) search area is approximately 6.5 miles northeast of the site. The site is not in designated critical habitat of this species (USFWS, 2005a).
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	T	None	N/A	Elderberry shrubs in the Central Valley and surrounding foothills	Unlikely: no blue elderberry shrubs were observed in the site. There are no occurrences of valley elderberry longhorn beetle recorded in the CNDDB (2017) within the search area.

1 T= Threatened; E = Endangered; CE = Candidate for Endangered Status; SC = Species of Special Concern per California Department of Fish and Wildlife.

2 CNPS List 1B includes species that are rare, threatened, or endangered in California and elsewhere; List 2 includes plants that are rare, threatened or endangered in California but are more common elsewhere.

habitat in the greater project vicinity. This table also includes an assessment of the likelihood of occurrence of each of these species in the site. The evaluation of the potential for occurrence of each species is based on the distribution of regional occurrences (if any), habitat suitability, and field observations.

SPECIAL-STATUS PLANTS: Special-status plants identified in the CNDDB (2017) search include vernal pool smallscale (*Atriplex persistens*), round-leaved filaree (*California macrophylla*), succulent owl's clover (*Castilleja campestris ssp. succulenta*), dwarf downingia (*Downingia pusilla*), spiny-sepaled button-celery (*Eryngium spinosepalum*), forked hareleaf (*Lagophylla* dichotoma), ahining narvarretia (*Navarretia nigelliformis ssp. radians*), Colusa grass (*Neostapfia colusana*), San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*), hairy Orcutt grass (*Orcuttia pilosa*), and Sanford's arrowhead (*Sagittaria sanfordii*) (Table 3 and Attachment B). The USFWS IPaC Trust Report contains a few of these same species.

Special-status plants generally occur in relatively undisturbed areas in vegetation communities such as vernal pools, marshes and swamps, seasonal wetlands, riparian scrub, and areas with unusual soils. The ruderal grassland in the body of the site is highly disturbed and does not provide suitable habitat for any of the plants in Table 3 or other special-status plants. Black Rascal Creek provides potentially suitable aquatic habitat for Sanford's arrowhead, and this species is documented in the CNDDB (2017) in a tributary to Black Rascal Creek, approximately 2.5 miles northeast of the site. Due to lack of suitable habitat, no other special-status plant species are expected to occur in the site.

SPECIAL-STATUS WILDLIFE: The potential for intensive use of habitats within the project site by special-status wildlife species is generally low. Special-status wildlife species that have been recorded in greater project vicinity in the CNDDB (2017) include Swainson's hawk, burrowing owl, tricolored blackbird (*Agelaius tricolor*), bald eagle (*Haliaeetus leucocephalus*), mountain plover (*Charadrius alexandrinus nivosus*), San Joaquin kit fox (*Vulpes macrotis mutica*), western

mastiff bat (*Eumops perotis californicus*), California tiger salamander (*Ambystoma californiense*), giant garter snake (*Thamnophis gigas*), western pond turtle (*Emys marmorata*), vernal pool fairy shrimp (*Branchinecta lynchi*), Conservancy fairy shrimp (*Branchinecta conservatio*), and vernal pool tadpole shrimp (*Lepidurus packardi*). Although not included in the CNDDB within the search area, California red-legged frog (*Rana aurora draytonii*), blunt-nosed leopard lizard (*Gambelia sila*), Sacramento Central Valley steelhead (*Oncorhynchus mykiss*), delta smelt (*Hypomesus transpacificus*), and valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) were added to Table 3 because they are included in the USFWS IPaC Trust Resource Report (Attachment B).

While the project site may have provided habitat for special-status wildlife species at some time in the past, farming and development have substantially modified natural habitats in the greater project vicinity. Of the wildlife species identified in the CNDDB, Swainson's hawk, tricolored blackbird, and western pond turtle are the only species that have potential to occur in the site on more than a transitory or very occasional basis. Other special-status birds including burrowing owl and mountain plover may fly over or forage in the area on occasion, but would not be expected to nest in or immediately adjacent to the project site.

SWAINSON'S HAWK: The Swainson's hawk is a migratory hawk listed by the State of California as a Threatened species. The Migratory Bird Treaty Act and Fish and Game Code of California protect Swainson's hawks year-round, as well as their nests during the nesting season (March 1 through September 15). Swainson's hawk are found in the Central Valley primarily during their breeding season, a population is known to winter in the San Joaquin Valley.

Swainson's hawks prefer nesting sites that provide sweeping views of nearby foraging grounds consisting of grasslands, irrigated pasture, hay, and wheat crops. Most Swainson's hawks are migratory, wintering in Mexico and breeding in

California and elsewhere in the western United States. This raptor generally arrives in the Central Valley in mid-March, and begins courtship and nest construction immediately upon arrival at the breeding sites. The young fledge in early July, and most Swainson's hawks leave their breeding territories by late August.

The site is within the nesting range of Swainson's hawks and the CNDDB (2017) contains a few records of nesting Swainson's hawks in the greater project vicinity (Attachment B). The nearest occurrence of nesting Swainson's hawks in the CNDDB (2017) search area is approximately 2.5 miles northwest of the site.

Swainson's hawks were not observed in or near the site during the recent survey, which was conducted during the heart of the Swainson's hawk nesting season. The weedy grassland in the site provides marginal Swainson's hawk foraging habitat. Due to periodic disking, it is unlikely Swainson's hawks forage in the site intensively, but they may use it on an occasional basis when there are expansive alfalfa and hay fields in the region providing higher quality foraging habitat.

TRICOLORED BLACKBIRD: The tricolored blackbird is a State of California Species of Concern, is also a candidate for listing as an endangered species at the state level, and is also protected by the federal Migratory Bird Treaty Act (MBTA). This species is endemic to California. Tricolored blackbirds are colonial nesters requiring very dense stands of emergent wetland vegetation and/or dense thickets of wild rose or blackberries for nesting. Preferred nesting substrates are expansive stands of cattails and tules adjacent to open water. They forage in annual grasslands and croplands.

Tricolored blackbirds were not observed in the site during the recent survey, although the tules (*Scirpus acutus*), cattails (*Typha* sp.), and other emergent wetland vegetation along Black Rascal Creek provide suitable nesting habitat for this species. Patches of blackberry brambles and wild rose growing along the creek are also suitable for nesting. Tricolored blackbirds are common in

agricultural lands in Merced County and may forage and nest in the project site during some years. The nearest occurrence of tricolored blackbird in the CNDDB (2017) search area is approximately 1 mile southeast of the site (Attachment B).

WESTERN POND TURTLE: The western pond turtle is a state species of concern but is not listed at either the state or federal level. Western pond turtles are associated with permanent or nearly permanent bodies of water with adequate basking sites such as logs, rocks or open mud banks. Pond turtles construct nests in sandy banks along slow moving streams and ponds in the spring and the young usually hatch in 2 to 3 months.

Black Rascal Creek provides suitable habitat for western pond turtles and this species is documented in the CNDDB (2017) in a tributary to Black Rascal Creek, approximately 3.5 miles northwest of the site. If western pond turtles are present in Black Rascal Creek, it is possible they utilize grasslands in the site for nesting.

OTHER SPECIAL-STATUS SPECIES: The body of the site does not provide suitable aquatic habitat for any type of fish, giant garter snake, California tiger salamander, or California red-legged frog. There is no alkali sink scrub habitat in the site for blunt-nosed leopard lizard. There are no blue elderberry shrubs in the site, precluding the potential occurrence of valley elderberry longhorn beetle. There are no vernal pools or seasonal wetlands in the site for vernal pool branchiopods (i.e., fairy and tadpole shrimp).

The ruderal grassland in the site provides potentially suitable foraging habitat for San Joaquin kit fox, but there is no suitable denning habitat in the site for this species. However, this species is not known from the Merced region. The only occurrence of San Joaquin kit fox in the CNDDB (2017) search area is an observation approximately 6 miles northwest of the site along a canal in Atwater. Special-status bats may fly over or forage in the site and may also roost in trees in and near the site.

CRITICAL HABITAT: The site is not within designated critical habitat for California red-legged frog (USFWS, 2006), California tiger salamander (USFWS, 2005a), federally listed vernal pool shrimp or plants (USFWS, 2005b), delta smelt (USFWS, 1994), valley elderberry longhorn beetle (USFWS, 1980), or Central Valley steelhead (NOAA, 2005).

Conclusions and Recommendations

- The body of the site is disturbed grassland vegetated with ruderal grasses and weeds. The body of the site has been routinely mowed and/or disked for years. There are no sensitive habitats in the body of the site.

- Development of the proposed project will result in the removal of a few eucalyptus trees. From a wildlife habitat perspective, the proposed removal of trees is a less than significant impact.

- Black Rascal Creek is the only potentially jurisdictional Water of the U.S. or wetland in the site.

- Avoidance of jurisdictional Waters of the U.S. is recommended, if possible. It is not known if the project will involve work in Black Rascal Creek, such as construction of a storm drain outfall. If complete avoidance of Black Rascal Creek is infeasible, impacts should be minimized to the maximum extent practicable, and permits from ACOE, CDFW, RWQCB, and possibly CVFPB should be secured prior to the placement of any fill material (e.g., culverts, fill dirt, rock) within jurisdictional Waters of the U.S.

- Due to high levels of disturbance and a lack of suitable habitat, it is unlikely that special-status plants occur in the body of the site. Although considered unlikely, Sanford's arrowhead could potentially occur in Black Rascal Creek.

- Only a few special-status wildlife species have potential to occur in or near the site on more than a very occasional or transitory basis. Swainson's hawk could potentially nest in trees in or near the site and tricolored blackbird may nest along Black Rascal Creek. Both of these birds may use the site for foraging. However, the weedy grassland in the site provides marginal foraging habitat and use of the site by either Swainson's hawk or tricolored blackbird is expected to be limited.

- Pre-construction surveys for nesting Swainson's hawks within 0.25 miles of the project site are recommended if construction commences between March 1 and September 15. If active nests are found, a qualified biologist should determine the need (if any) for temporal restrictions on construction. The determination should utilize criteria set forth by CDFW (CDFG, 1994).

- Pre-construction surveys for western pond turtles and their nests are recommended for construction between April 1 through October 31. This will involve a search for nests in uplands adjacent to the creek. If nest sites are located, a 50-foot buffer area around the nest is recommended and work should be delayed until hatching is complete and the young have left the nest site.

- Trees, shrubs, and grasslands in the site could be used by other birds protected by the Migratory Bird Treaty Act of 1918. If

construction survey for nesting birds is recommended. If active nests are found, work in the vicinity of the nest should be delayed until the young fledge.

We hope this information is useful. Please call me at (209) 745-1159 with any questions.

Sincerely,



Diane S. Moore, M.S.
Principal Biologist

References and Literature Consulted

ACOE (U.S. Army Corps of Engineers). 1987. Technical Report Y87-1. U.S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, MI.

ACOE. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. U.S. Army Engineer Research and Development Center, Vicksburg, MS. September.

CDFG (California Department of Fish and Game). 1994. Staff Report regarding Mitigation for Impacts to Swainson's Hawks (*Buteo Swainsoni*) in the Central Valley of California. November.

CDFG. 2012. Staff Report on Burrowing Owl Mitigation. California Department of Fish and Wildlife, Sacramento, California. March 7.

CNDDB (California Natural Diversity Database). 2017. California Department of Fish and Wildlife's Natural Heritage Program, Sacramento, California.

CNDDB (California Natural Diversity Database). 2017. California Department of Fish and Wildlife's Natural Heritage Program, Sacramento, California.

CNPS (California Native Plant Society). 2017. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. http://www.rareplants.cnps.org

National Oceanic and Atmospheric Administration (NOAA). 2005. Endangered and Threatened Species; Designation of Critical Habitat for Seven Evolutionarily Significant Units of Pacific Salmon and Steelhead in California; Final Rule. Federal Register 70 (170): 52488-52585. September 2, 2005.

Sawyer, J.O. and T. Keeler-Wolf. 1995. A Manual of California Vegetation. California Native Plant Society, Sacramento. California.

USFWS (United States Fish and Wildlife Service). 1994. Final Critical Habitat for the Delta Smelt (*Hypomesus transpacificus*). Federal Register Vol. 59, No. 242, December 19, 1994, pp. 65256 – 65279.

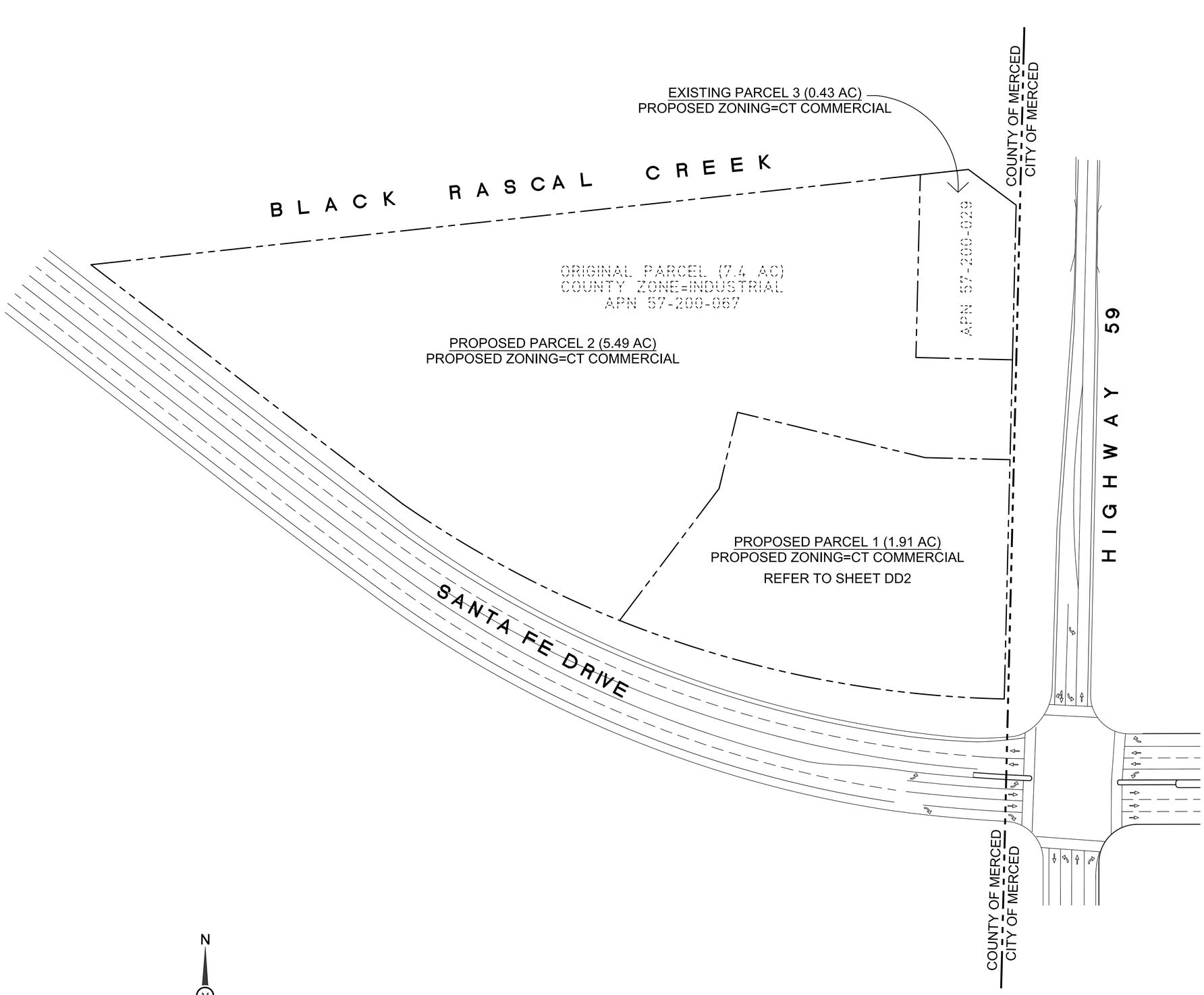
USFWS. 2005a. Part II, Department of the Interior, Fish and Wildlife Service. 50 CFR Part 17: Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for Four Vernal Pool Crustaceans and Eleven Vernal Pool Plants in California and Southern Oregon; Evaluation and Economic Exclusions from August 2003 Final Designation, Final Rule. Federal Register Vol. 70, No. 154, August 11.

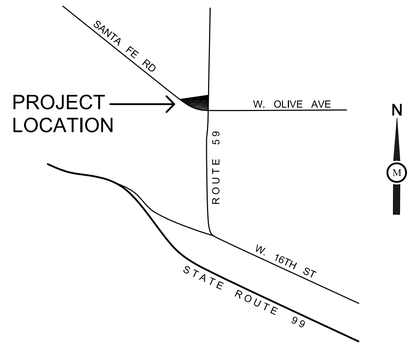
USFWS. 2005b. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the California Tiger Salamander, Central Population; Final Rule. Federal Register Vol. 70, No. 162, August 23, 2005, pp. 49390 – 49458.

USFWS. 2006. Part II, Department of the Interior, Fish and Wildlife Service. 50 CFR Part 17: Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for California Red-Legged Frog, and Special Rule Exemption Associated with Final Listing for Existing Routine Ranching Activities, Final Rule. Federal Register Vol. 71, No. 71, April 13.

Attachment A

Tentative Map and Site Plan





VICINITY MAP

NOT TO SCALE

LOT DATA:

A.P.N.:	57-200-067 & 57-200-029
TOTAL ACREAGE:	341,075 SF (7.83 AC)
EXISTING PARCELS:	2
PROPOSED PARCELS:	3
EXISTING ZONE:	INDUSTRIAL (COUNTY)
PROPOSED ZONE:	C-T DISTRICT COMMERCIAL (CITY)
EXISTING USE:	VACANT
PROPOSED USE:	CONVENIENCE STORE, GASOLINE SALES, CARWASH, AND QUICK SERVE RESTAURANT (QSR) W/ DRIVE THRU

PARCEL	BLDG. SQ. FT.	ACREAGE
1	7,226	1.91
2	FUTURE DEVELOPMENT	5.49
3	FUTURE DEVELOPMENT	0.43
TOTAL	7,226	7.83

PROPERTY DESCRIPTION

A PORTION OF LOT 96 AND A PORTION OF THE WEST 40 FEET OF THE 100 FOOT WIDE SOUTHERN PACIFIC RAILROAD-OAKDALE BRANCH RIGHT-OF-WAY (NOW ABANDONED) AS SHOWN ON THE MAP ENTITLED, MAP OF THE CROCKER COLONY, RECORDED IN VOLUME 5 OF OFFICIAL PLATS, PAGE 6, MERCED COUNTY RECORDS

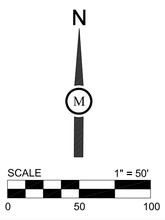
SITE UTILITIES:	PROVIDED BY:
SEWAGE DISPOSAL:	CITY
WATER SUPPLY:	CITY
DRAINAGE:	CITY

APPLICANT

NORCAL CAJUN FOODS II, INC.
CONTACT: SANDY MANN
2190 MERIDIAN PARK BLVD, STE. G
CONCORD, CA 94520
PHONE: (925) 446-6806

DESIGN FIRM

MILESTONE ASSOCIATES
CONTACT: JULIO TINAJERO
1000 LINCOLN ROAD, STE. H202
YUBA CITY, CA 95991
PHONE: (530) 755-4700



PROPOSED TENTATIVE MAP

SCALE: 1" = 50'

Milestone Associates
Imagineering
1000 LINCOLN ROAD, STE. H202, YUBA CITY, CA 95991
TEL (530) 755-4700 FAX (530) 755-4687

SEAL

REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER LLOYD DAY
No. C 64309
exp. 6/30/17
CIVIL
STATE OF CALIFORNIA

ISSUES / REVISIONS

DATE	DESCRIPTION
9-26-16	REVISED ANNEXATION SUBMITTAL
8-29-16	REVISED ANNEXATION SUBMITTAL
4-18-16	REVISED ANNEXATION SUBMITTAL
11-4-15	ANNEXATION SUBMITTAL

DRAWN BY:

CHK'D BY:

ARCO / FREDDYS RESTAURANT
NORCAL CAJUN FOODS II, INC.
HIGHWAY 59 @ SANTA FE DRIVE
MERCED, CA 95348
A.P.N.: 57-200-067

Freddy's STEAKBURGERS

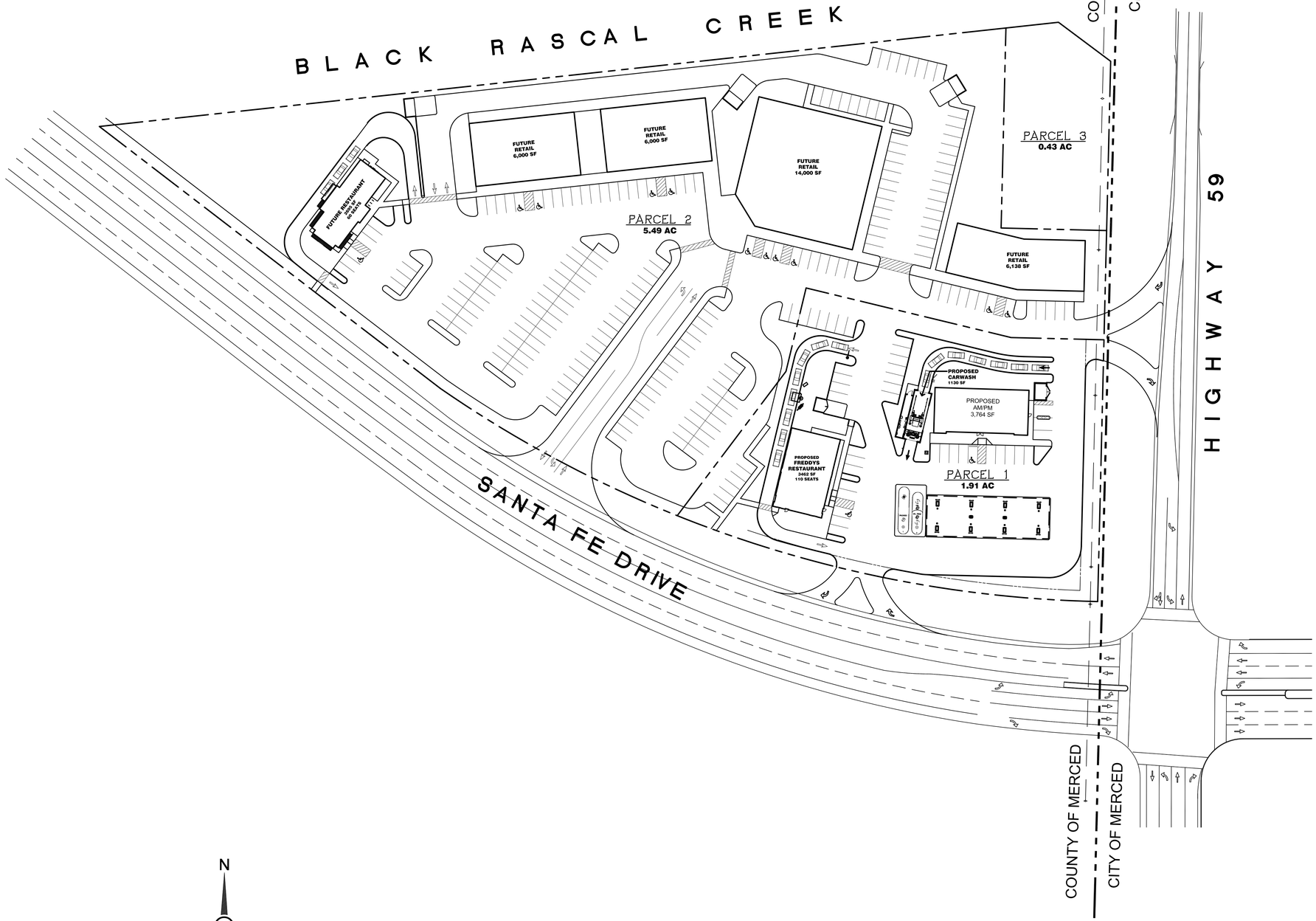
ARCO
BP WEST COAST PRODUCTS, LLC

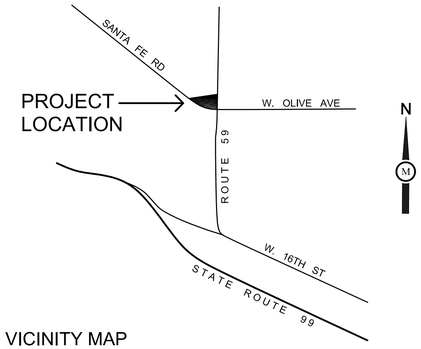
SHEET TITLE

PROPOSED TENTATIVE MAP

PROJECT NO: 15-916

TM





VICINITY MAP

NOT TO SCALE

LOT DATA:

A.P.N.:	57-200-067 & 57-200-029
TOTAL ACREAGE:	341,075 SF (7.83 AC)
EXISTING PARCELS:	2
PROPOSED PARCELS:	3
EXISTING ZONE:	INDUSTRIAL (COUNTY)
PROPOSED ZONE:	C-T DISTRICT COMMERCIAL (CITY)
EXISTING USE:	VACANT
PROPOSED USE:	CONVENIENCE STORE, GASOLINE SALES, CARWASH, AND QUICK SERVE RESTAURANT (QSR) W/ DRIVE THRU

PARCEL	BLDG. SQ. FT.	ACREAGE
1	7,226	1.91
2	FUTURE DEVELOPMENT	5.49
3	FUTURE DEVELOPMENT	0.43
TOTAL	7,226	7.83

PARKING DATA:

REQUIRED:	
C-STORE (3764/250 SF):	15 SPACES
FREDDYS (110 SEATS/2.5):	44 SPACES
CARWASH	2 SPACES
REQUIRED:	61 SPACES

PROVIDED:	
STANDARD SPACE (9'x20')	42 SPACES
SPACES AT FUEL PUMPS	16 SPACES
RECIPROCAL SPACES	2 SPACES
ACCESSIBLE SPACE (9'x20')	2 SPACES
PROVIDED:	62 SPACES

PROPERTY DESCRIPTION

A PORTION OF LOT 96 AND A PORTION OF THE WEST 40 FEET OF THE 100 FOOT WIDE SOUTHERN PACIFIC RAILROAD-OAKDALE BRANCH RIGHT-OF-WAY (NOW ABANDONED) AS SHOWN ON THE MAP ENTITLED, MAP OF THE CROCKER COLONY, RECORDED IN VOLUME 5 OF OFFICIAL PLATS, PAGE 6, MERCED COUNTY RECORDS

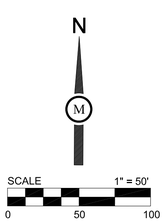
SITE UTILITIES:	PROVIDED BY:
SEWAGE DISPOSAL:	CITY
WATER SUPPLY:	CITY
DRAINAGE:	CITY

APPLICANT

NORCAL CAJUN FOODS II, INC.
CONTACT: SANDY MANN
2190 MERIDIAN PARK BLVD, STE. G
CONCORD, CA 94520
PHONE: (925) 446-6806

DESIGN FIRM

MILESTONE ASSOCIATES
CONTACT: JULIO TINAJERO
1000 LINCOLN ROAD, STE. H202
YUBA CITY, CA 95991
PHONE: (530) 755-4700



OVERALL PROJECT S I T E

SCALE: 1" = 50'

RECEIVED
MERCED CITY PLANNING
9-27-16

Milestone Associates
Imagineering
1000 LINCOLN ROAD, STE. H202, YUBA CITY, CA 95991
TEL (530) 755-4700 FAX (530) 755-4687

SEAL

REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER LLOYD DAY
No. C 64309
exp. 6/30/17
CIVIL
STATE OF CALIFORNIA

ISSUES / REVISIONS

DATE	DESCRIPTION
9-26-16	REVISED ANNEXATION SUBMITTAL
8-29-16	REVISED ANNEXATION SUBMITTAL
4-18-16	REVISED ANNEXATION SUBMITTAL
11-4-15	ANNEXATION SUBMITTAL

DRAWN BY:

CHK'D BY:

ARCO / FREDDYS RESTAURANT
NORCAL CAJUN FOODS II, INC.
HIGHWAY 59 @ SANTA FE DRIVE
MERCED, CA 95348
A.P.N.: 57-200-067

Freddy's STEAKBURGERS

ARCO
BP WEST COAST PRODUCTS, LLC

SHEET TITLE
OVERALL
SITE PLAN

PROJECT NO: 15-916

DD1

Attachment B

CNDDB Summary Report and Exhibits

& USFWS Species List

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Merced (3712034) OR Atwater (3712035))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Candidate Endangered	G2G3	S1S2	SSC
Ambystoma californiense California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Atriplex persistens vernal pool smallscale	PDCHE042P0	None	None	G2	S2	1B.2
Branchinecta conservatio Conservancy fairy shrimp	ICBRA03010	Endangered	None	G2	S2	
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Branchinecta mesovallensis midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
California macrophylla round-leaved filaree	PDGER01070	None	None	G3?	S3?	1B.2
Castilleja campestris var. succulenta succulent owl's-clover	PDSCR0D3Z1	Threatened	Endangered	G4?T2T3	S2S3	1B.2
Charadrius montanus mountain plover	ABNNB03100	None	None	G3	S2S3	SSC
Downingia pusilla dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Eryngium spinosepalum spiny-sepaled button-celery	PDAPI0Z0Y0	None	None	G2	S2	1B.2
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G5T4	S3S4	SSC
Haliaeetus leucocephalus bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
Lagophylla dichotoma forked hare-leaf	PDAST5J070	None	None	G2	S2	1B.1
Lepidurus packardi vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G4	S3S4	
Linderiella occidentalis California linderiella	ICBRA06010	None	None	G2G3	S2S3	

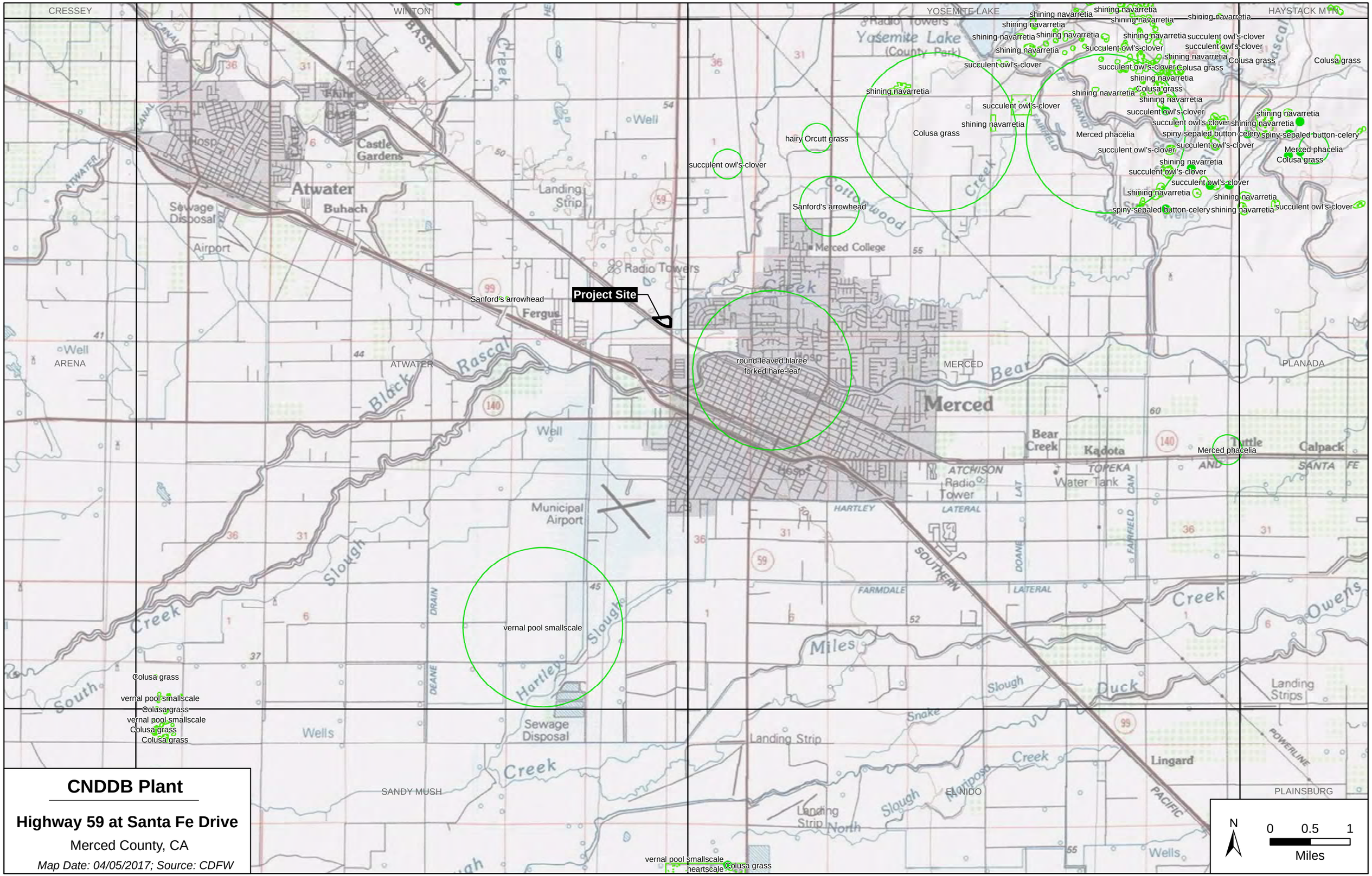
Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Navarretia nigelliformis ssp. radians shining navarretia	PDPLM0C0J2	None	None	G4T2	S2	1B.2
Neostapfia colusana Colusa grass	PMPOA4C010	Threatened	Endangered	G1	S1	1B.1
Orcuttia inaequalis San Joaquin Valley Orcutt grass	PMPOA4G060	Threatened	Endangered	G1	S1	1B.1
Orcuttia pilosa hairy Orcutt grass	PMPOA4G040	Endangered	Endangered	G1	S1	1B.1
Phacelia ciliata var. opaca Merced phacelia	PDHYD0C0S2	None	None	G5TH	SH	3.2
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Thamnophis gigas giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
Vulpes macrotis mutica San Joaquin kit fox	AMAJA03041	Endangered	Threatened	G4T2	S2	

Record Count: 28

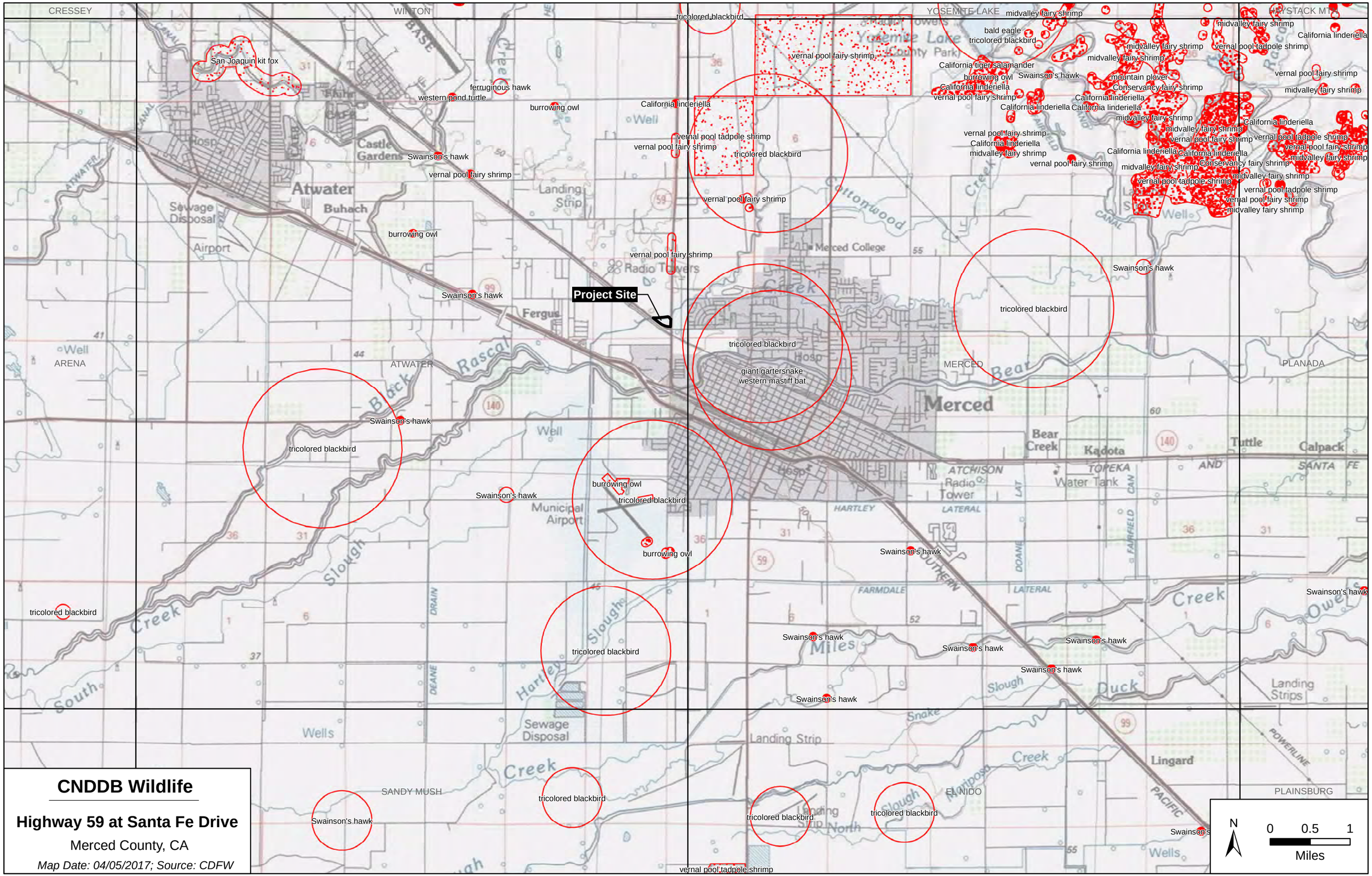


CNDDB Plant

Highway 59 at Santa Fe Drive

Merced County, CA

Map Date: 04/05/2017; Source: CDFW



CNDDB Wildlife

Highway 59 at Santa Fe Drive

Merced County, CA

Map Date: 04/05/2017; Source: CDFW

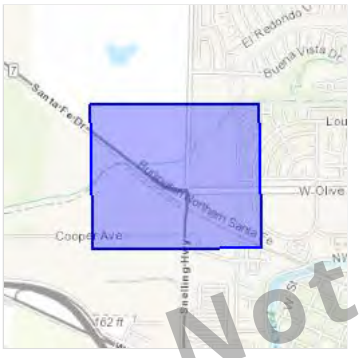
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Merced County, California



Not for consultation

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.

5. Click REQUEST SPECIES LIST.

Listed species[1] are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
San Joaquin Kit Fox Vulpes macrotis mutica No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2873	Endangered

Reptiles

NAME	STATUS
Blunt-nosed Leopard Lizard Gambelia silus No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/625	Endangered
Giant Garter Snake Thamnophis gigas No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander Ambystoma californiense There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt Hypomesus transpacificus There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/321	Threatened
Steelhead Oncorhynchus (=Salmo) mykiss There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/1007	Threatened

Insects

NAME	STATUS
Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS

Conservancy Fairy Shrimp Branchinecta conservatio There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp Branchinecta lynchi There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp Lepidurus packardi There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/2246	Endangered

Flowering Plants

NAME	STATUS
Colusa Grass Neostapfia colusana There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/5690	Threatened
Fleshy Owl's-clover Castilleja campestris ssp. succulenta There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/8095	Threatened
Hairy Orcutt Grass Orcuttia pilosa There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/2262	Endangered
San Joaquin Orcutt Grass Orcuttia inaequalis There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/5506	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service[3]. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php

- Conservation measures for birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Year-round bird occurrence data http://www.birdscanada.org/birdmon/default/datasummaries.jsp

The migratory birds species listed below are species of particular conservation concern (e.g. Birds of Conservation Concern) that may be potentially affected by activities in this location. It is not a list of every bird species you may find in this location, nor a guarantee that all of the bird species on this list will be found on or near this location. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To view available data on other bird species that may occur in your project area, please visit the AKN Histogram Tools and Other Bird Data Resources. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

NAME	SEASON(S)
Allen's Hummingbird Selasphorus sasin https://ecos.fws.gov/ecp/species/9637	Migrating
Bald Eagle Haliaeetus leucocephalus https://ecos.fws.gov/ecp/species/1626	Wintering
Black Rail Laterallus jamaicensis https://ecos.fws.gov/ecp/species/7717	Breeding
Burrowing Owl Athene cunicularia https://ecos.fws.gov/ecp/species/9737	Year-round
Calliope Hummingbird Stellula calliope https://ecos.fws.gov/ecp/species/9526	Migrating
Costa's Hummingbird Calypte costae https://ecos.fws.gov/ecp/species/9470	Year-round
Fox Sparrow Passerella iliaca	Wintering
Lesser Yellowlegs Tringa flavipes https://ecos.fws.gov/ecp/species/9679	Wintering
Lewis's Woodpecker Melanerpes lewis https://ecos.fws.gov/ecp/species/9408	Wintering
Loggerhead Shrike Lanius ludovicianus https://ecos.fws.gov/ecp/species/8833	Year-round
Long-billed Curlew Numenius americanus https://ecos.fws.gov/ecp/species/5511	Wintering
Marbled Godwit Limosa fedoa https://ecos.fws.gov/ecp/species/9481	Wintering
Nuttall's Woodpecker Picoides nuttallii https://ecos.fws.gov/ecp/species/9410	Year-round
Oak Titmouse Baeolophus inornatus https://ecos.fws.gov/ecp/species/9656	Year-round
Peregrine Falcon Falco peregrinus https://ecos.fws.gov/ecp/species/8831	Wintering
Rufous Hummingbird selasphorus rufus https://ecos.fws.gov/ecp/species/8002	Migrating
Short-eared Owl Asio flammeus https://ecos.fws.gov/ecp/species/9295	Wintering

Snowy Plover Charadrius alexandrinus	Breeding
Swainson's Hawk Buteo swainsoni https://ecos.fws.gov/ecp/species/1098	Breeding
Tricolored Blackbird Agelaius tricolor https://ecos.fws.gov/ecp/species/3910	Year-round
Western Grebe aechmophorus occidentalis https://ecos.fws.gov/ecp/species/6743	Wintering
Williamson's Sapsucker Sphyrapicus thyroideus https://ecos.fws.gov/ecp/species/8832	Year-round
Yellow-billed Magpie Pica nuttalli https://ecos.fws.gov/ecp/species/9726	Year-round

What does IPaC use to generate the list of migratory bird species potentially occurring in my specified location?

Landbirds:

Migratory birds that are displayed on the IPaC species list are based on ranges in the latest edition of the National Geographic Guide, Birds of North America (6th Edition, 2011 by Jon L. Dunn, and Jonathan Alderfer). Although these ranges are coarse in nature, a number of U.S. Fish and Wildlife Service migratory bird biologists agree that these maps are some of the best range maps to date. These ranges were clipped to a specific Bird Conservation Region (BCR) or USFWS Region/Regions, if it was indicated in the 2008 list of Birds of Conservation Concern (BCC) that a species was a BCC species only in a particular Region/Regions. Additional modifications have been made to some ranges based on more local or refined range information and/or information provided by U.S. Fish and Wildlife Service biologists with species expertise. All migratory birds that show in areas on land in IPaC are those that appear in the 2008 Birds of Conservation Concern report.

Atlantic Seabirds:

Ranges in IPaC for birds off the Atlantic coast are derived from species distribution models developed by the National Oceanic and Atmospheric Association (NOAA) National Centers for Coastal Ocean Science (NCCOS) using the best available seabird survey data for the offshore Atlantic Coastal region to date. NOAANCCOS assisted USFWS in developing seasonal species ranges from their models for specific use in IPaC. Some of these birds are not BCC species but were of interest for inclusion because they may occur in high abundance off the coast at different times throughout the year, which potentially makes them more susceptible to certain types of development and activities taking place in that area. For more refined details about the abundance and richness of bird species within your project area off the Atlantic Coast, see the Northeast Ocean Data Portal. The Portal also offers data and information about other types of taxa that may be helpful in your project review.

About the NOAANCCOS models: the models were developed as part of the NOAANCCOS project: Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf. The models resulting from this project are being used in a number of decision-support/mapping products in order to help guide decision-making on activities off the Atlantic Coast with the goal of reducing impacts to migratory birds. One such product is the Northeast Ocean Data Portal, which can be used to explore details about the relative occurrence and abundance of bird species in a particular area off the Atlantic Coast.

All migratory bird range maps within IPaC are continuously being updated as new and better information becomes available.

Can I get additional information about the levels of occurrence in my project area of specific birds or groups of birds listed in IPaC?

Landbirds:

The Avian Knowledge Network (AKN) provides a tool currently called the "Histogram Tool", which draws from the data within the AKN (latest,survey, point count, citizen science datasets) to create a view of relative abundance of species within a particular location over the course of the year. The results of the tool depict the frequency of detection of a species in survey events, averaged between multiple datasets within AKN in a particular week of the year. You may access the histogram tools through the Migratory Bird Programs AKN Histogram Tools webpage.

The tool is currently available for 4 regions (California, Northeast U.S., Southeast U.S. and Midwest), which encompasses the following 32 states: Alabama, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New York, North, Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin.

In the near future, there are plans to expand this tool nationwide within the AKN, and allow the graphs produced to appear with the list of trust resources generated by IPaC, providing you with an additional level of detail about the level of occurrence of the species of particular concern potentially occurring in your project area throughout the course of the year.

Atlantic Seabirds:

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAANCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Facilities

Wildlife refuges

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGES AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location overlaps the following wetlands:

FRESHWATER POND
PUBFx

A full description for each wetland code can be found at the National Wetlands Inventory website: https://ecos.fws.gov/ipac/wetlands/decoder

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Attachment C

Photographs



Disked ruderal grassland in the east part of the site, looking west; 04/27/17.



Disked ruderal grassland in the norhtwest part of the site, looking northwest; 04/27/17.



Disked ruderal grassland in the west part of the site, looking south; 04/27/17.



Eucalyptus trees in the southeast part of the site, looking south; 04/27/17.



North Highway 59 along the east edge of the site, looking south; 04/27/17.



Black Rascal Creek along the northedge of the site, looking west; 04/27/17.



Black Rascal Creek, looking northwest from the North Highway 59 bridge; 04/27/17.



Black Rascal Creek, looking east from the Santa Fe Drive bridge; 04/27/17.



Constructed ditch in the southeast corner of the site, looking east; 04/27/17. Water in this ditch flows from the east under North Highway 59 and leaves the site under Santa Fe Drive.



Same ditch as shown above, looking west from the North Highway 59 culvert; 04/27/17. The section of ditch in the corner of the site is approximately 100 feet long.

Attachment D

Designated Critical Habitat

Colusa grass, Conservancy fairy shrimp,
Fleshy owl's-clover, Greene's tuctoria,
San Joaquin Orcutt grass, Vernal pool fairy shrimp

California tiger Salamander

Project Site

Critical Habitat

Highway 59 at Santa Fe Drive

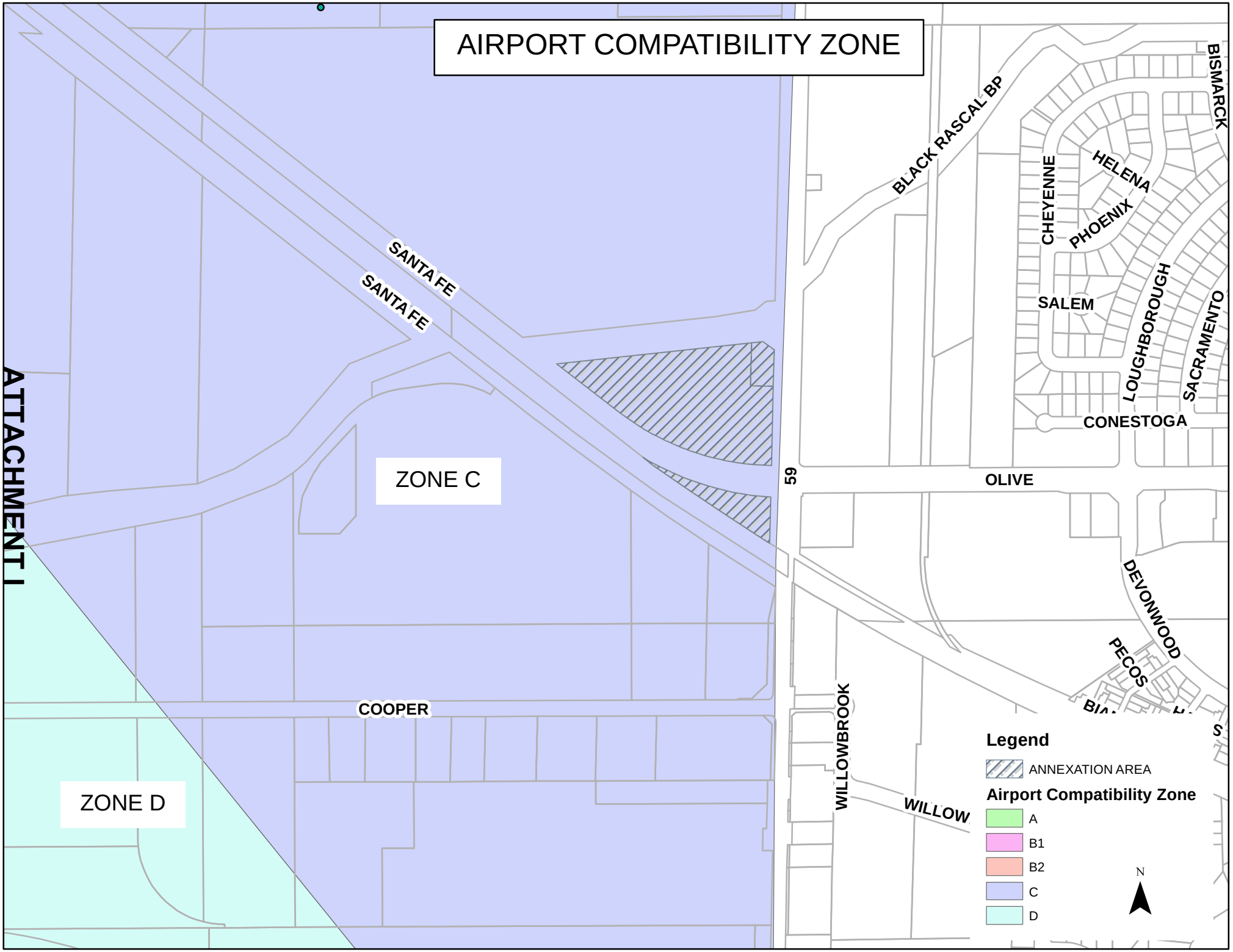
Merced County, CA

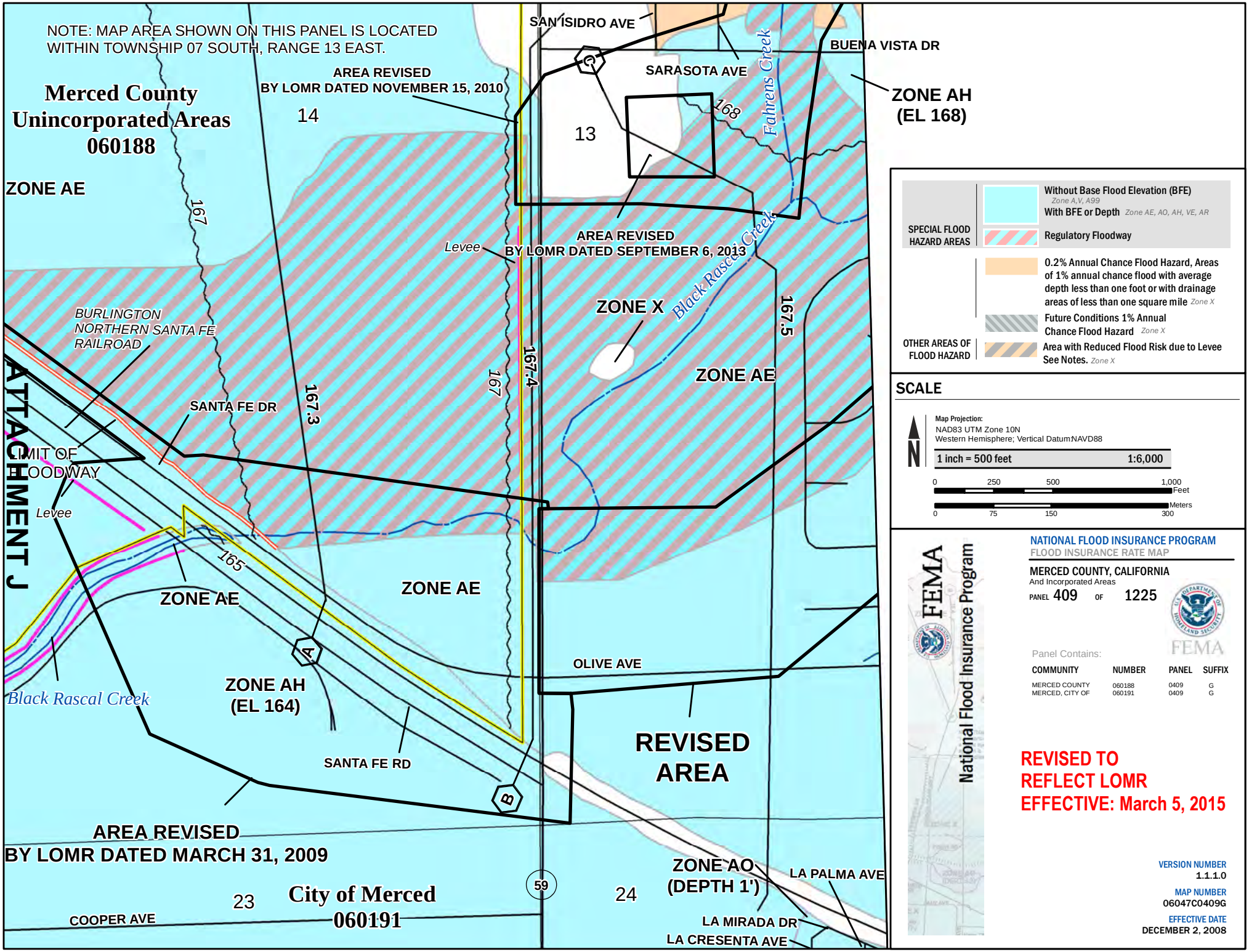
Map Date: 04/05/2017; Source: USFWS

N

0 0.5 1

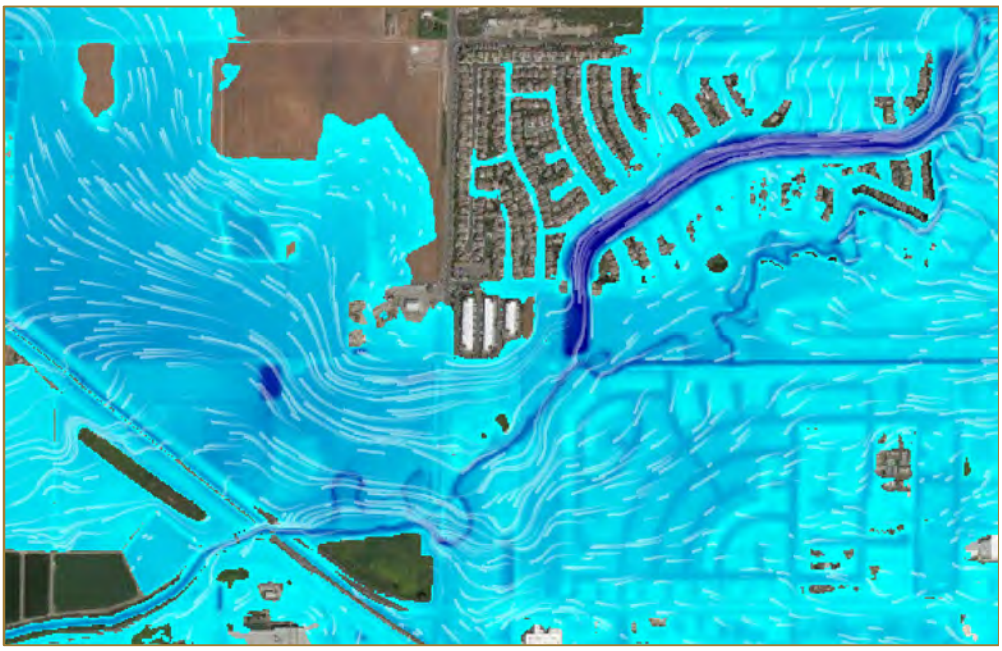
Miles


AIRPORT COMPATIBILITY ZONE
ATTACHMENT I
ZONE C
ZONE D
SANTA FE
SANTA FE
COOPER
BLACK RASCAL BP
BISMARCK
HELENA
CHEYENNE
PHOENIX
SALEM
LOUGHBOROUGH
SACRAMENTO
CONESTOGA
59
OLIVE
DEVONWOOD
PECOS
WILLOWBROOK
WILLOW
Legend
ANNEXATION AREA
Airport Compatibility Zone
A
B1
B2
C
D
N


NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 07 SOUTH, RANGE 13 EAST.
Merced County Unincorporated Areas 060188
ZONE AE
AREA REVISED BY LOMR DATED NOVEMBER 15, 2010
14
13
SAN ISIDRO AVE
SARASOTA AVE
BUENA VISTA DR
ZONE AH (EL 168)
168
Fahrens Creek
AREA REVISED BY LOMR DATED SEPTEMBER 6, 2013
Levee
Black Rascal Creek
ZONE X
ZONE AE
167
167.3
167.4
167.5
BURLINGTON NORTHERN SANTA FE RAILROAD
SANTA FE DR
LIMIT OF FLOODWAY
Levee
165
ZONE AE
ZONE AE
ZONE AH (EL 164)
Black Rascal Creek
OLIVE AVE
SANTA FE RD
REVISED AREA
AREA REVISED BY LOMR DATED MARCH 31, 2009
23
City of Merced 060191
59
24
ZONE AO (DEPTH 1')
LA PALMA AVE
LA MIRADA DR
LA CRESENTA AVE
COOPER AVE
ATTACHMENT J
SPECIAL FLOOD HAZARD AREAS
Without Base Flood Elevation (BFE) Zone A,V, A99
With BFE or Depth Zone AE, AO, AH, VE, AR
Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD
0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
Future Conditions 1% Annual Chance Flood Hazard Zone X
Area with Reduced Flood Risk due to Levee See Notes. Zone X
SCALE
Map Projection:
NAD83 UTM Zone 10N
Western Hemisphere; Vertical Datum:NAVD88
1 inch = 500 feet 1:6,000
0 250 500 1,000 Feet
0 75 150 300 Meters
FEMA
National Flood Insurance Program
NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP
MERCED COUNTY, CALIFORNIA
And Incorporated Areas
PANEL 409 OF 1225
Panel Contains:
COMMUNITY NUMBER PANEL SUFFIX
MERCED COUNTY 060188 0409 G
MERCED, CITY OF 060191 0409 G
REVISED TO REFLECT LOMR EFFECTIVE: March 5, 2015
VERSION NUMBER 1.1.1.0
MAP NUMBER 06047C0409G
EFFECTIVE DATE DECEMBER 2, 2008

Highway 59 Retail Center
Merced County, California

Black Rascal Creek Urban Level of Flood Protection (ULOP) Study



January
2018

Final Report

Prepared for:

59 Petroleum LLC

Prepared by:

RIVER FOCUS
WATER RESOURCE CONSULTANTS

ATTACHMENT K

Highway 59 Retail Center
Merced County, California

Black Rascal Creek Urban Level of Flood Protection (ULOP) Study

Final Report

January 2018

Prepared for

59 Petroleum LLC

Prepared by

River Focus, Inc.
www.riverfocus.com



A. Jake Gusman, P.E.
Project Manager, River Focus

Table of Contents

1 INTRODUCTION 1
1.1 Study Purpose 1
1.2 FEMA Floodplain Mapping 2
1.3 Urban Level of Flood Protection Requirements 2
2 HYDROLOGY 4
2.1 Black Rascal Creek Diversion – Levee Breach 4
2.2 Fahrens Creek 5
2.3 Summary 6
3 HYDRAULIC MODELING 7
3.1 Effective FEMA Model 7
3.2 Hydraulic Model Data/Parameters 7
3.3 Model Output 11
4 ULOP IMPOSED CONDITIONS 17
5 ULOP CERTIFICATION 18
5.1 Certification Conditions 18
5.2 Certification Statement 18
6 REFERENCES 19
7 ACKNOWLEDGMENTS 19

List of Tables

Table 2-1. Fahrens Creek – FEMA Peak Discharges (FEMA, 2008) 5
Table 2-2. Peak Discharge Comparison 6
Table 3-1. Manning's Roughness Values 8
Table 4-1. Proposed Fill Elevations – Project Site 17

List of Figures

Figure 1-1. Study Area Location Map 1
Figure 1-2. FEMA Flood Insurance Rate Map (LOMR Case No. 09-09-1124P) 2
Figure 2-1. Black Rascal Creek Diversion Channel – 200-year Breach Hydrograph 4
Figure 2-2. Fahrens Creek – 200-year Hydrograph 6
Figure 3-1. Black Rascal Creek Upstream of Highway 59 (Facing Downstream) 8
Figure 3-2. HEC-RAS 2-D Mesh with Model Inflow Locations 9
Figure 3-3. Manning's Roughness Layer 10
Figure 3-4. HEC-RAS Computed Hydrograph at Highway 59 12
Figure 3-5. HEC-RAS Maximum 200-year Flood Depth 13
Figure 3-6. HEC-RAS Maximum 200-year Water Surface Elevation (1-ft Contours Shown) 14
Figure 3-7. HEC-RAS 200-year Model Flow Trace 15
Figure 3-8. Maximum 200-year Flood Elevation– 0.1-ft Contours near Project Site (with Flood Depth) 16

1 INTRODUCTION

The proposed Highway 59 Retail Center Project is located on an undeveloped 10-acre parcel bounded by Santa Fe Drive, State Highway 59, and Black Rascal Creek. The triangular-shaped parcel is currently in unincorporated Merced County, but is slated for annexation by the City of Merced. A location map showing the study area and project site is provided in Figure 1-1.



Figure 1-1. Study Area Location Map

1.1 Study Purpose

Before annexation and development approval can occur, a floodplain study must be performed based on the California Department of Water Resources' Urban Level of Flood Protection (ULOP) Criteria (DWR, 2013). The proposed project must be shown to provide the level of protection required to withstand a 0.5-percent annual chance exceedance (200-year) flood event. In this case, fill will be placed on the site to provide the required level of protection. The purpose of this study is to (1) establish the 200-year flood elevations along the project site using the latest hydrology and hydraulic modeling and (2) determine the required fill elevations to protect the project site from the 200-year flood event.

1.2 FEMA Floodplain Mapping

The project site is located within a FEMA Special Flood Hazard Area—the Zone AE (100-year) floodplain from Black Rascal Creek. The FEMA regulatory floodway for the creek is generally located just north of the site based on the March 31, 2009, FEMA Letter of Map Revision (LOMR) for the project area (Case No. 09-09-1124P). River Focus requested and obtained the FEMA Flood Insurance Study (FIS) backup data from the FEMA Project Library, which included the effective HEC-2 hydraulic model for the study reach.

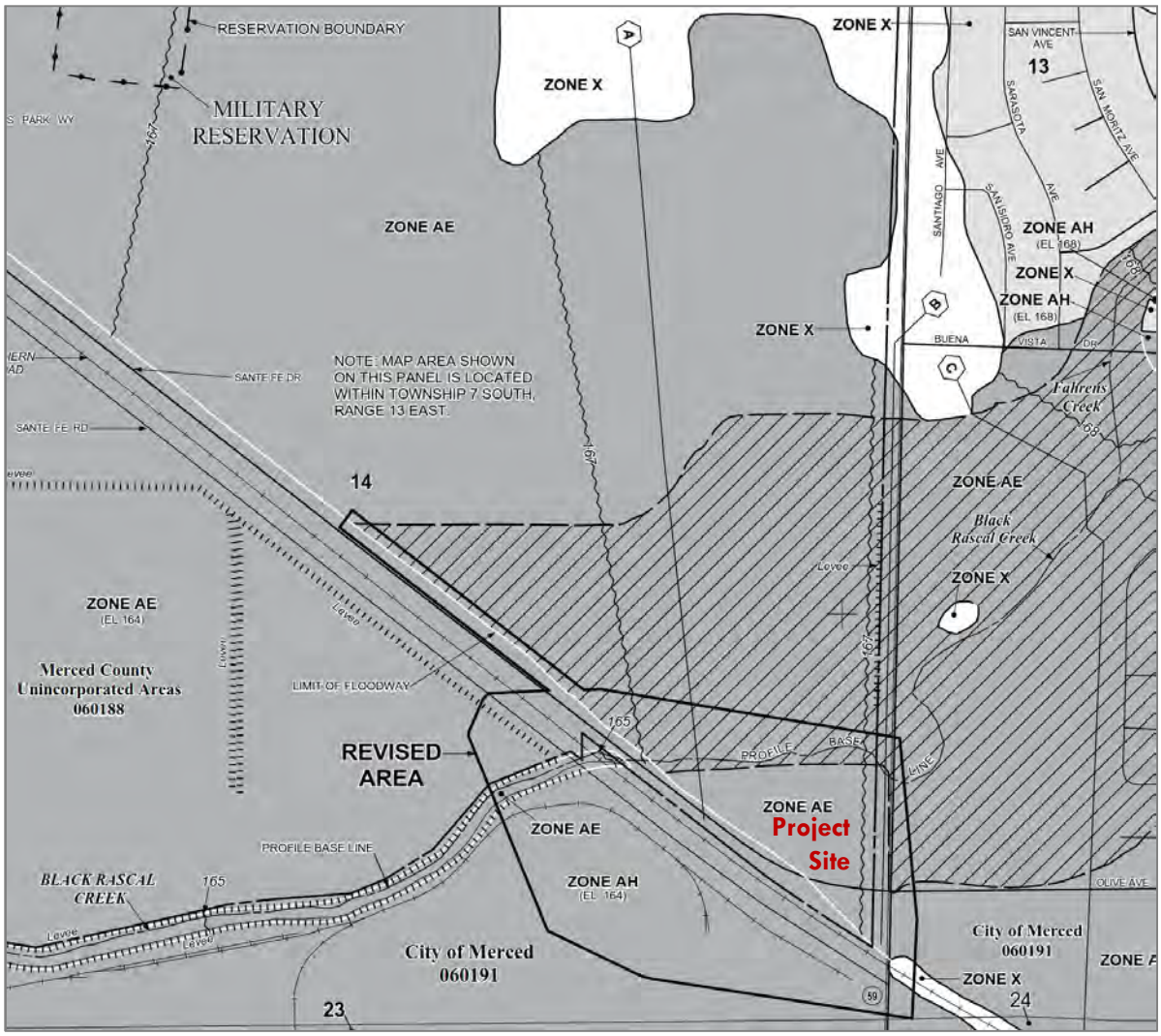


Figure 1-2. FEMA Flood Insurance Rate Map (LOMR Case No. 09-09-1124P)

1.3 Urban Level of Flood Protection Requirements

The State of California's Urban Level of Flood Protection (ULOP) Criteria were developed in 2013, in response to the Central Valley Flood Protection Act of 2008, with the purpose of strengthening the link between flood management and land use in the Central Valley. According to the August 2017 Central Valley Flood Protection Plan Update (DWR, 2017), no updates have been made to ULOP Criteria since November 2013.

Specific requirements from the ULOP Criteria that are applicable to the study area are shown below.

FND-1: Cities and counties shall make a finding related to an urban level of flood protection or the national FEMA standard of flood protection based on substantial evidence in the record for one of the following before approving any affected land-use decisions:

- *That the imposed conditions by the city or county on a property, development project, or subdivision are sufficient to provide the required level of flood protection (California Government Code Sections 65865.5, 65962, and 66474.5).*

EVD-2: Substantial evidence in the record to support a finding related to an urban level of flood protection based on imposed conditions shall include the following, at a minimum:

- *A list of the conditions imposed by the city or county that is consistent with existing codes and regulations, responsible entities for implementing the conditions, and a plan and schedule by which the imposed conditions will be met.*
- *A report prepared by a Professional Civil Engineer registered in California to document the data and analyses for demonstrating the imposed conditions will result in the property, development project, or subdivision having an urban level of flood protection.*
- *Any additional data and information that cities or counties use to make the finding.*

This study report has been prepared by a Professional Civil Engineer registered in California and documents the data and analysis used to demonstrate that the imposed conditions (i.e., fill) will result in the development project having an urban level of flood protection.

2 HYDROLOGY

The project reach is impacted by two main flooding sources: (1) a potential levee breach from the Black Rascal Creek Diversion Channel, located approximately 7 miles east of the project site, and (2) Fahrens Creek, which joins Black Rascal Creek approximately 2000 feet east of the project site.

2.1 Black Rascal Creek Diversion – Levee Breach

Flow from the Black Rascal Creek watershed is diverted toward Bear Creek via the Black Rascal Creek Diversion Channel. The California Department of Water Resources (DWR), through their contractor RBF Consulting, developed levee breach hydrographs for the Black Rascal Creek Diversion Channel (DWR Task Order No. 32).

Three potential breach locations were modeled in the DWR study using the U.S. Army Corps of Engineers' HEC-RAS (River Analysis System) program. Breach Location 2, which provides the largest of the three breach hydrographs in terms of peak flow and volume, was used for the current ULOP study. Figure 2-1 shows the 0.5% annual chance exceedance (200-year) hydrograph for Breach Location 2. The peak discharge of the levee breach is 5,938 cfs.

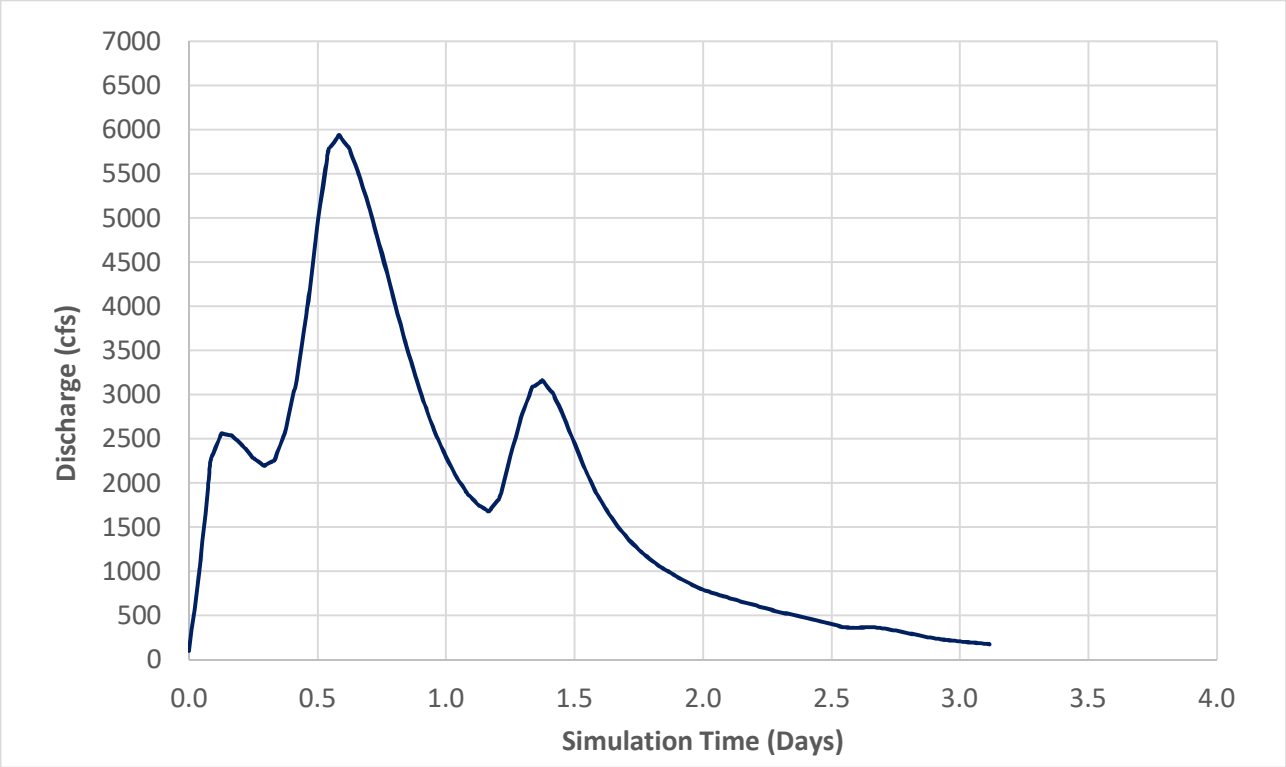


Figure 2-1. Black Rascal Creek Diversion Channel – 200-year Breach Hydrograph

2.2 Fahrens Creek

The 0.5% annual chance exceedance (200-year) peak discharge for Fahrens Creek was computed based on FEMA peak discharges provided in the Flood Insurance Study (FEMA, 2008) and summarized in Table 2-1.

The ratio of the Fahrens Creek 100-year peak discharges at Cottonwood Creek vs. at the confluence with Black Rascal Creek was used—along with the other peak discharges at Cottonwood Creek—to compute the missing peak discharges at the Confluence. Values were then plotted on a Log-Probability scale to estimate a 200-year peak discharge of 6,370 cfs for Fahrens Creek at its confluence with Black Rascal Creek.

Table 2-1. Fahrens Creek – FEMA Peak Discharges (FEMA, 2008)

Recurrence Interval	**Peak Discharge (cfs)**	
	Fahrens Creek @ Cottonwood Creek (Area = 29.2 mi^2)	Fahrens Creek @ Confluence of Black Rascal Creek (Area = 38.5 mi^2)
10-year	1,140	n/a
50-year	2,850	n/a
100-year	3,800	5,400
500-year	6,300	n/a

The Fahrens Creek hydrograph (shown in Figure 2-2) was developed by scaling the main section of the Black Rascal Creek hydrograph to the computed 200-year peak discharge of 6,370 cfs for Fahrens Creek. Because the Fahrens Creek watershed is larger than the Black Rascal Creek watershed, the peak discharge is expected to arrive later. The peak of the Fahrens Creek hydrograph was set at 9 hours after the levee breach hydrograph.

Flow from the Black Rascal Creek Diversion Channel levee breach has farther to travel through the city to reach the project area. As a result, it is reasonable for the peak flows from the two flooding sources, i.e., the levee breach and Fahrens Creek, to reach the project area at a similar time.

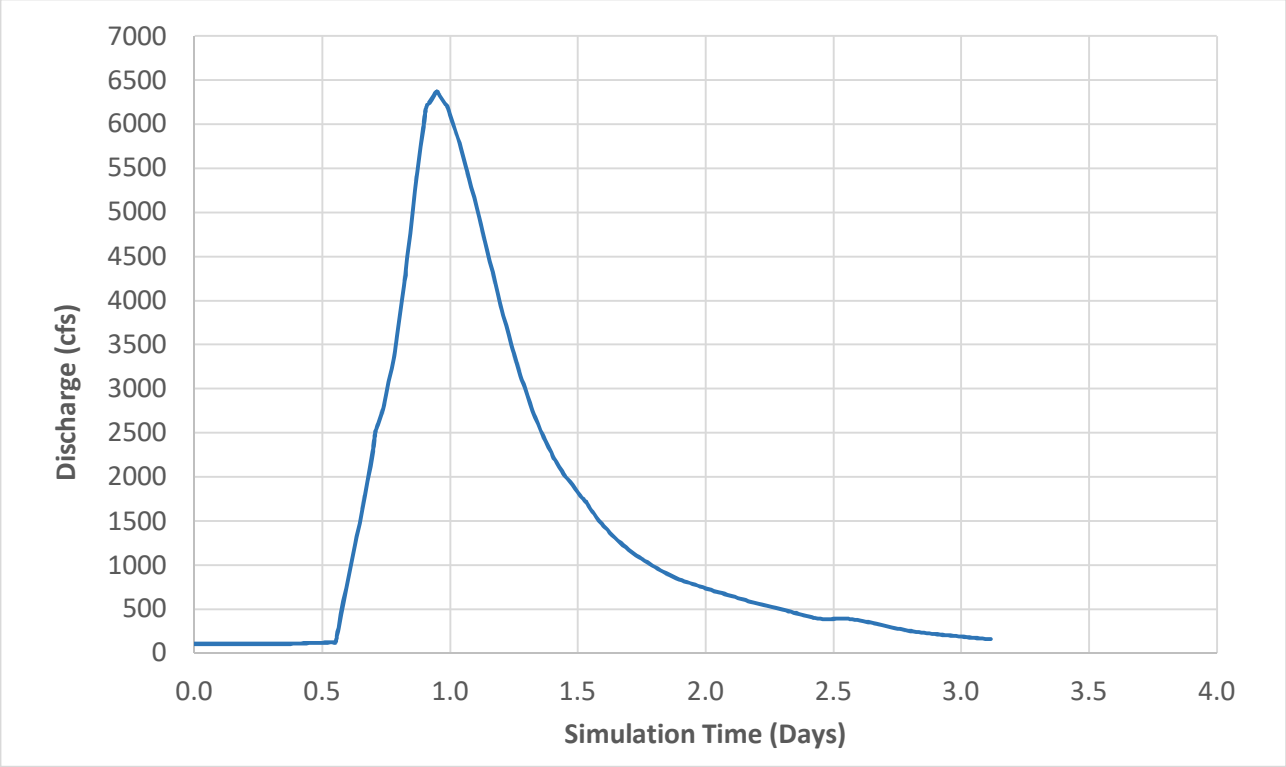


Figure 2-2. Fahrens Creek – 200-year Hydrograph

2.3 Summary

Table 2-2 provides a summary of the peak discharges for each of two flooding sources for the project reach.

Table 2-2. Peak Discharge Comparison

Recurrence Interval	Peak Discharge (cfs)	
	Black Rascal Creek Diversion Levee Breach[1]	Fahrens Creek
200-year	5,938	6,370

1. Peak discharge at levee breach location

3 HYDRAULIC MODELING

3.1 Effective FEMA Model

River Focus reviewed the FEMA effective hydraulic model and found the following:

- The effective model was created using the old DOS-based HEC-2 program. Although FEMA still accepts models using the legacy HEC-2 program, the U.S. Army Corps of Engineers replaced HEC-2 with HEC-RAS more than 20 years ago.
- As is the case with all HEC-2 models, the model cross sections are not georeferenced (i.e., they do not have spatial location information).
- Flow conditions within the floodplain of Black Rascal Creek floodplain is highly two-dimensional (2-D) rather than the one-dimensional (1-D) flow assumed by the effective model.

To produce a more defensible Urban Level of Flood Protection determination for the project site, a 2-D hydraulic model was created for Black Rascal Creek using HEC-RAS (River Analysis System), Version 5.0.3 (HEC, 2016).

3.2 Hydraulic Model Data/Parameters

Model Mesh and Cross Sections

The Black Rascal Creek and Fahrens Creek 2-D model mesh is shown in Figure 3-2. In general, a 100-ft by 100-ft cell size was used, with additional detail for portions of the channel and adjacent to berms and levees. The 2-D modeling approach in HEC-RAS allows for larger mesh sizes, while preserving cell face and storage information.

Vertical Datum and Horizontal Projection

All elevations in this report and in the HEC-RAS model are referenced to the NAVD88 vertical datum. The projection/coordinate system used for this study is NAD 1983 State Plane California IV (FIPS 0404 feet). As-built plan data for the Santa Fe Drive Bridge and the Highway 59 culvert were in the older NGVD29 vertical datum; a conversion factor of +2.454 ft was used to convert the data from NGVD29 to NAVD88.

Topographic Data

High-quality LiDAR topographic data developed for DWR's Central Valley Floodplain Evaluation and Delineation (CVFED) Program was used for the hydraulic model terrain.

Field Reconnaissance

River Focus personnel (Jake Gusman and Darren Bertrand) conducted a field reconnaissance visit on October 20, 2017, to examine creek and overbank conditions and evaluate hydraulic model parameters, bridges, and other structures. Figure 3-1 shows Black Rascal Creek upstream of Highway 59.



Figure 3-1. Black Rascal Creek Upstream of Highway 59 (Facing Downstream)

Manning's Roughness

The channel and overbank roughness (Manning's *n*) values used in the hydraulic model ranged between 0.030 and 0.500, as described in Table 3-1. The Manning's roughness layer is shown in Figure 3-3. The selected *n* values were based on field observations, aerial imagery, engineering references (e.g., Chow, 1959; Engineers Australia, 2014), and engineering judgment.

Table 3-1. Manning's Roughness Values

Manning's *n* Value	Description / Notes
Channel	
0.030	Fahrens Creek, grass-lined channel
0.040	Bear Creek
0.040 to 0.055	Black Rascal Creek
0.055	Fahrens Creek, original creek
Floodplain	
0.022	Open water, pond/basin
0.025	Parking lot
0.030	Vacant land, cultivated areas (no crop)
0.040	Field crops
0.045	Parks, urban landscape
0.050	Grain and hay crops
0.090	Deciduous fruits and nuts
0.120	Agricultural residence
0.150	Urban/residential
0.200	Industrial/commercial
0.500	Buildings (individual)

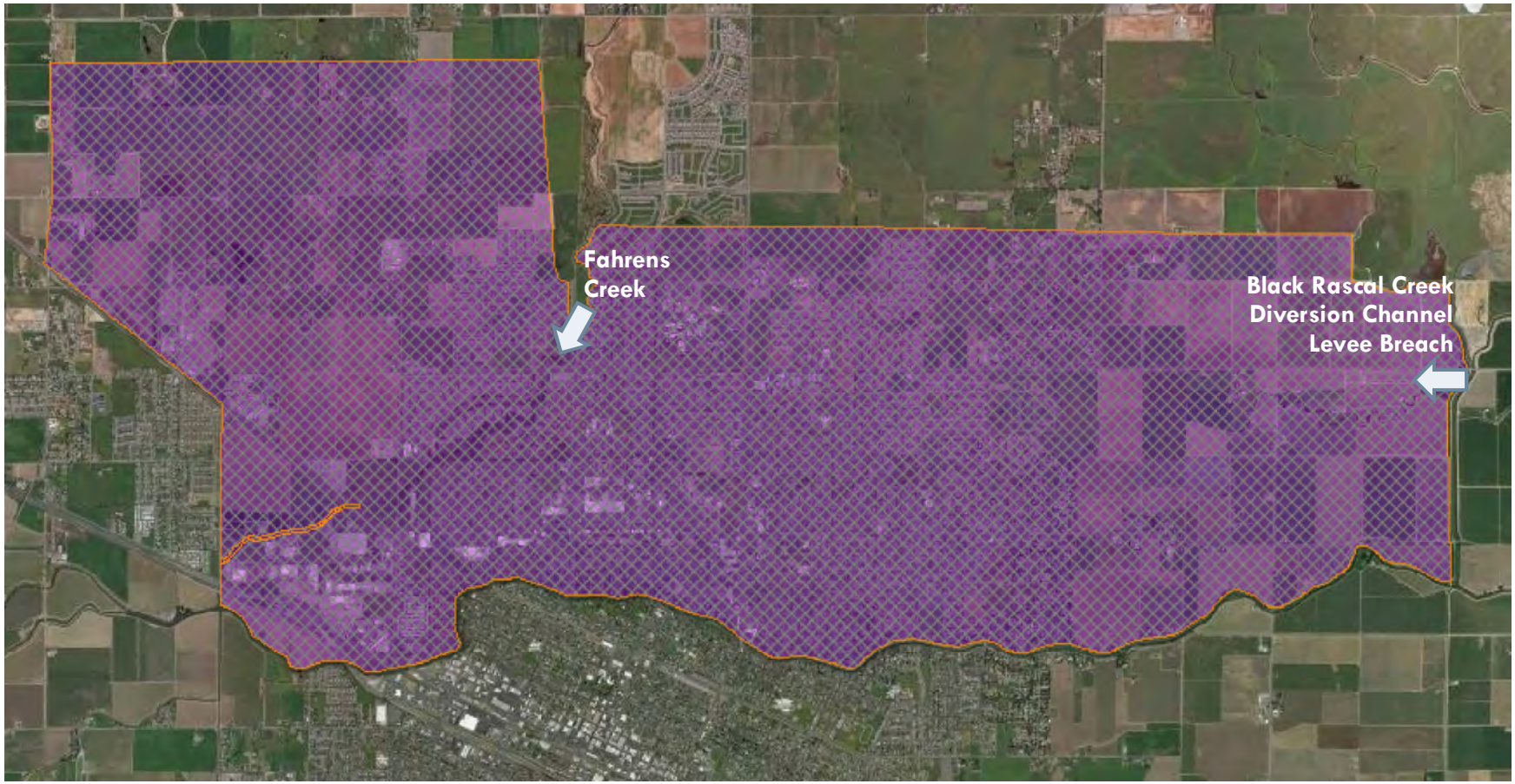


Figure 3-2. HEC-RAS 2-D Mesh with Model Inflow Locations

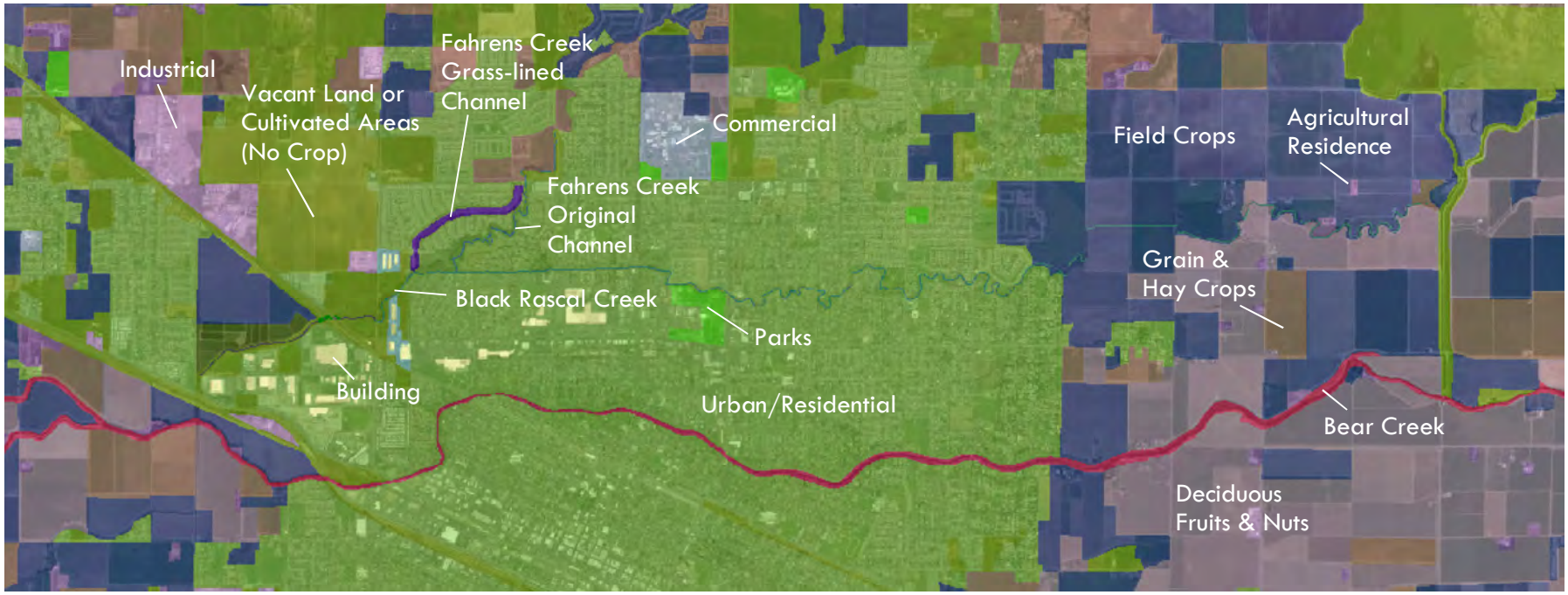


Figure 3-3. Manning's Roughness Layer

Boundary Conditions

Normal depth was used for the downstream boundary conditions along the 2D model mesh.

Existing Bridges and Culverts

Bridge and culvert data were provided by DWR. There are three modeled bridges in the study area (from upstream to downstream): Santa Fe Road Drive, Railroad Bridge, and Santa Fe Road Bridge. Because bridges cannot be directly modeled in 2-D portion of HEC-RAS, a short 1-D model reach was added for the channel from just upstream of the Santa Fe Drive Bridge to just downstream of the Santa Fe Road Bridge. The 2-D model mesh includes a 2-D connection with the existing Highway 59 box culvert at Black Rascal Creek.

Project Site

The ground elevation within the project site was raised to simulate the presence of fill.

3.3 Model Output

Due to the existing contours, floodwaters leaving Black Rascal Creek between the upstream levee breach and the project site will be distributed throughout the floodplain. This results in a lower peak flow by the time it reaches the project site. The computed peak discharge reaching Highway 59 near the project area—from the levee breach and Fahrens Creek—is approximately 9,500 cfs, as shown in Figure 3-4.

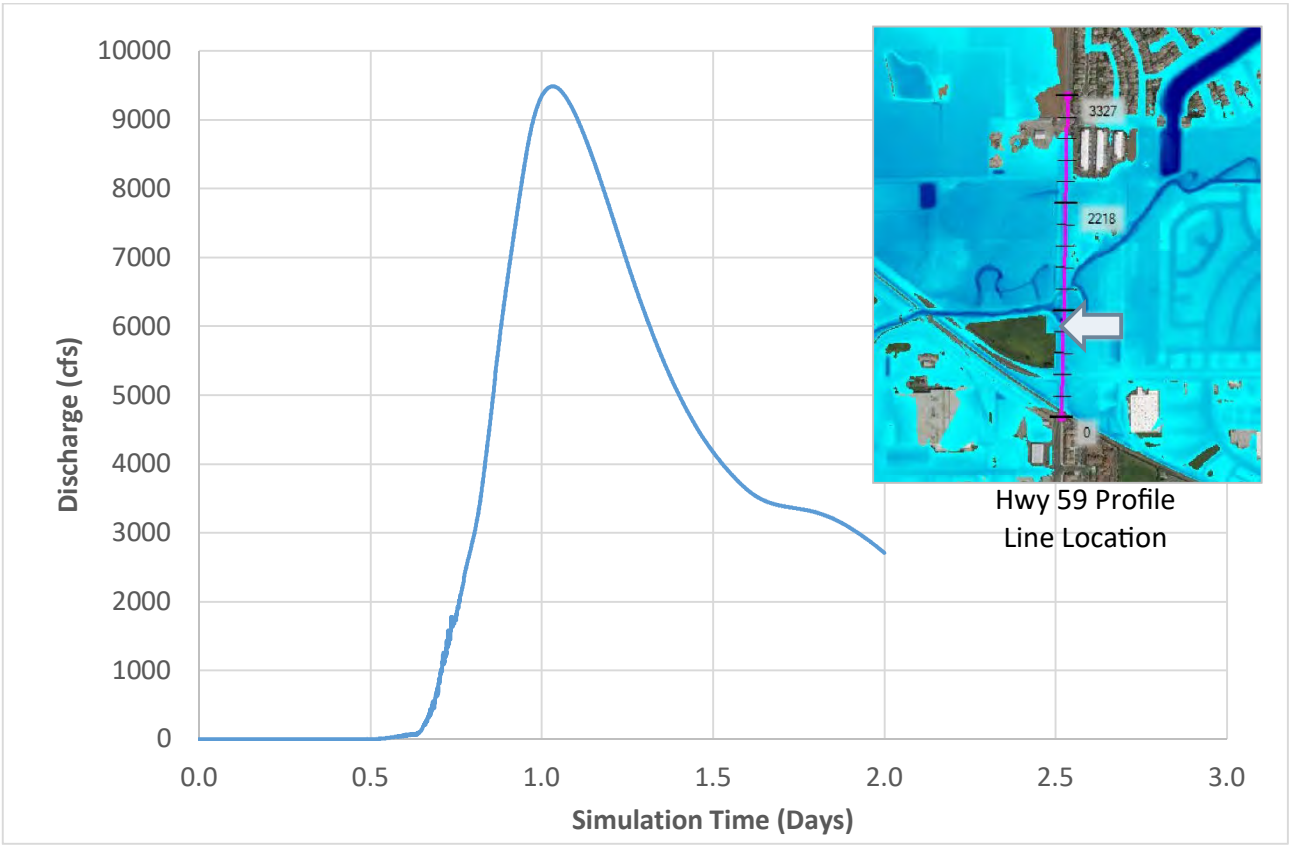


Figure 3-4. HEC-RAS Computed Hydrograph at Highway 59

The computed maximum 200-year flood depths for the entire study area are shown in Figure 3-5, while the maximum 200-year water surface elevations are shown in Figure 3-6.

Figure 3-7 shows a model flow trace, showing flow direction at a snapshot during the model simulation. The computed 200-year water surface elevation and flood depth in the vicinity of the project site are shown in Figure 3-8. The 200-year water surface elevation along the project site ranges from approximately 167.4 to 167.7 feet (NAVD88 vertical datum).

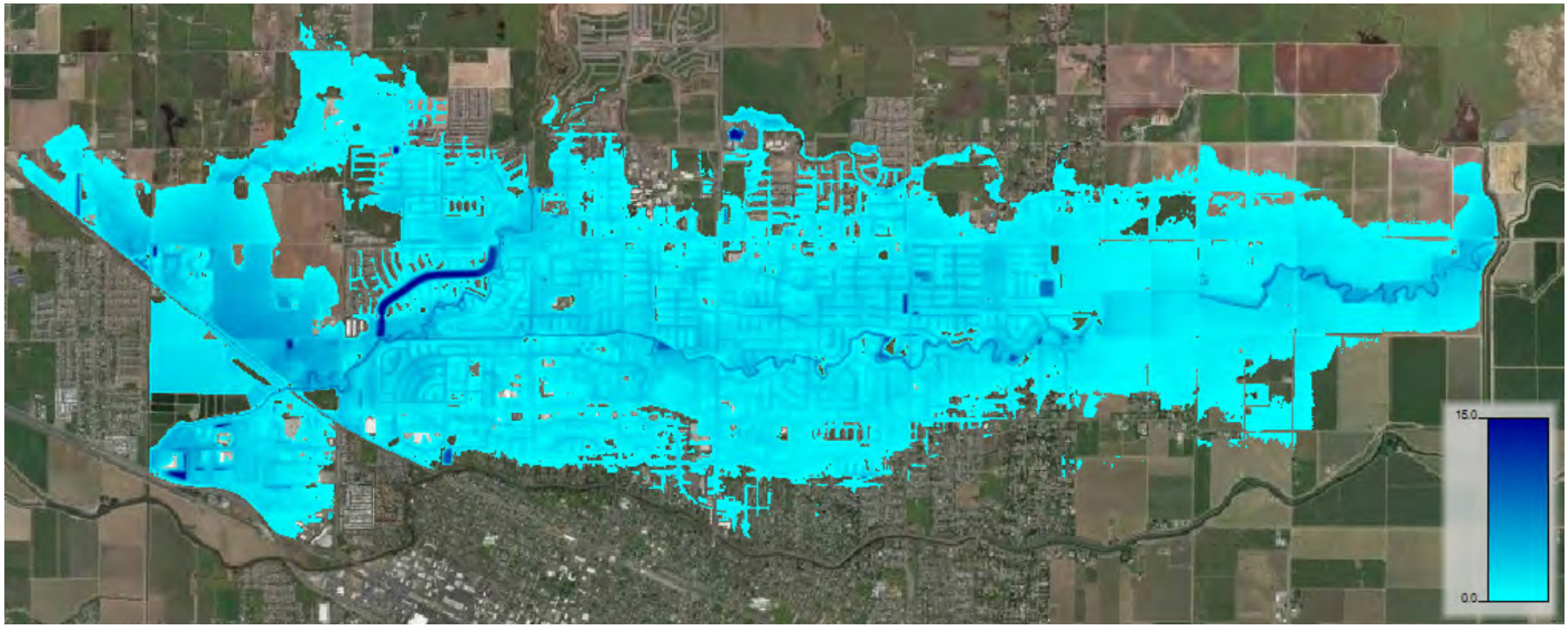


Figure 3-5. HEC-RAS Maximum 200-year Flood Depth

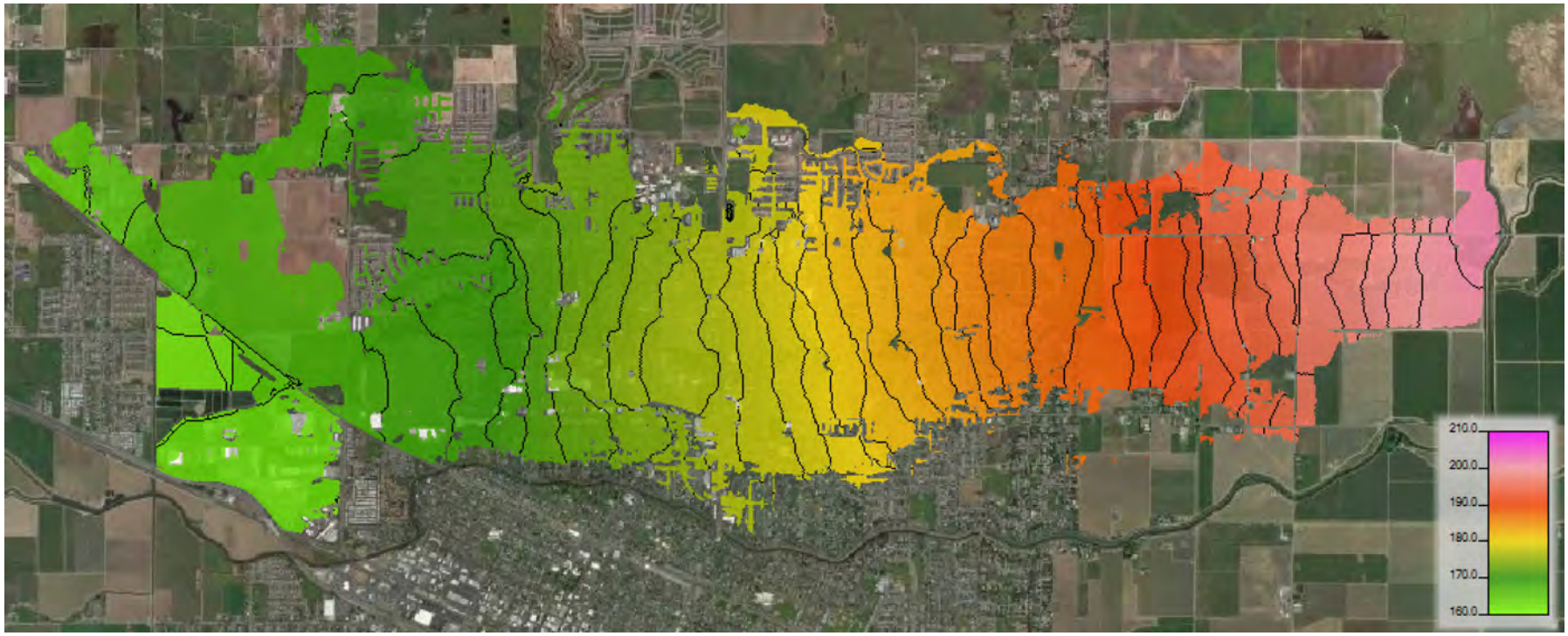


Figure 3-6. HEC-RAS Maximum 200-year Water Surface Elevation (1-ft Contours Shown)

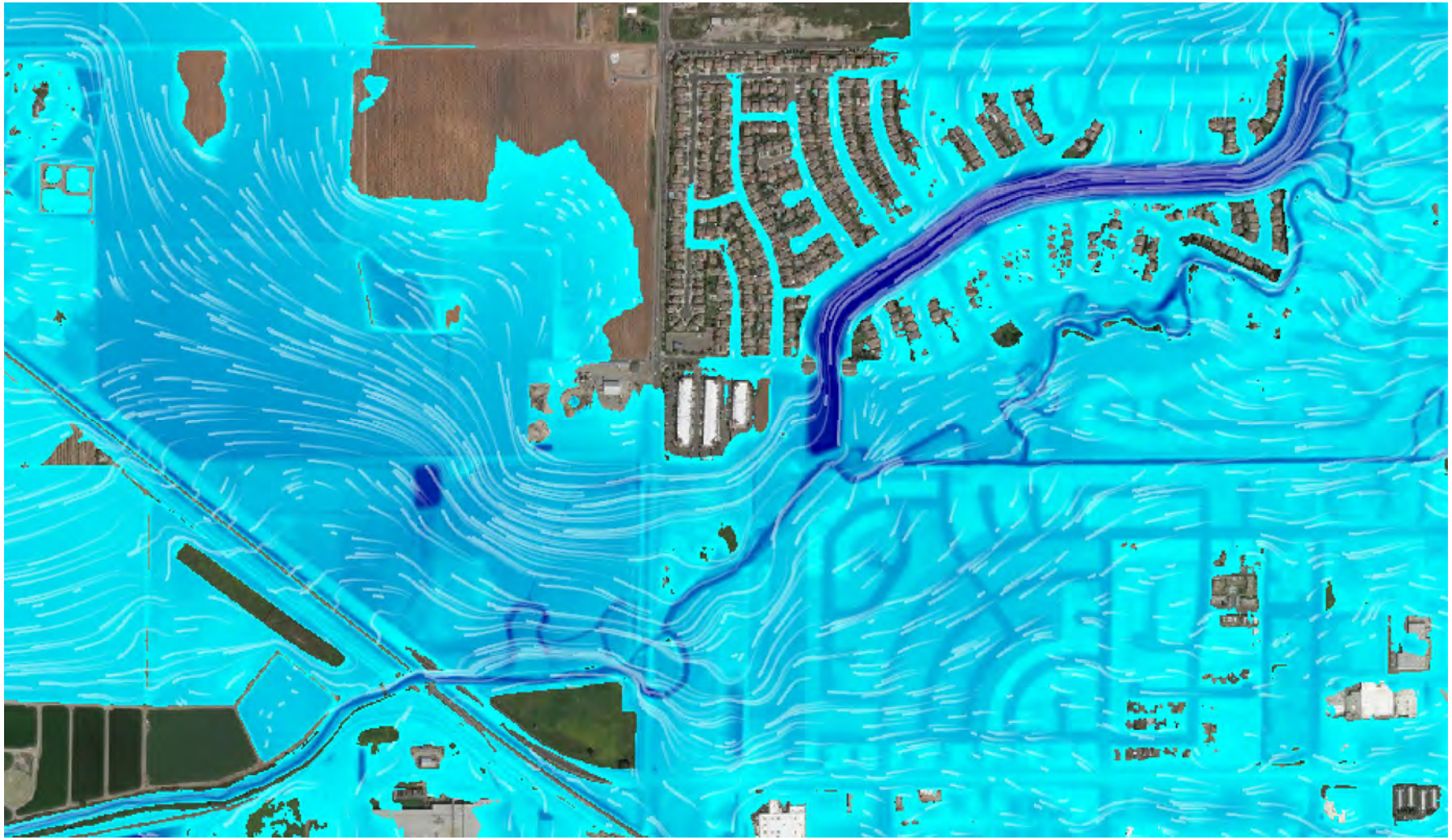


Figure 3-7. HEC-RAS 200-year Model Flow Trace

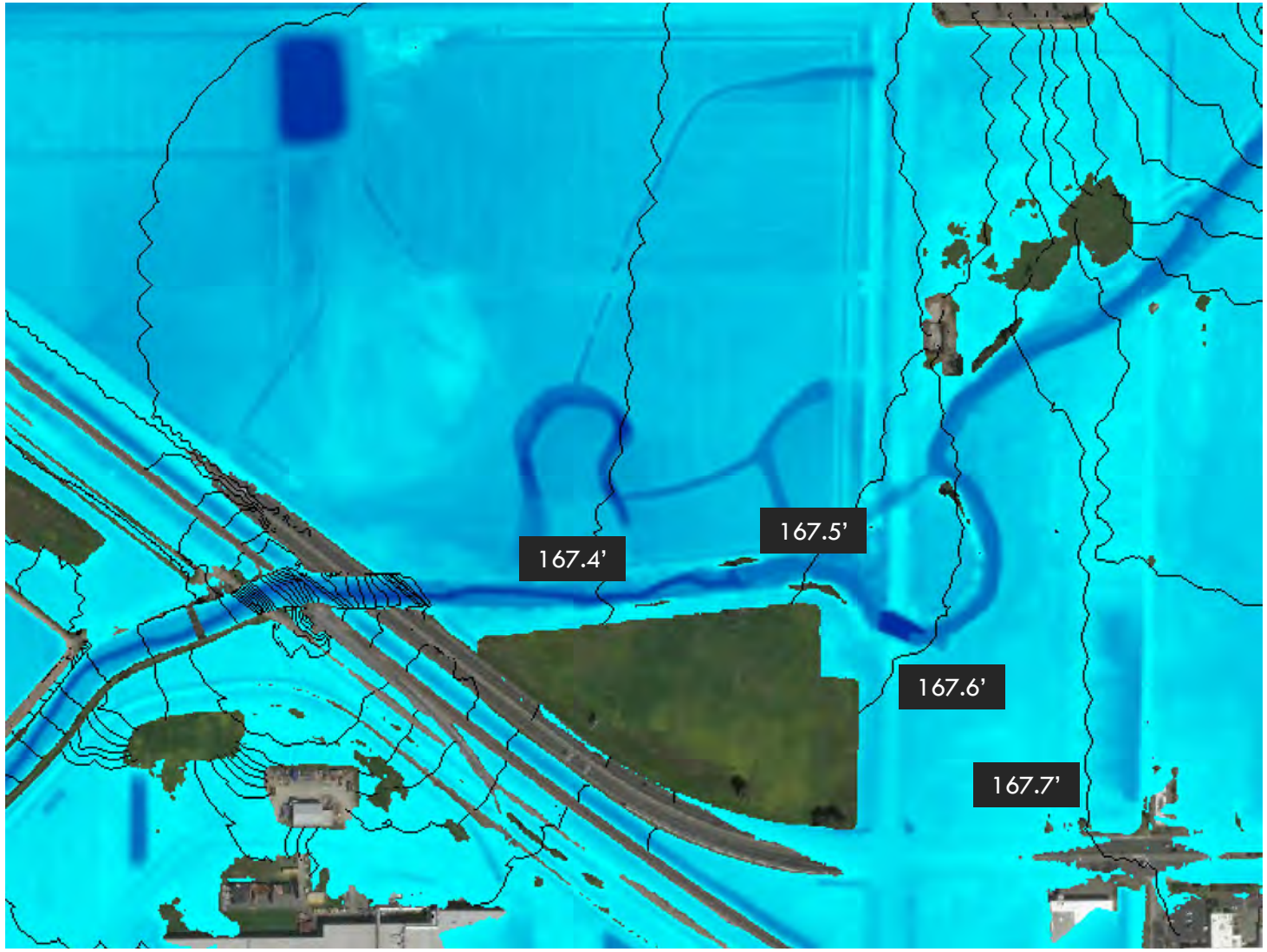


Figure 3-8. Maximum 200-year Flood Elevation– 0.1-ft Contours near Project Site (with Flood Depth)

4 ULOP IMPOSED CONDITIONS

An imposed condition in the form of fill is required for the project development to achieve an urban level of flood protection. The fill must be elevated above the computed 200-year flood elevation and freeboard is highly recommended by DWR (note: freeboard is the difference between the fill elevation and the computed flood elevation).

A freeboard of 1 foot or greater will help to account for the inherent uncertainty in estimating peak flood discharges and the computed flood elevations. A summary of proposed fill elevations is provided in Table 4-1. The required fill elevation ranges from 168.4 ft to 168.7 ft (NAVD88 vertical datum).

Table 4-1. Proposed Fill Elevations – Project Site

Location	200-year Water Surface Elevation (ft, NAVD88)	Freeboard Height (ft)	Fill Elevation (ft, NAVD88)
Downstream (Northwest) End of Project Site	167.4	1	168.4
Upstream (East) End of Project Site	167.7	1	168.7

5 ULOP CERTIFICATION

5.1 Certification Conditions

This certification is provided to the City of Merced and Merced County for the sole purpose of supporting the finding that the imposed conditions on the project site will achieve an urban level of flood protection.

This certification is made in accordance with the requirements of the Urban Level of Flood Protection Criteria (DWR, 2013). This certification does not constitute a warranty or guarantee of performance, expressed or implied.

5.2 Certification Statement

Certification of Data and Information

The data and information contained in this report are accurate to the best of my knowledge.

Certification of Analysis

The analyses were performed in accordance with sound engineering practice in a manner consistent with the degree of skill and care ordinarily exercised by members of the civil engineering profession currently practicing in the same locality under similar conditions.

I, Andreas Jake Gusman, PE, a Professional Registered Civil Engineer in the State of California, certify that the imposed conditions for the Highway 59 Retail Center Project will provide an urban level of flood protection.



6 REFERENCES

Chow, V.T. (1959). *Open Channel Hydraulics.* New York: McGraw-Hill Publishing Company.

DWR (2013). *Urban Level of Flood Protection Criteria*, FloodSafe California, November 2013. California Department of Water Resources.

DWR (2017). *Central Valley Flood Protection Plan Update, 2017 Update.* August 2017. California Department of Water Resources.

Engineers Australia (2014). *Australian Rainfall & Runoff. Project 15: Two Dimensional Modelling in Urban and Rural Floodplains.* Stage 1&2 Report P15/S1/009. November 2012.

FEMA (2008). *Flood Insurance Study – Merced County, California and Incorporated Areas.* Federal Emergency Management Agency (FEMA) Flood Insurance Study Number 06047CV000B. Effective December 2, 2008.

HEC (2016). *HEC-RAS River Analysis System – User's Manual, Version 5.0*, February 2016, U.S. Army Corps of Engineers, Hydrologic Engineering Center (HEC), Davis, California.

7 ACKNOWLEDGMENTS

This study was performed by River Focus, Inc., for 59 Petroleum, LLC. The Project Manager for 59 Petroleum, LLC was Surina Mann. The River Focus study team included Jake Gusman, PE (Project Manager) and Darren Bertrand (Senior Hydrologist).

TRAFFIC IMPACT ANALYSIS

FOR

SR 59 / OLIVE AVENUE RETAIL CENTER

Merced, CA

Prepared For:

BASE CAMP
115 South School Street, Suite 14
Lodi, CA 95240

Prepared By:

KD Anderson & Associates, Inc.
3853 Taylor Road, Suite G
Loomis, California 95650
(916) 660-1555

Revised January 3, 2018
October 9, 2017

ATTACHMENT L

TRAFFIC IMPACT ANALYSIS FOR
SR 59 / OLIVE AVENUE RETAIL CENTER

TABLE OF CONTENTS

EXECUTIVE SUMMARY i

INTRODUCTION 1
Project Description 1
Traffic Study Scope 1

EXISTING SETTING 4
Study Area - Roadways 4
Study Area - Intersections 6
Level of Service Analysis Procedures 7
Existing Traffic Conditions and Levels of Service 11
Alternative Transportation Modes 13

PROJECT CHARACTERISTICS 16
Project Use / Access Characteristics 16

EXISTING PLUS SR 59 / OLIVE AVENUE RETAIL CENTER CONDITIONS 22
Traffic Volumes 22
Intersection Level of Service 22
Southbound SR 59 Queues 22
Roadway Segment Level of Service 23
Traffic Signal Warrants 27
Impacts to Alternative Transportation Modes 27

LONG TERM YEAR 2035 CUMULATIVE CONDITIONS 29
Overview 29
Daily Traffic Volumes / Levels of Service 30
Peak Hour Intersection Volumes and Levels of Service 32
Southbound SR 59 Queues 33
Traffic Signal Warrants 38

IMPROVEMENTS / MITIGATION 39
Existing Conditions 39
Existing Plus SR 59 / Olive Avenue Retail Center Build Out with Access as Proposed 39
Cumulative Plus SR 59 / Olive Avenue Retail Center with Access as Proposed Conditions 40

REFERENCES 41

APPENDIX 42

KDA

TRAFFIC IMPACT ANALYSIS FOR
SR 59 / OLIVE AVENUE RETAIL CENTER
Merced, California

EXECUTIVE SUMMARY

Project Description

The SR 59 / Olive Avenue Retail Center project is a proposed convenience commercial development that will occupy 8 acres on the northwest corner of the intersection of State Route 59 (SR 59) and Olive Avenue - Santa Fe Drive. The project site is in Merced County but will be annexed into the City of Merced. The proposed development plans includes roughly 42,800 sf of retail commercial uses, including a gasoline station with convenience store, fast food restaurants, coffee kiosk and other retail uses.

Access. The project proposes right-turn only access to SR 59 north of Olive Avenue, as well as two driveways on Santa Fe Drive. Full access is proposed at the western driveway, and the eastern driveway near SR 59 is limited to right turns only.

Trip Generation. Based on approved trip generation rates that account for the specific land uses included in the project, the project is expected to generate approximately 3,859 new daily trips, with 269 new trips generated in the a.m. peak hour and 312 new trips occurring in the weekday p.m. peak hour.

Improvements. The project is assumed to complete frontage improvements on SR 59 and Santa Fe Drive that are consistent with the City's Arterial Street standard. Separate right turn deceleration treatments are assumed at the project driveways. Work required along SR 59 would be conducted under an encroachment permit acquired through Caltrans.

Study Scope

This analysis addresses traffic conditions occurring on weekday a.m. and p.m. commute periods. The analysis addresses the operation of seven (7) existing intersection in the west Merced area that were identified during the scoping process in consultation with City and Caltrans staff.

1. SR 59 / Yosemite Avenue –Traffic Signal
2. SR 59 / Buena Vista Drive – Traffic Signal
3. SR 59 / Santa Fe Drive / W. Olive Avenue – Traffic Signal
4. W. Olive Avenue / Loughborough Drive – Traffic Signal
5. W. Olive Avenue / Austin Avenue – Traffic Signal
6. SR 59 / Cooper Avenue / Willowbrook Drive – Traffic Signal
7. SR 59 / W. 16th Street – All-Way Stop

The analysis also addresses conditions on SR 59, Olive Avenue and Santa Fe Drive based on daily traffic volumes.

At City of Merced direction, the traffic study considers the following scenarios:

- Existing Conditions
- Existing Conditions Plus Project Build Out with access as proposed
- Year 2035 Cumulative Conditions without the Project
- Year 2035 Cumulative Conditions with Project Build Out

Existing Traffic Conditions

The City establishes Level of Service (LOS) D as the minimum acceptable standard for intersections and roadways.

Traffic counts were conducted in 2017 to established existing conditions. Two safety intersection improvement projects are pending and are expected to be completed before the proposed project proceeds. These improvements are included in the analysis of existing conditions at the SR 59 / Olive Avenue / Santa Fe Drive intersection and at the SR 59 / W. 16th Street intersection.

With anticipated improvements all study intersections operate at LOS D or better during the study hours. However, SR 59 between W. 16th Street and Olive Avenue carries daily traffic volumes that are indicative of LOS F conditions.

The existing system of pedestrian and bicycle facilities in this area include limited sidewalks and Class I bike paths, but pedestrians and bicycles use paved shoulder elsewhere. A gap exists in the pedestrian system on the west side of SR 59 between Cooper Avenue and Santa Fe Drive, and right of way would need to be acquired to improve the situation in this area.

Existing Plus SR 59 / Olive Avenue Retail Center with Access As Proposed

The impacts of SR 59 / Olive Avenue Retail Center were identified by superimposing project trips onto the current background traffic volume levels. The directional distribution of project trips was identified using the Merced County Association of Governments (MCAG) regional traffic model, and that analysis tool indicated that the majority of project trips will arrive and depart via SR 59 to north and Olive Avenue to the east under short term future conditions.

Impacts. If no improvements to the area circulation system are made all off-site study intersections would continue to operate with LOS D or better conditions, but access is problematic from two standpoints. The western access on Santa Fe Drive is forecast to operate at LOS F in the p.m. peak hour. As noted in Table A1 conditions at this location could be improved either by creating a Two-Way Left-Turn lane on Santa Fe Drive, by restricting access or by installing a traffic signal. However, each alternative has ramifications on the project layout as noted.

Similarly, the SR 59 access is expected to occasionally be blocked by the queue of southbound traffic extending from the Santa Fe Drive traffic signal. Alternative measures to alleviate this issue are also noted, along with their ramifications on the site. One alternative (lengthening the southbound left turn lane on SR 59) is feasible. The other two alternatives are not feasible as closing the access will make the site untenable as a retail center and moving the access to the north is not possible due to the impact on Black Rascal Creek and lack of right of way.

TABLE A1 MITIGATION SUMMARY			
Location	**Impact**	**Mitigation**	**Ramification**
EXISTING PLUS PROJECT CONDTIONS			
Western Santa Fe Drive Access	LOS F during p.m. peak hour	Create TWLT lane on Santa Fe Drive	Required moving driveway or reconstructing SR 59 intersection
		Or Prohibit outbound left turns	Exacerbates problem at SR 59 driveway
		Or Install traffic signal	Location is problematic and likely require moving driveway
SR 59 Access	Access blocked by Southbound Queues	Lengthen southbound left turn lane	Facilities access but does not shorten queues. Recommended Mitigation
		Move access to the north	Affects Black Rascal Creek as well as property not included in project. Not feasible
		Close SR 59 access	Exacerbates issues at western access, and make site untenable as a retail center
CUMULATIVE PLUS PROJECT CONDTIONS			
SR 59 / Olive Avenue / Santa Fe Drive	Significantly exacerbate LOS F conditions during a.m. and p.m. peak hours	Fair share contribution to intersection improvements including: • Reconstruct westbound Olive Avenue to provide dual left turn lanes onto Southbound SR 59. • Reconfigure the westbound right turn lane to create a combination through & right turn lane, and extend that through lane across SR 59 along the project's frontage. • Reconstruct the existing northbound right turn lane as a "free" right turn with median island separating eastbound and right turning traffic. • Reconstruct the Eastbound Santa Fe Drive approach to provide dual left turn lane.	

Year 2035 Cumulative Plus SR 59 / Olive Avenue Retail Center with Access as Proposed Conditions

Basis for Traffic Volumes. The Merced County Association of Governments (MCAG) Year 2035 travel demand forecast model was refined and used to develop background traffic volume projections that assume the SR 59 / Olive Avenue Retail Center Project is developed as proposed. A portion of the City of Atwater's approved Ferrari Ranch Annexation was assumed to be developed by 2035.

Assumed Improvements. The following regional improvements were assumed for this cumulative analysis:

- 2015 RTP improvement assumed in the MCAG traffic model
- Widen SR 59 to 4-lanes from W. 16th Street to Olive Avenue
- Campus Parkway extend to Yosemite Avenue
- AME remains terminated at Green Sands Avenue

Impacts. If SR 59 / Olive Avenue Retail Center and other Merced area development proceeds as anticipated by the Year 2035, but no additional improvements are made, then two off-site intersections will operate at LOS F.

The **SR 59 / Olive Avenue / Santa Fe Drive intersection** will operate at LOS F with and without the project. The project's cumulative impact is significant based on the change in overall delay at the intersection. As noted in Table A1 intersection improvements that are consistent with the Circulation Element have been identified, and the project would contribute its fair share to the cost of these improvements. With that contribution the project's impact is not significant.

The SR 59 / W. 16th Street intersection would operate at LOS with and without the project, but the project's incremental change in delay is less than the increment permitted by the City. This impact is not significant and mitigation is not required.

Mainline SR 59 from to Yosemite Avenue is projected to operate at LOS F with and without the project. However, the incremental increase in volume contributed by the project is less than the 5% increase permitted under City guidelines. As a result, the project's impact is not significant and mitigation is not required.

TRAFFIC IMPACT ANALYSIS FOR
SR 59 / OLIVE AVENUE RETAIL CENTER PROJECT
Merced, California

INTRODUCTION

Project Description

The SR 59 / Olive Avenue Retail Center project is a proposed convenience commercial development that will occupy 8 acres abutting State Route 59 (SR 59) at its intersection with Olive Avenue and Santa Fe Drive, as noted in Figure 1. The project site is in Merced County but will be annexed into the City of Merced. As noted in Figure 2 (site plan), the proposed development plans includes roughly 42,000 sf of retail commercial uses, including a gasoline station with convenience store, fast food restaurants and other retail uses.

Access to the site is a primary consideration of this traffic study. As presented in the site plan, the project includes a right-turn only driveway on SR 99 and two driveways on Santa Fe Drive, one of which will permit full access.

Traffic Study Scope

This analysis is intended to evaluate the relative traffic impacts of the project within a range of relevant scenarios as required under City of Merced guidelines and requested by Caltrans. The analysis considers traffic conditions occurring during weekday a.m. and p.m. peak hours.

At City of Merced direction, the traffic study considers the following scenarios:

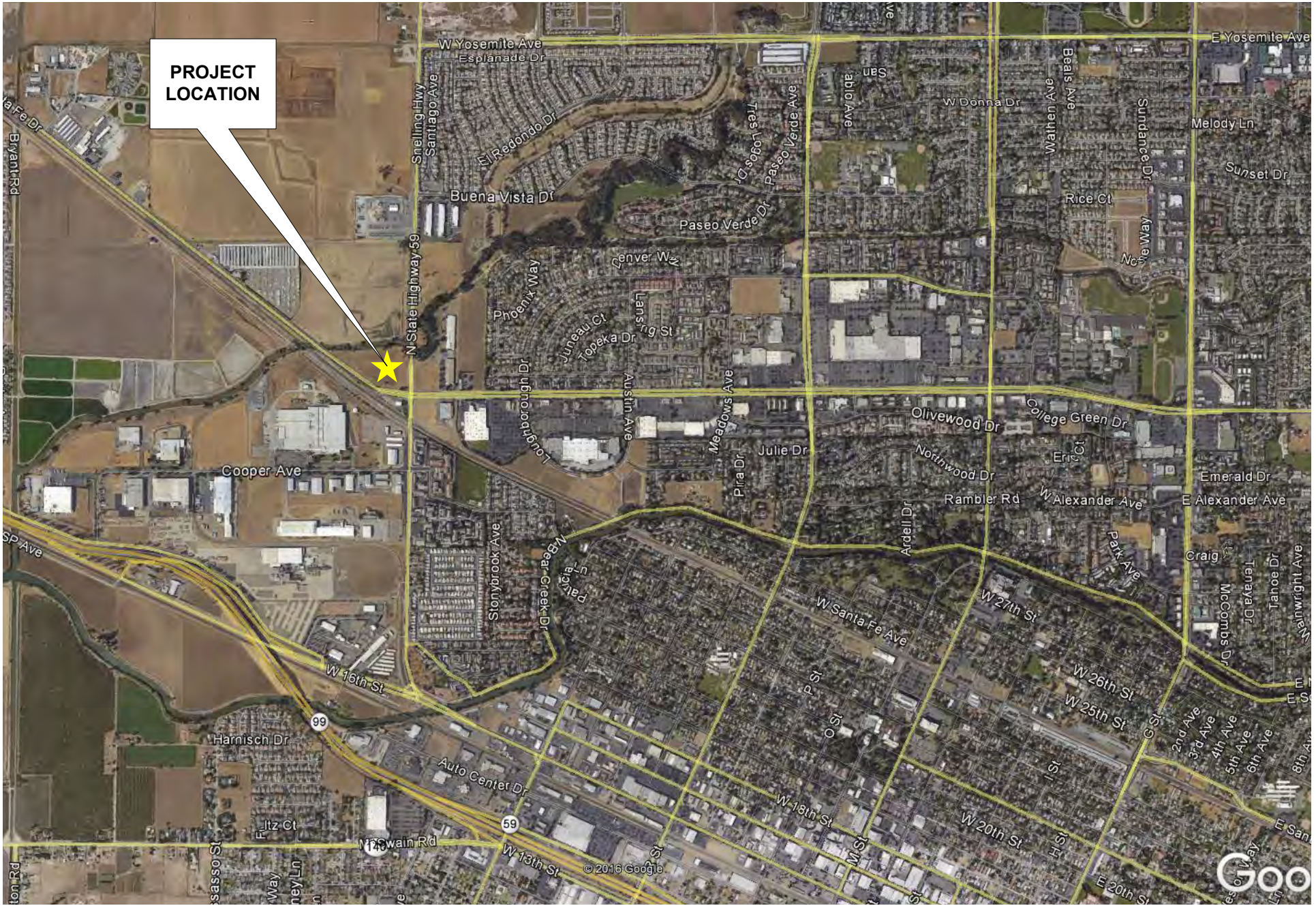
- Existing Conditions
- Existing Conditions Plus Project Build Out
- Year 2035 Cumulative Conditions no development on the site
- Year 2035 Cumulative Conditions with Project Build Out

Two scenarios typically evaluated under City and Caltrans guidelines were not addressed:

- Existing Plus Approved Projects (EPAP) Conditions without the proposed Project
- EPAP Conditions with Project Build Out with Circulation as proposed

These scenarios were omitted because no approved projects were identified in the area of the proposed project by the City of Merced, Merced County or the City of Atwater. Thus, the project's impacts under EPAP background conditions would be the same as those identified under Existing Plus Project conditions.

The traffic analysis also addresses project impacts to alternative transportation modes.

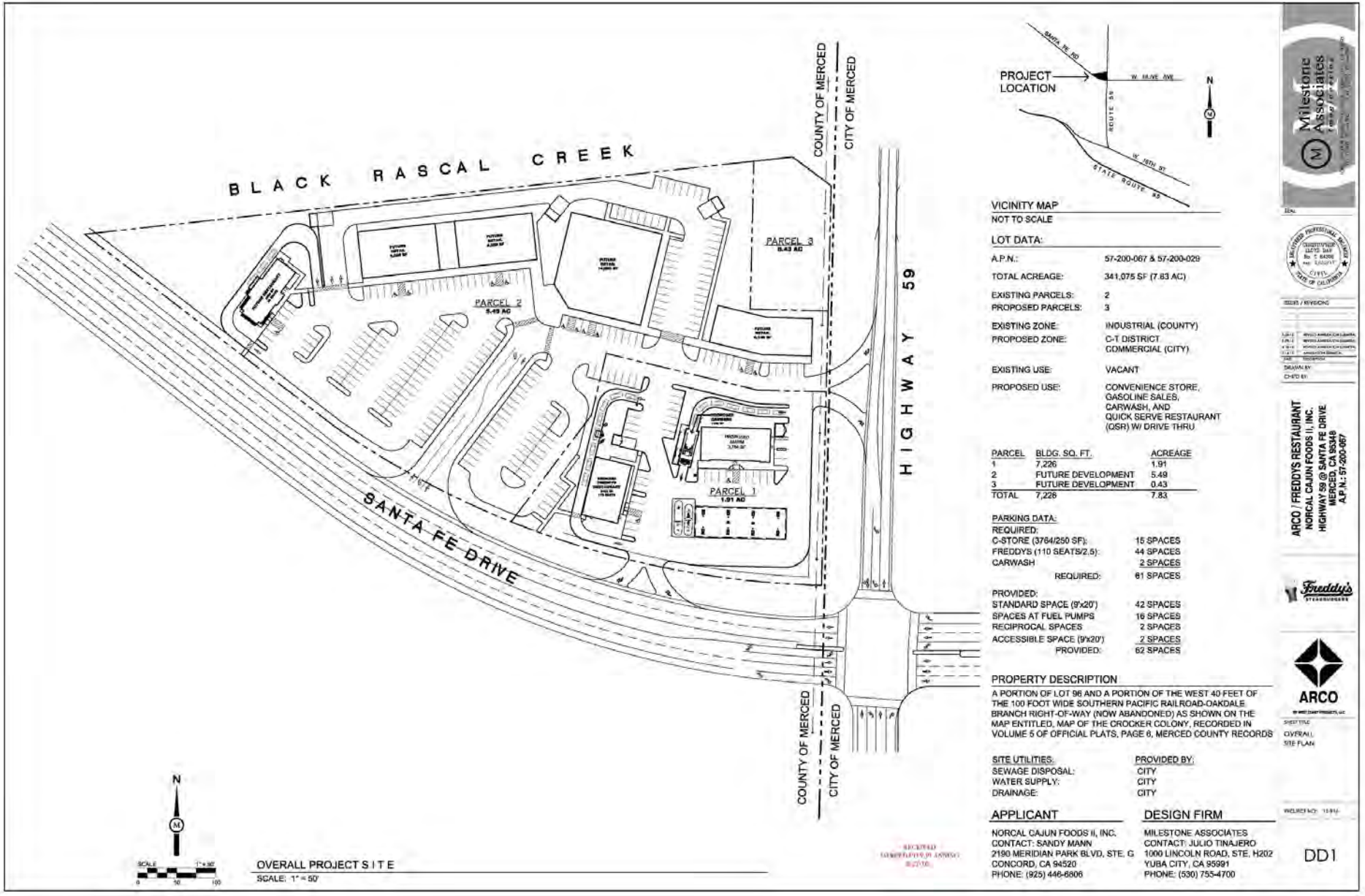


VICINITY MAP

KD Anderson & Associates, Inc.
Transportation Engineers

0780-06 RA 1/3/2018

figure 1



KD Anderson & Associates, Inc.
Transportation Engineers

SITE PLAN

0780-06 RA 1/3/2018

figure 2

EXISTING SETTING

This portion of this traffic impact study presents a description of the existing transportation system in the vicinity of the proposed project site.

Study Area - Roadways

The following is a description of roadways that provide access to the proposed SR 59 / Olive Avenue Retail Center project.

State Route 99 (SR 99). SR 99 is the primary north-south route through the San Joaquin Valley and the major point of access to the City of Merced. SR 99 is generally a controlled access freeway with local connections limited to grade separated interchanges. SR 99 has 4 to 6 mainline travel lanes at various locations in Merced County but is a four lane roadway in the immediate area of the proposed project. The speed limit on SR 99 is posted at 65 mph.

The most recent traffic volume counts published by Caltrans reveal an *Annual Average Daily Traffic (AADT)* volume of 59,000 vehicles per day in the area of the project north of the V Street interchange (2015). Trucks comprise roughly 27% of the daily traffic volume on SR 99 in this area.

Four roadways provide regional access to the project.

State Route 59 (SR 59). SR 59 is an important route through Merced County which links the City of Merced with SR 152 at the Madera County line and extends north to the Snelling area of northern Merced County. SR 59 is a Major Arterial in the Merced General Plan (128' ROW). In the vicinity of the proposed project, SR 59 is a two lane conventional highway which is being incrementally widened to a four lane section as adjoining development occurs. Implementation of improvements to SR 59 is constrained by two key physical features. The highway crosses the UPRR at a two lane at-grade crossing roughly midway between the Olive Avenue and Cooper Avenue – Willowbrook Drive intersection. The highway also crosses Rascal Creek on a two lane structure just north of the proposed project. SR 59 is designated an STAA Terminal Access route.

Traffic count information (2015) provided by Caltrans indicates a daily volume of 17,200 AADT in the area between 16th Street and W. Olive Avenue with the volume dropping to 8,700 AADT north of Olive Avenue. Trucks comprise 5% to 6% of the daily traffic volume on SR 59 in this area.

Santa Fe Drive is an east-west Principal Arterial roadway across Merced County that connects the project with the Atwater area to the west. Santa Fe Drive enters Merced County east of Turlock and extends across the northern Atwater area past the project site to an intersection in the City of Merced on State Route 59 at Olive Drive. In the area of the project Santa Fe Drive is a four lane street with a continuous center Two-Way Left-Turn (TWLT) lane. There are no

sidewalks along Santa Fe Drive, but the roadway has paved shoulders. The BN&SF railroad runs parallel to and south of Santa Fe Drive and limits the number of connections to Santa Fe Drive from the south. Today the posted speed limit on Santa Fe Drive is 55 mph.

Olive Avenue. Olive Avenue is a major east-west route through Olive Avenue begins at the SR 59 / Santa Fe Drive intersection and continues easterly beyond the City limits into rural Merced County. In the area of the project W. Olive Avenue is a six lane facility with a raised landscaped median. Sidewalk has been provided along W. Olive Avenue in the commercial area east of the project but is missing in the immediate vicinity of SR 59 where development has not occurred. The posted speed limit on W. Olive Avenue is 45 mph.

16th Street. 16th Street is an element of the City's downtown grid street system running parallel to and north of SR 99. 16th Street originates at on and off ramps from southbound SR 99 about ¾ mile west of the SR 59 intersection and continues easterly to the SR 99 / SR 140 interchange in eastern Merced. SR 59 follows the segment of 16th Street west of V Street. In the area of the project W. 16th Street is a four lane facility. The posted speed limit on W. 16th Street is 40 mph.

Other roadways link the project with Merced neighborhoods.

Yosemite Avenue. Yosemite Avenue is an east-west Major Arterial street that traverses Merced in the area roughly a mile north of Olive Avenue. Today the portion of Yosemite Avenue between SR 59 and San Augustine Avenue is two lanes, but Yosemite Avenue has been widened to a four lane section from San Augustine Avenue easterly. Ultimately, this portion of Yosemite Avenue will be a four lane roadway, but widening is not expected until the property north of Yosemite Avenue is annexed to the city and developed. The posted speed limit on Yosemite Avenue is 45 mph.

Buena Vista Drive. Buena Vista Drive is a two-lane collector street aligned in an east-west direction. Buena Vista Drive extends east from an intersection on SR 59 across R Street to an intersection on M Street in central Merced. Access to Buena Vista Drive is somewhat limited, as commercial properties near SR 59 have driveways on Buena Vista Drive, but only public street intersections are permitted in the area between the project and R Street. The posted speed limit is 35 mph. Buena Vista Drive is designated a *Primary Emergency Response Route* in the City's Neighborhood Traffic Calming Guidelines.

Cooper Avenue. Cooper Avenue is a local two-lane collector street that provides access to the City's industrial area west of SR 59 and north of SR 99. Cooper Avenue intersects SR 59 roughly 1,000 feet south of W. Olive Avenue and continues westerly for about a mile to an intersection on Ashby Road. The posted speed limit on Cooper Avenue is 40 mph.

Willowbrook Drive. Willowbrook Drive is a two lane local street that extends east from the SR 59 / Cooper Avenue intersection to provide access to the residential area between SR 59 and Bear Creek. A prima facie 25 mph speed limit exists on Willowbrook Drive.

Loughborough Drive. Loughborough Drive is a two lane street that provides access to the retail commercial area south of W. Olive Avenue and continues to the northeast parallel to W. Olive Avenue to M Street. The portion of Loughborough Drive north of W. Olive Avenue is designated a collector street. The posted speed limit is 30 mph.

Austin Avenue. Austin Avenue is a local street that extends north and south from W. Olive Avenue to provide access to existing retail commercial and residential areas.

Study Area - Intersections

The quality of traffic flow is typically governed by the operation of major intersections. Based on direction from City and Caltrans staff seven (7) existing intersections were analyzed for this traffic study. The locations of the study intersections are shown on Figure 3. The study area will also include the project's three driveways that do not exist today.

1. SR 59 / Yosemite Avenue –Traffic Signal
2. SR 59 / Buena Vista Drive – Traffic Signal
3. SR 59 / Santa Fe Drive / W. Olive Avenue – Traffic Signal
4. W. Olive Avenue / Loughborough Drive – Traffic Signal
5. W. Olive Avenue / Austin Avenue – Traffic Signal
6. SR 59 / Cooper Avenue / Willowbrook Drive – Traffic Signal
7. SR 59 / W. 16th Street – All-Way Stop

The geometric configuration of each intersection and its traffic controls are described in the text which follows. Pending improvement projects currently being pursued by the City of Merced and Caltrans and are reasonably certain to be completed when the proposed project opens are also described. These improvement projects have been assumed in subsequent analysis of current traffic conditions

The **SR 59 / Yosemite Avenue intersection** is a "tee" controlled by a traffic signal. The intersection is configured with separate left turn lanes on each approach, and the northbound SR 59 approach and westbound Yosemite Avenue approach have separate right turn lanes. Crosswalks are striped across the northern and eastern legs of the intersection.

The **SR 59 / Buena Vista Drive intersection** is a "tee" controlled by a traffic signal. The intersection is configured with a separate southbound left turn lane and a separate northbound right turn lane. The westbound Buena Vista Drive approach is striped as a single lane but is generally wide enough to allow right turns around the queue of traffic waiting to turn left. Crosswalks are striped across the north and east legs of the intersection.

The **SR 59 / Santa Fe Drive / W. Olive Avenue intersection** is controlled by a traffic signal, and Caltrans is currently preparing plans for a safety improvement project at the intersect. Each approach has separate left turn lanes, and the pending Caltrans project will lengthen the eastbound Santa Fe Drive left turn lane. The northbound, westbound and eastbound approaches

have separate right turn lanes, and the Caltrans safety project will add a southbound right turn lane as well. Today crosswalks exist on all four legs of the intersection, and the Caltrans safety project will provide landing pads and detectable warning surface incorporated into the shoulder area for pedestrians/bicyclists.

The **W. Olive Avenue / Loughborough Drive intersection** is controlled by a traffic signal. The intersection has separate left turn lanes on each approach, and the northbound Loughborough Drive approach also provide a combined left turn and through lane. The eastbound W. Olive Avenue and northbound Loughborough Drive approaches have separate right turn lanes. Crosswalks are striped across all four legs of the intersection.

The **W. Olive Avenue / Austin Avenue intersection** is controlled by a traffic signal. The intersection has separate left turn lanes on each approach, and the eastbound W. Olive Avenue has a separate right turn lane. Crosswalks are striped across all four legs of the intersection.

The **SR 59 / Cooper Avenue / Willowbrook Drive intersection** is controlled by a traffic signal. This intersection has been widened to provide two through southbound lanes on SR 59, although these lanes do not extend to adjoining signalized intersections. Each approach has a separate left turn and right turn lane. Crosswalks are striped on all four legs of the intersection.

Today the **SR 59 / W. 16th Street intersection** is controlled by an all-way stop, but the pending City of Merced improvements project will reconfigure the intersection and install a traffic signal. Today the southbound SR 59 approach has as short right turn lane, and that lane will be lengthened with the improvement project. The westbound W. 16th Street approach has two through lanes and a separate right turn lane, and a longer merging area for the right turn lane will be provided on SR 59. The eastbound W. 16th Street approach will continue to include a through lane and separate left turn lane. Crosswalks do not exist at the intersection today, but will be provided with the safety project.

Level of Service Analysis Procedures

Level of Service (LOS) analysis provides a basis for describing existing traffic conditions and for evaluating the significance of project traffic impacts. Level of Service measures the quality of traffic flow and is represented by letter designations from A to F, with a grade of A referring to the best conditions, and F representing the worst conditions. The characteristics associated with the various LOS for intersections are presented in Table 1.

TABLE 1 LEVEL OF SERVICE DEFINITIONS		
Level of Service	**Signalized Intersection**	**Unsignalized Intersection**
A	Uncongested operations, all queues clear in a single-signal cycle. Delay ≤ 10.0 sec	Little or no delay. Delay ≤ 10 sec/vehicle
B	Uncongested operations, all queues clear in a single cycle. Delay > 10.0 sec and ≤ 20.0 sec	Short traffic delays. Delay > 10 sec/vehicle and ≤ 15 sec/vehicle
C	Light congestion, occasional backups on critical approaches. Delay > 20.0 sec and ≤ 35.0 sec	Average traffic delays. Delay > 15 sec/vehicle and ≤ 25 sec/vehicle
D	Significant congestions of critical approaches but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed. Delay > 35.0 sec and ≤ 55.0 sec	Long traffic delays. Delay > 25 sec/vehicle and ≤ 35 sec/vehicle
E	Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). Delay > 55.0 sec and ≤ 80.0 sec	Very long traffic delays, failure, extreme congestion. Delay > 35 sec/vehicle and ≤ 50 sec/vehicle
F	Total breakdown, stop-and-go operation. Delay > 80.0 sec	Intersection blocked by external causes. Delay > 50 sec/vehicle
Source: Transportation Research Board 2010.		

Intersection Level of Service Methodology. Intersection Level of Service was calculated for this traffic impact study using the methodology contained in the *Highway Capacity Manual 2010* (Transportation Research Board 2010) (HCM 2010) using Synchro 9.0 software. HCM techniques identify the average length of delays and use that information to determine the operating Level of Service. An overall average delay and Level of Service is determined for intersections controlled by traffic signals or all-way stops. At locations controlled by side street stops, delays can be determined for each movement that must yield the right of way, and the "worst case" delay is employed for analysis.

Roadway Segment Level of Service Methodology. The Merced General Plan presents daily traffic volume Level of Service thresholds than can be employed on a planning level basis (GP Table 4.3), and these values are presented in Table 2.

TABLE 2 LEVEL OF SERVICE THRESHOLDS FOR ROADWAY SEGMENTS					
	Daily Roadway Segment Level of Service Thresholds				
Roadway Type	**LOS A**	**LOS B**	**LOS C**	**LOS D**	**LOS E**
6 lane Freeway	25,900	42,600	57,800	68,400	76,000
4 lane Freeway	40,000	65,800	89,200	105,600	117,400
2 lane Arterial	-	-	11,600	16,000	16,800
4 lane Arterial	-	4,100	26,800	33,700	35,400
6 lane Arterial	-	6,600	41,800	50,700	53,200
2 lane Collector	-	-	4,800	10,300	13,200
4 lane Collector		-	11,300	22,200	26,400

Standards of Significance. The methods employed to determine the significance of Level of Service are noted in the General Plan and in Merced's traffic study guidelines.

Implementing Action T-1.8.b of the *Merced Vision 2030 General Plan* (City of Merced 2010) establishes an acceptable LOS of D for intersections and roadways. Action T-1.8.b states:

> "1.8.b Use peak-hour Level of Service "D" ("Tolerable Delays") as the design standard for new streets and intersections in new growth areas.
>
> "The preferred LOS levels are typically "C" and "D," particularly for larger roads and major intersections. With LOS C the road provides stable operation but is still underutilized to some degree. LOS D represents a fine balance between the relatively large number of vehicles served and the generally acceptable level of service provided. It is the intent of the City's standards and policies for new and most upgraded intersections and road segments to be designed and built so as not to drop below LOS D ("tolerable delay") during peak traffic periods."

Therefore, in this traffic impact study, LOS A through D are considered acceptable for signalized intersections, while LOS E and F are unacceptable.

At two-way stop-sign-controlled intersections (or one-way stop T intersections), Level of Service can be calculated for each movement where motorists yield the right of way, as well as for the intersection as a whole. Significance is based on the length of the average delay experienced by motorists on the worst case movement, which is typically a left turn made from the stop-sign-controlled approach to the intersection. It should be noted that overall intersection average LOS at un-signalized intersections is better, often much better, than LOS on the worst single movement.

Under City of Merced guidelines, however, a poor "worst case" LOS is not necessarily significant unless the intersection also carries traffic volumes which satisfy **peak hour traffic signal warrant** requirements. Traffic signal warrants are a series of several standards which provide guidelines for determining if a traffic signal is appropriate. Signal warrant analyses are

typically conducted at intersections of uncontrolled major streets and stop sign-controlled minor streets. If one or more signal warrants are met, signalization of the intersection may be appropriate. However, a signal should not be installed if none of the warrants are met, since the installation of signals would increase delays on the previously-uncontrolled major street, and may increase the occurrence of particular types of accidents.

Consistent with the California Environmental Quality Act (CEQA), the City will use the traffic study to determine the project's impact to two broad CEQA checklist topics: (1) substantial increases in traffic; and (2) changes to level-of-service. Each of these broad categories have distinct thresholds of significance (described below) and are to be utilized in the traffic study.

1. Topic: Substantial Increase in Traffic Levels

A. Arterial Level Road: The threshold of significance is a project ADT contribution equal or greater than 5% of the current ADT for an "arterial roadway" that is, or will be, operating at an unacceptable LOS "E" or "F".
B. Collector Level Road: The threshold of significance is an amount where the Project contributes more than 20% of the current ADT on roads carrying at least 3,000 ADT. Thus, a significant impact would occur if a Project adds 601 ADT to a collector road that currently has 3,000 ADT. [3,000(.20)]

2. Topic: Change in Level of Service (LOS) Rating

Merced Vision 2015 General Plan Policy T-1.8 states: Use A Minimum Peak Hour Level of Service (LOS) "D" As a Design Objective for All New Streets in New Growth Areas and for Most Existing City Streets Except Under Special Circumstances. *To implement this Policy, the City focuses on four different street system categories, each described in greater detail below: (A) roadways; (B) signalized intersections; (C) un-signalized intersections; and (D) roads within established neighborhoods.*

A. Roadways and Signalized Intersections: *Merced Vision 2015 General Plan,* Implementing Action T-1.8.b, establishes an acceptable LOS of "D" for intersection and roadway operations.

1.8.b Use peak-hour Level of Service "D" ("Tolerable Delays") as the design standard for new streets and intersections in new growth areas.
The preferred LOS levels are typically "C" and "D," particularly for larger roads and major intersections. With LOS C the road provides stable operation but is still underutilized to some degree. LOS D represents a fine balance between the relatively large number of vehicles served and the generally acceptable level of service provided. It is the intent of the City's standards and policies for new and most upgraded intersections and road segments to be designed and built so as not to drop below LOS D ("tolerable delay") during peak traffic periods.

Existing Traffic Conditions and Levels of Service

Traffic count data for the weekday a.m. and p.m. peak hours, as well as 24 hour weekday counts were collected for this traffic impact study at the existing study intersections on March 26, 2017 and on roadway segments on March 28, 2017. Weekday counts were conducted when local schools were in session. Count data were collected in 15-minute intervals for the period from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m. on weekdays and from noon to 2:00 p.m. on Saturdays. The contiguous one-hour period within each period with the highest volumes was used in this traffic impact study as the peak hour. Figure 3 presents the existing lane configurations and existing a.m. and p.m. peak hour traffic volumes at the existing study intersections.

The extent to which traffic within the hour was concentrated into any particular 15 minute period was determined based on the *Peak Hour Factor (PHF)* at each intersection. The observed PHF was incorporated into the LOS analysis to address the specific peaking characteristics of traffic near area schools, but in each case a maximum PHF of 0.92 was used.

Intersection Levels of Service. Table 3 presents existing a.m. peak hour and p.m. peak hour LOS at the existing study intersections. The worksheets presenting the calculation of LOS and signal warrants under all development conditions including Existing Conditions are included in the Appendix. As indicated, all intersections operate at acceptable LOS (i.e., LOS D or better) during all three time periods.

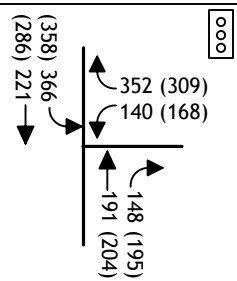
TABLE 3
EXISTING PEAK HOUR LEVELS OF SERVICE

#	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	SR 59 / Yosemite Ave	Signal	20.7	C	21.8	C
2	SR 59 / Buena Vista Dr	Signal	8.8	A	12.0	B
3	SR 59 / Santa Fe Dr / W. Olive Ave	Signal	24.8	C	37.6	D
4	SR 59 / Cooper Ave / Willowbrook Dr	Signal	15.0	B	18.3	B
5	SR 59 / W. 16th Street	Signal*	15.1	B	21.1	B
6	W. Olive Ave / Loughborough Dr	Signal	14.6	B	27.5	C
7	W. Olive Ave / Austin Ave	Signal	7.4	A	16.2	B

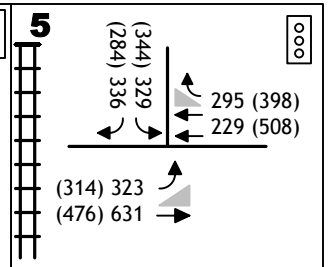
BOLD values are Levels of Service in excess of LOS D.



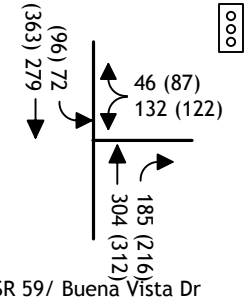
1 SR 59/ Yosemite Ave



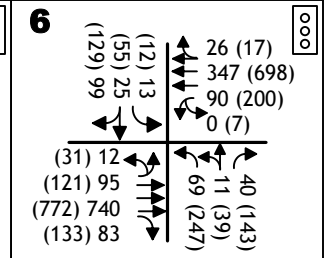
5 SR 59/ West 16th St



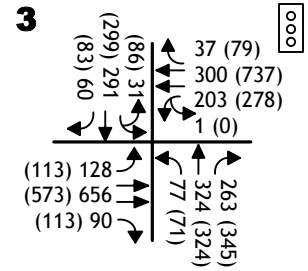
2 SR 59/ Buena Vista Dr



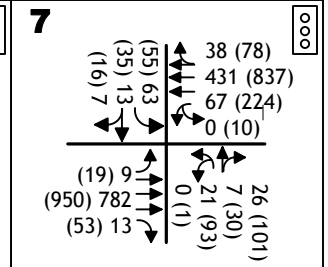
6 Loughborough Dr/ Olive Ave



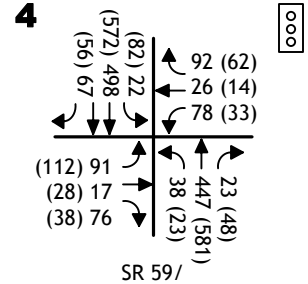
3 SR 59/ Santa Fe Dr/ Olive Ave



7 Austin Ave/ Olive Ave



4 SR 59/ Cooper Ave/ Willowbrooke Dr



EXISTING TRAFFIC VOLUMES AND LANE CONFIGURATIONS

KD Anderson & Associates, Inc.
Transportation Engineers
0780-06 RA 1/3/2018

figure 3

Roadway Segments. Table 4 identifies 2017 daily traffic volumes on study area roadways as well as the applicable Level of Service based on Merced General Plan thresholds. As indicated, the two lane segments of SR from the W. 16th Street intersection to W. Olive Avenue carry volumes that are indicative of LOS F conditions. This exceeds the City's minimum LOS D standard. All other roadways carry traffic volumes that indicate LOS D or better conditions.

TABLE 4
EXISTING ROADWAY SEGMENTS VOLUMES AND LEVELS OF SERVICE

Street	from	To	Classification	Daily Volume	LOS
SR 59	Buena Vista Dr	W. Olive Ave	2 lane Arterial	13,739	D
	W. Olive Ave	NB & SF RR	2 lane Arterial	21,954	F
	BN&SF RR	W 16th Street	2 lane Arterial	20,462	F
Santa Fe Drive	Beachwood Dr	SR 59	4 lane Arterial	19,733	C
W. Olive Ave	SR 59	Loughborough Dr	6 lane Arterial	25,131	C

Alternative Transportation Modes

The section which follows describes existing and planned facilities for pedestrians, bicyclists and transit riders in the area of the proposed project.

Pedestrians. Sidewalks are generally absent along rural Merced County roads but are constructed as properties are annexed into the City of Merced and developed. The text which follows notes the availability of pedestrian facilities in the study area.

To the south along SR 59 no pedestrian facilities exist on the west side of SR 59 in the area from the Santa Fe Drive across the BN&SF railroad to Cooper Avenue, and no shoulder is available in some areas. A separated bike path exists on the east side of SR 59 and that facility extends to the BN&SF crossing. Sidewalk begins south of the railroad crossing.

No sidewalk exists immediately east of SR 59 along W. Olive Avenue. Pedestrians typically walk off the roadway on and unimproved paths have been worn in this area. Sidewalks exist on W. Olive Avenue starting roughly 300 feet east of SR 59.

To the north the bike path extends on the east side of SR 59 from W. Olive Avenue to Rascal Creek, and the path continues to the east along the creek. No facilities exist on the creek crossing or in the area north of the creek for roughly 1,000 feet to the point where sidewalk was installed with commercial property at the Buena Vista Drive intersection.

There are no dedicated facilities on Santa Fe Drive and pedestrians use the paved shoulders.

Bicycles. The City of Merced General Plan includes the Bicycle Master Plan which identifies existing and planned facilities. Bicycle facilities are divided into three classes:

- Class I (Bike Paths or Trails) which are a completely separate right-of way designated for the exclusive use of bicycles and pedestrians.
- Class II (Bike Lanes) which provide restricted right-of-way on the street for the exclusive or semi-exclusive use of bicycles.
- Class III (Bike Routes) where bicycles are encouraged but bike lanes are not provided and motor vehicles and bicyclists share the right of way.

Today Class I facilities exist along the east side of SR 59 from the BNSF crossing to Black Rascal Creek.

The Merced 2013 Bicycle Transportation Plan and General Plan indicates that Class II lanes are to be created on SR 59 from W. 16th Street to W. Olive Avenue, but none exist today in this area.

Transit. The City of Merced is served by a local public bus system, inter-regional private bus companies, and private taxi-cabs, as well as rail and air passenger services that are both dealt with under separate headings. The public bus system, created in 1974, served the community as the Merced Transit System (MTS)/City Shuttle for more than two decades. Its primary goal over time remained to serve senior citizens, low-income people and the disabled, even as the system expanded. Originally created solely as a demand responsive Dial-A-Ride operation, the service extended as time passed to include a number of fixed routes within the City.

Today Route M1 – Merced West serves the area of the proposed project. This route originates at the downtown Transportation Center on 16th Street and extends north on SR 59 beyond the project site to a stop on Buena Vista Drive (refer to map in Appendix). M1 runs from 6:30 a.m. to 8:00 p.m. Monday thru Friday on roughly ½ hour headways. The route runs from 8:30 a.m. to 6:00 p.m. Saturday and Sunday.

Route M6 – Olive Loops follows Olive Drive as far west as the Loughborough Drive intersection roughly ¼ mile east of the project. M6 runs from 7:15 a.m. to 8:00 p.m. Monday thru Friday on roughly ½ hour headways. The route runs from 8:45 a.m. to 5:00 p.m. Saturday and Sunday.

Intersection Queuing. The feasibility of project access is linked to the length of southbound queues on SR 59 approaching the Santa Fe Drive – W. Olive Avenue intersection. Caltrans staff has noted that if the queue of southbound through traffic regularly extends beyond the project driveway, then it would be difficult to leave the site and use the southbound left turn lane to reach W. Olive Avenue.

The length of peak period queues has been estimated as a byproduct of the Level of Service analysis, and the results are presented in Table 5. These calculations assume that the pending Caltrans safety improvements project has been installed and that a southbound right turn lane is available.

TABLE 5
ESTIMATED EXISTING SOUTHBOUND PEAK HOUR QUEUES

Approach	Lane	AM Peak Hour		PM Peak Hour	
		Volume	95th % Queue (feet)	Volume	95th % Queue (feet)
Southbound	Left turn	31	53	86	117
	Through	291	263	299	276
	Right turn	60	<25	83	<25

PROJECT CHARACTERISTICS

Project Use / Access Characteristics

The SR 59 / Olive Avenue Retail Center plan includes a variety of convenience oriented retail land uses. The development plan includes three points of access that are also evaluated in this analysis.

Trip Generation Rates. The number of vehicle trips that are expected to be generated by development of the proposed project has been estimated using trip generation rates based on the nature and size of project land uses. Data compiled by the Institute of Transportation Engineers (ITE) and presented in the publication *Trip Generation, 9th Edition* (Institute of Transportation Engineers 2012) is the source of trip generation rates for the uses within the proposed project. The trip generation rates used in this analysis are presented in Table 6.

A conservative approach has been taken to estimate project trip generation which yields a "worst case" assessment. As indicated, available rates have been employed for those areas with a specific land use designation, including those areas designated for food services, gasoline sales, and pharmacy. Those areas broadly designated as "retail" have been assigned trip generation rates based on the average rates from the ITE "Shopping Center" land use category 820.

Trip Generation Forecasts. Table 7 identifies the results of applying the identified trip generation rates to the land use inventory. A portion of these trips would likely be made between uses on the site, but to provide a "worst case" evaluation no internal capture has been assumed. Similarly, many of the trips associated with retail uses are typically drawn from the stream of background traffic passing the site as part of another trip. Table 7 identifies the typical share of the trips associated with various retail uses. After discount for "pass-by" trips the project could be expected to result in 4,040 net new trips on a daily basis, with 300 new trips in the a.m. peak hour and 320 new trips in the p.m. peak hour.

TABLE 6
TRIP GENERATION RATES FOR SR 59 / OLIVE RETAIL CENTER

ITE Code	Description	Quantity	Trips per Unit						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
820	General Retail	ksf	42.70	62%	38%	0.96	48%	52%	3.71
880	Pharmacy without Drive thru window	ksf	90.06	65%	35%	2.94	49%	51%	8.40
934	Fast Food Restaurant with Drive thru	ksf	496.12	51%	49%	45.42	52%	48%	32.65
938	Coffee / Donut Shop with Drive thru and No Indoor Seating	ksf	2000.00	50%	50%	337.04	50%	50%	83.33
946	Gasoline / Service Station with C store and Car Wash	fueling position	152.84	51%	49%	11.84	51%	49%	13.86

TABLE 7
TRIP GENERATION FORECASTS FOR SR 59 / OLIVE RETAIL CENTER

ITE Code	Description	Quantity	Trips per Unit						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Phase 1: Gasoline with C Store and Car Wash plus Fast Food and Coffee / Kiosk									
946	*Gasoline with C Store and Car Wash*	16 positions	2,445	97	92	189	113	109	222
	Pass-by (56% daily, 62% a.m., 56% p.m.)		1,369	60	57	117	63	61	124
	Net New Trips		**1,076**	**37**	**35**	**72**	**50**	**48**	**98**
826	*Fast Food with Drive Thru*	3.46 ksf	1,717	80	77	157	59	54	113
	Pass-by (50% daily and p.m., 49% a.m.)		858	39	38	77	29	27	56
	Net New Trips		**859**	**41**	**39**	**80**	**30**	**27**	**51**
938	*Coffee / Donut Shop with Drive thru and No Indoor Seating*	*0.824 ksf*	1,648	139	139	278	35	34	69
	Pass-by (89%)		1,467	124	123	247	31	30	61
	Net New Trips		**181**	**15**	**16**	**31**	**4**	**4**	**8**
	Phase 1 Total Net New Trips		**1,116** **~~1,935~~**	**93** **~~78~~**	**90** **~~74~~**	**183** **~~152~~**	**84** **~~80~~**	**79** **~~75~~**	**163** **~~155~~**
Phase 2: Pharmacy, Fast Food and Retail									
826	*General Retail*	18.2 ksf	777	11	6	17	32	36	68
	Pass-by (15% daily and p.m.)		116	2	0	2	5	5	9
	Net New Trips		**661**	**8**	**5**	**13**	**27**	**31**	**58**
934	*Fast Food Restaurant with Drive Thru*	2.7 ksf	1,340	63	60	123	46	42	88
	Pass-by (50% daily and p.m., 49% a.m.)		670	31	29	60	23	21	44
	Net New Trips		**670**	**32**	**31**	**63**	**23**	**21**	**44**
880	*Pharmacy without Drive Thru*	14.0 ksf	1,261	27	14	41	58	60	118
	Pass-by (53% daily and p.m.)		668	0	0	0	31	32	63
	Net New Trips		**593**	**27**	**14**	**41**	**27**	**28**	**55**
	Phase 2 Total Net New Trips		**1,924**	**67**	**50**	**117**	**77**	**80**	**157**
PROJECT TOTAL NET NEW TRIPS			**4,040** **~~3,859~~**	**160** **~~145~~**	**140** **~~124~~**	**300** **~~269~~**	**161** **~~157~~**	**159** **~~155~~**	**320** **~~312~~**

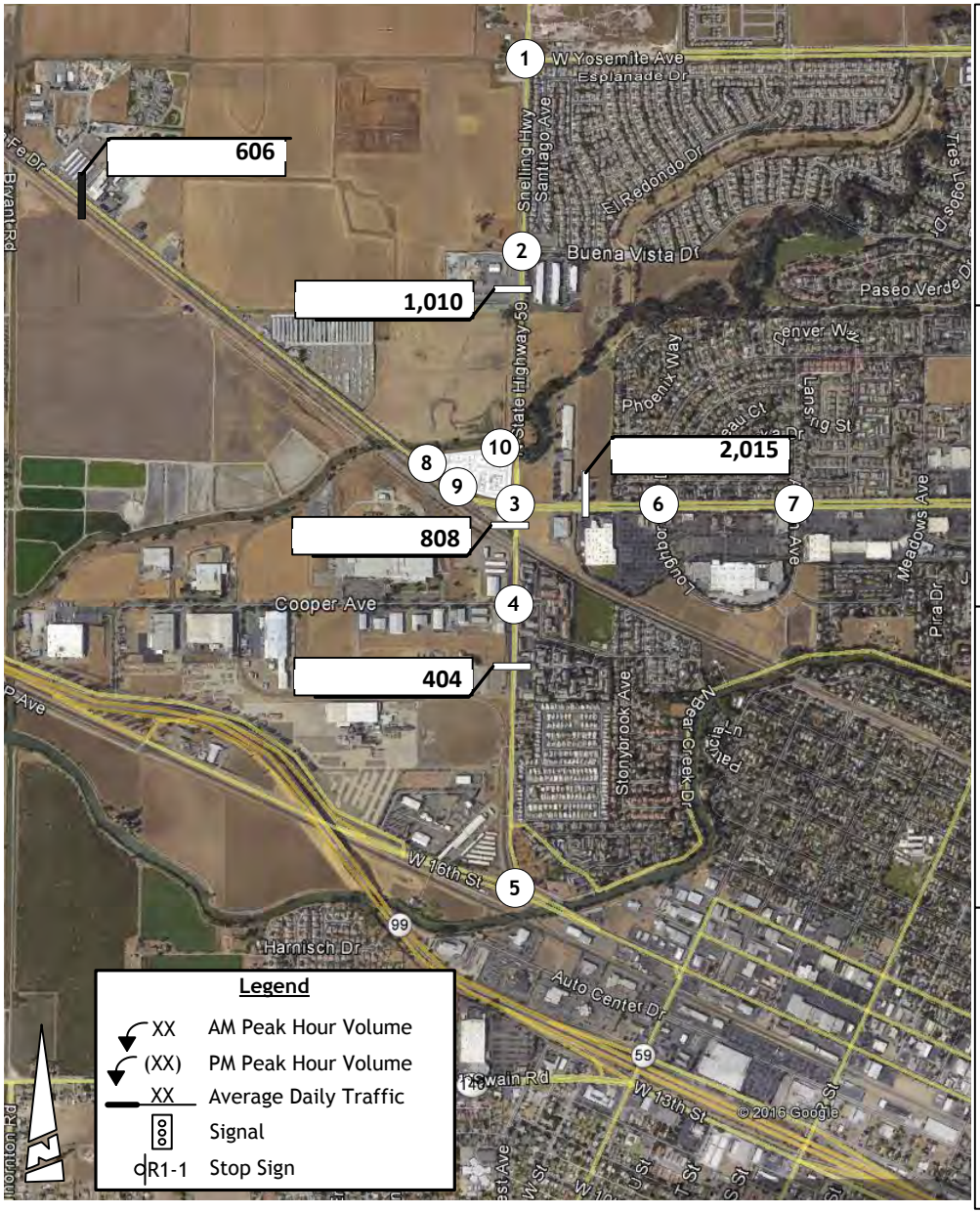
Trip Distribution. The geographic distribution of vehicle trips associated with the proposed project has been determined from review of select zone analysis results from the MCAG regional travel demand forecasting model, consideration of the nature of land uses in each area and consideration of current travel patterns. Table 8 indicates the directional allocation of new trips.

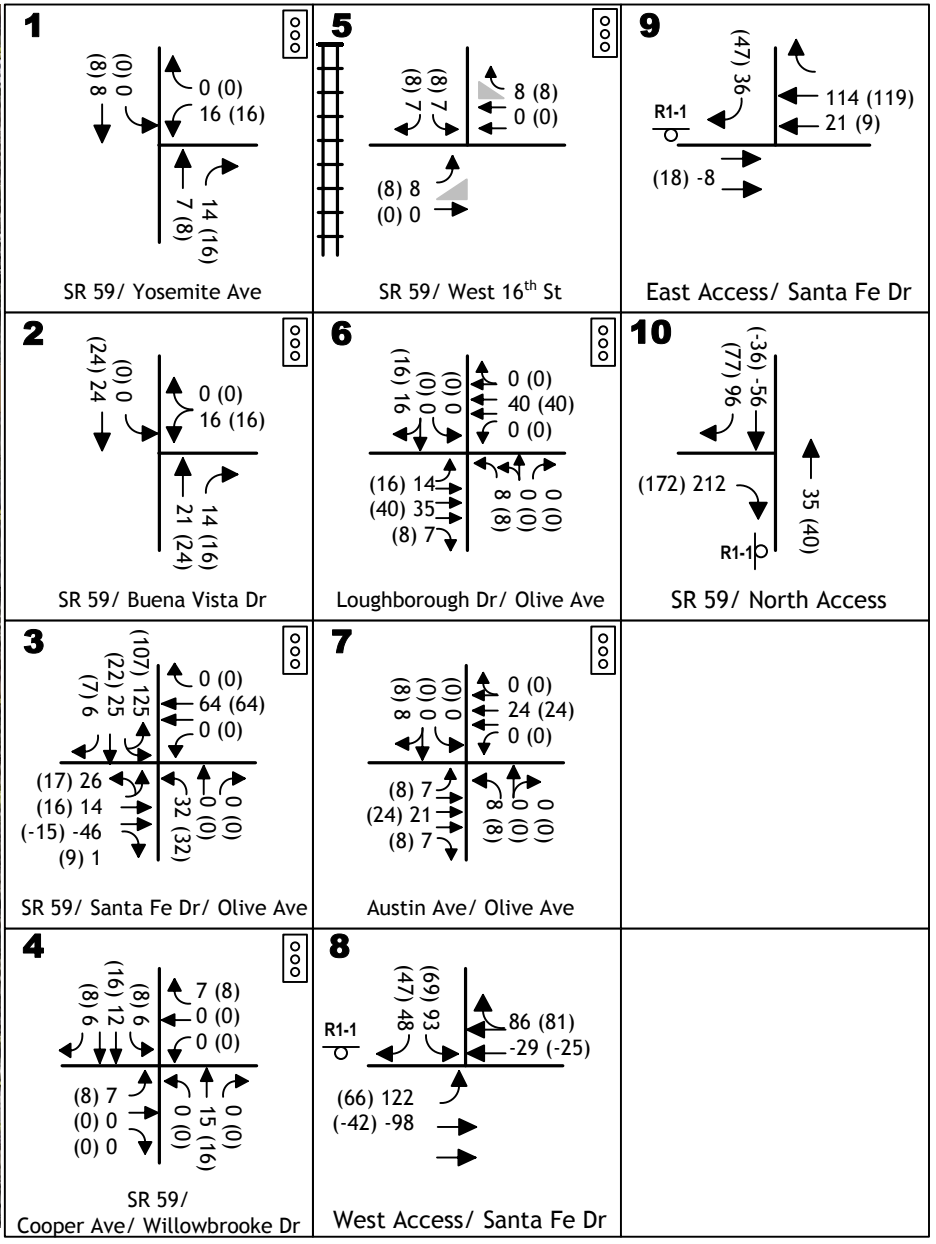
TABLE 8
SR 59 / OLIVE AVENUE RETAIL CENTER COMMERCIAL USES
TRIP DISTRIBUTION ASSUMPTIONS

Direction	**Route**	**Percentage of Total Trips**	
New Trips			
North	SR 59 beyond Yosemite Avenue	5%	
	Yosemite Avenue east of SR 59	10%	
	Buena Vista Drive east of SR 59	10%	
East	W. Olive Avenue beyond Austin Avenue	15%	
	Loughborough Drive off of W. Olive Avenue	15%	
	Austin Avenue off of W. Olive Avenue	10%	
West	Santa Fe Drive west of SR 59	15%	
South	W. 16th Street beyond SR 59	10%	
	Cooper Avenue west of SR 59	5%	
	Willowbrook Drive east of SR 59	5%	
Total		100%	
Pass By Trips			
Direction		**AM Peak Hour**	**PM Peak Hour**
Southbound on SR 59		23%	22%
Westbound on Santa Fe Drive		26%	41%
Eastbound on Santa Fe Drive		52%	37%

Pass-by trips were assigned in proportion to the volume of traffic passing along the site, and the shares may vary based on time of day. The share drawn from each stream is also presented in Table 8.

Trip Assignment. Figure 4 illustrates "project only" trips through study area intersections and at project driveways under the distribution percentages noted above with access as proposed.





PROJECT ONLY TRAFFIC VOLUMES AND LANE CONFIGURATIONS

KD Anderson & Associates, Inc.
Transportation Engineers

Project Improvements. The project will install frontage improvements along SR 59 and Santa Fe Drive as required by the City and Caltrans in a manner that is consistent with Caltrans' pending safety improvement project. All work conducted in the state right of way will require an encroachment permit form Caltrans. The SR 59 access will be limited to right turns only, and a raised island will be constructed in the driveway to preclude left turns. To accommodate access the southbound right turn lane being constructed by Caltrans will be extended by the project proponents as far north towards Black Rascal Creek as is possible.

On Santa Fe Avenue the eastern access will be limited to right turns only. A painted center median is being installed by Caltrans, and precluding left turns will require either a raised median or a specific feature in the driveway. This driveway will be preceded by a right turn deceleration lane or taper as required by the City. Full access is planned at the western access, and the driveway is planned to be west of the end of the striped median being installed by Caltrans. The existing striped median will be reconfigured to provide an eastbound left turn lane at the project access. A right turn deceleration lane or taper will be installed at this driveway.

The project will also install frontage improvements typically required by the City of Merced, including sidewalks.

Truck Access – Proposed Project. Retail businesses attract truck traffic to stock stores and supply restaurants, and in the case of gasoline sales fuel trucks will visit the site regularly. Trucks typically stage in aisles in front of fast food restaurants and small trucks will unload at the rear of retail stores. The project driveways will be designed to accommodate the turning requirements of full size trucks. It is likely that fuel trucks traveling to and from the site via SR 99 will enter from by turning right from Santa Fe Drive and exit onto southbound SR 59. However, trucks can be accommodated at all driveways.

EXISTING PLUS SR 59 / OLIVE AVENUE RETAIL CENTER CONDITIONS

This analysis scenario assumes that the SR 59 / Olive Avenue Retail Center project is fully developed.

Traffic Volumes

Existing Plus Project Traffic Volumes. Figure 5 presents resulting a.m. and p.m. peak hour volumes assuming the project is built out with access as proposed.

Intersection Level of Service

Table 9 present the a.m. and p.m. peak hour Level of Service at each study intersection under Existing Plus Project conditions with access as proposed. As indicated projected Levels of Service at off-site intersections will fall within the LOS D minimum established by the City of Merced. Thus, the project's impact is not significant and no mitigation based on Level of Service is required at off-site locations.

Motorists waiting to turn onto Santa Fe Drive from the projects **Western Access** will experience delays that are indicative of LOS E in the a.m. peak hour and LOS F conditions in the p.m. peak hour, which exceed the LOS D minimum. Options to improve the Level of Service included:

1. *Reconfigure Santa Fe Drive to provide a Two-Way Left Turn Lane (TWLT) lane in the area between the access and the eastbound left turn lane approaching the SR 59 intersection.* This might be accomplished by moving the driveway to the west to create space for the TWLT lane or by leaving the driveway at the proposed location and modifying the SR 59 / Santa Fe Drive intersection to provide shorter dual left turn lanes and space for the TWLT lane. The later concept would however, require two northbound lanes on SR 59 north of the Santa Fe Drive intersection to received dual left turns, or.
2. *Install a traffic signal at the western access.* While a traffic signal could deliver an adequate Level of Service, the feasibility of another signal in relatively close proximity to the signalized SR 59 intersection is questionable, or.
3. *Prohibit outbound left turns.* The approach Level of Service would be improved if outbound left turns onto eastbound Santa Fe Drive were prohibited. However, this action would divert southbound traffic to the project's SR 59 driveway which would be undesirable, as noted in the discussion of queueing which follows.

Southbound SR 59 Queues

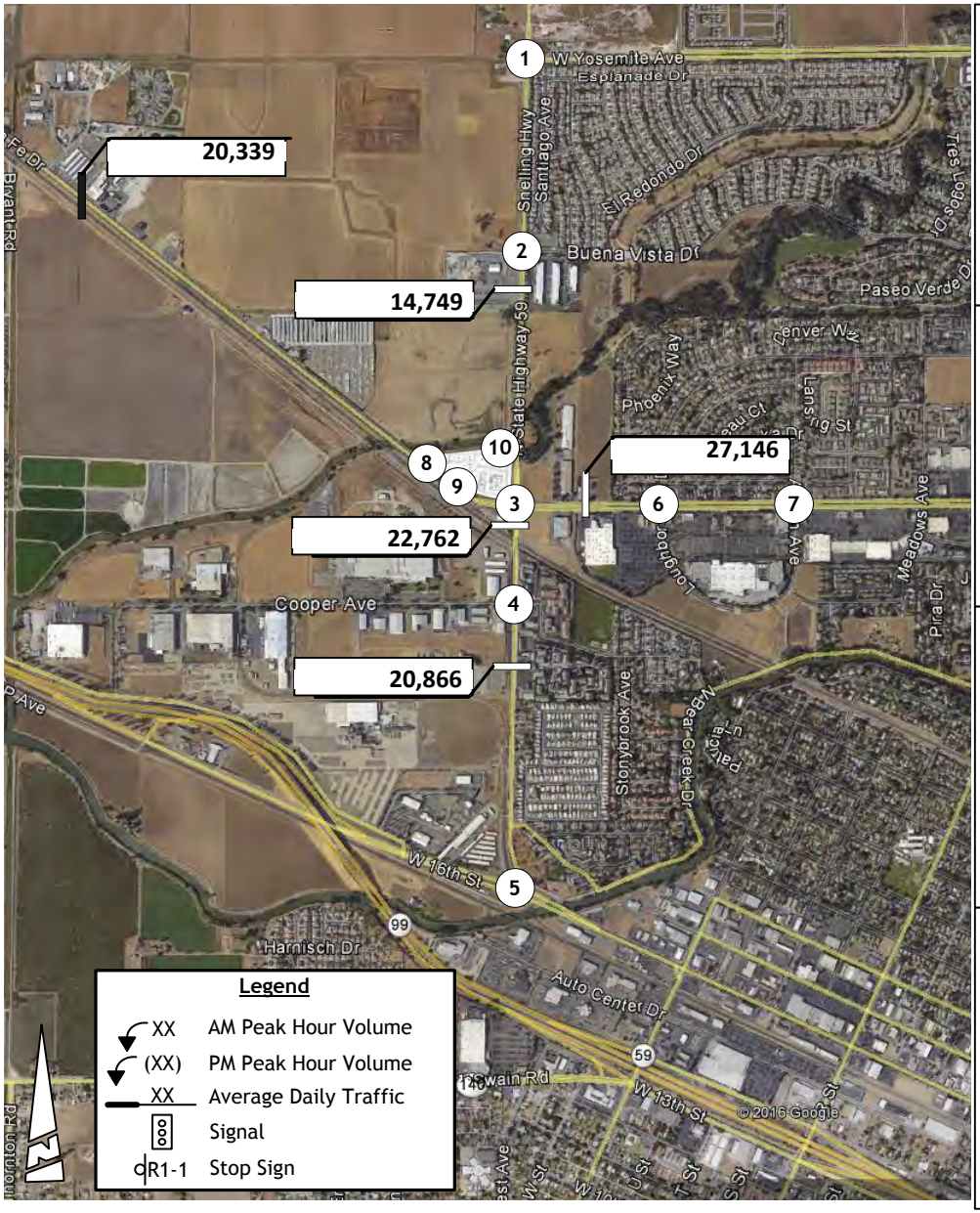
Table 10 compares current southbound queues with those that would be expected if the proposed project is completed. As shown the peak period queues on southbound SR 59 will extend beyond the proposed driveway. As a result, there will be occasions when outbound motorists waiting to turn onto SR 59 will find their path blocked. As in most locations near major intersections these motorists would have to wait through a portion of the traffic signal cycle until

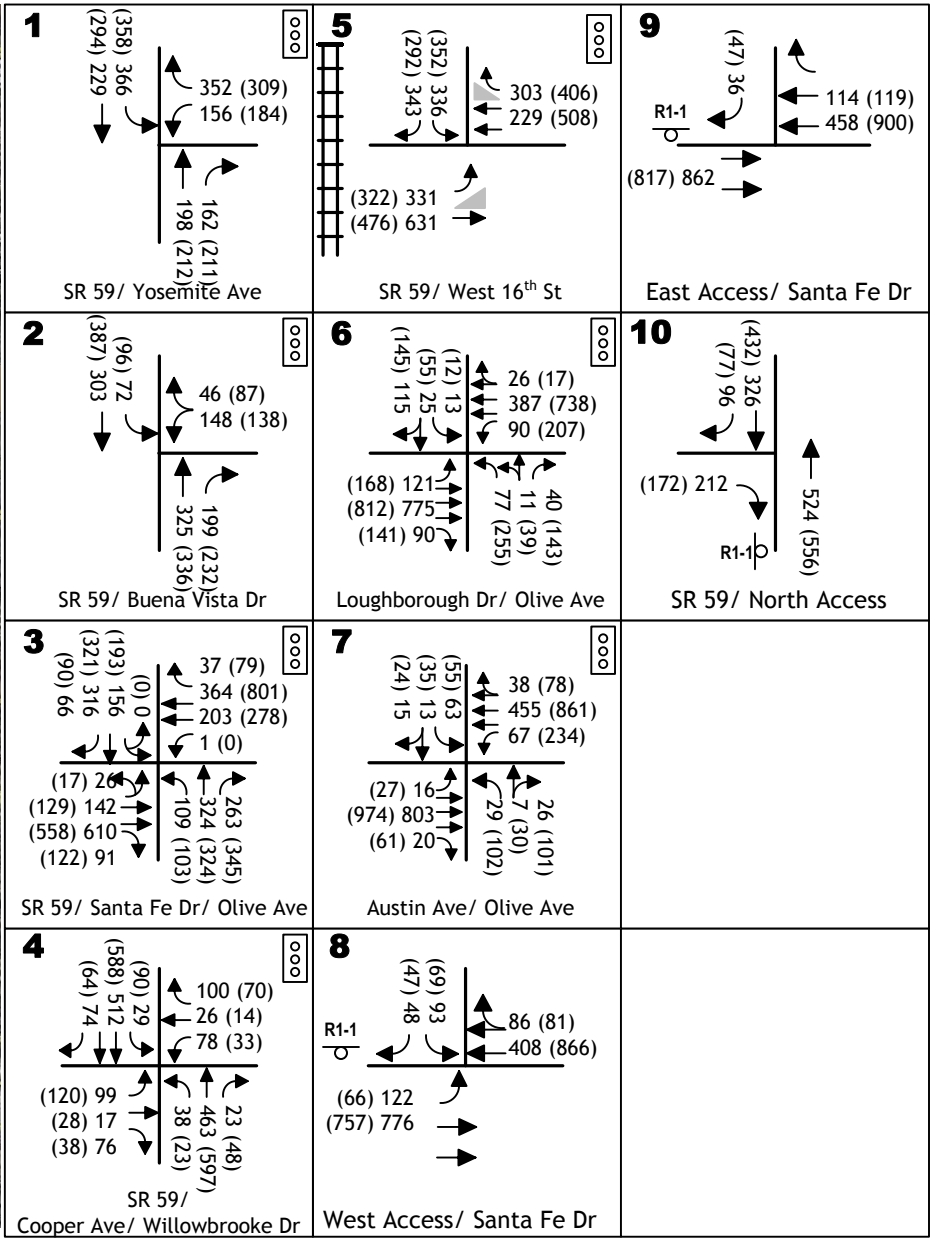
the queue clears and space is available. Reaching the southbound left turn lane could be problematic. In initial discussions Caltrans District 10 staff noted that the presence of long queues could be a reason to eliminate project access to SR 59. Options to address the effects of southbound queueing include:

1. *Lengthen the southbound left turn lane on SR 59*. This actions does not itself reduce the length of southbound queues, however, this mitigation would make it easier to drive around those queues to reach the turn lane and travel east on Olive Avenue. This alternative is the recommended mitigation, or.
2. *Move the Project Access to the north*. The project access could theoretically be moved to the north to reduce the amount of time that it is blocked by southbound queues. However, the length of project frontage beyond the current driveway location is limited. Moving the driveway an appreciable distance would require encroaching into the area of Black Rascal Creek through property that is not a part of the project. This alternative is not feasible, or.
3. *Close the SR 59 Access*. Closing the access to SR 59 would eliminate the conflicts created by southbound queues, but would have unintended consequences at the western access on Santa Fe Drive. The traffic diverted to the western access would exacerbate the LOS F conditions already discussed, and the resulting traffic volumes would reach the level that would justify a traffic signal. However signalizing the western access at the location proposed is problematic. In addition, according to the project proponent closing the access on SR 59 would leave the site unusable for retail commercial uses. This alternative is therefore not feasible

Roadway Segment Level of Service

Table 11 compares current Levels of Service based on daily traffic volumes with those conditions occurring after the project is completed. As indicated, the project will add traffic to all neighboring streets but will not result in any additional streets operating with Level of Service in excess of the LOS D standard. The project will increase the daily traffic volume on the segments of SR 59 south of the W. Olive Avenue intersection that already experience LOS F conditions. Because the minimum standard is exceeded with and without the project, the significance of the project's impact is determined based on the percentage change in traffic volume. Project trips represent 2.0% to 3.7% of the current daily volume on SR 59 in this area. Because these increases do not exceed the 5.0% increase permitted under City traffic study guidelines, the project's impact is not significant, and mitigation is not required.





EXISTING PLUS PROJECT TRAFFIC VOLUMES AND LANE CONFIGURATIONS

TABLE 9
EXISTING PLUS PROJECT PEAK HOUR LEVELS OF SERVICE

#	Intersection	Control	AM Peak Hour				PM Peak Hour			
			Existing		Existing Plus Project		Existing		Existing Plus Project	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	SR 59 / Yosemite Ave	Signal	20.7	C	21.0	C	21.8	C	22.5	C
2	SR 59 / Buena Vista Dr	Signal	8.8	A	9.1	B	12.0	B	12.3	B
3	SR 59 / Santa Fe Dr / W. Olive Ave	Signal	24.8	C	32.0	C	37.6	D	52.5	D
4	SR 59 / Cooper Ave / Willowbrook Dr	Signal	15.0	B	15.6	B	18.3	B	19.4	B
5	SR 59 / W. 16th Street	Signal*	15.2	B	15.6	B	21.1	B	22.1	B
6	W. Olive Ave / Loughborough Dr	Signal	14.6	B	15.3	B	27.5	C	29.1	C
7	W. Olive Ave / Austin Ave	Signal	7.4	A	7.6	B	16.2	B	16.6	B
8	SR 59 / Access EB right turn	EB Stop			13.8	B			14.8	B
9	Santa Fe Dr / West Access SB approach EB left turn	SB Stop			**40.1** 9.1	**E** A			**73.9** 11.3	**F** B
10	Santa Fe Dr / East Access SB right turn	SB stop			10.1	B			12.8	B

BOLD values are Levels of Service in excess of LOS D.

TABLE 10
EXISTING PLUS PROJECT SOUTHBOUND PEAK HOUR QUEUES

Approach	Lane	AM Peak Hour					PM Peak Hour				
		Existing		Existing Plus Project			Existing		Existing Plus Project		
		Volume	95th % Queue (feet)	Volume		95th % Queue (feet)	Volume	95th % Queue (feet)	Volume		95th % Queue (feet)
				Project Only	Total				Project Only	Total	
Southbound	Left turn	31	53	125	156	240	86	117	107	193	318
	Through	291	263	25	316	286	299	276	22	321	299
	Right turn	60	<25	6	66	<25	83	<25	7	90	<25

TABLE 11
EXISTING ROADWAY SEGMENTS VOLUMES AND LEVELS OF SERVICE

Street	from	To	Classification	Existing		Existing Plus Project			
				Daily Volume	LOS	Daily Volume			LOS
						Project Only	Total	Percentage Increase	
SR 59	Buena Vista Dr	W. Olive Ave	2 lane Arterial	13,739	D	1,010	14,749	7.0%	D
	W. Olive Ave	NB & SF RR	2 lane Arterial	**21,954**	**F**	808	**22,762**	3.7%	**F**
	BN&SF RR	W 16th St	2 lane Arterial	**20,462**	**F**	404	**20,866**	2.0%	**F**
Santa Fe Dr	Beachwood Dr	SR 59	4 lane Arterial	19,733	C	606	20,339	3.1%	C
W. Olive Ave	SR 59	Loughborough Dr	6 lane Arterial	25,131	C	2,015	27,146	8.0%	C

BOLD values exceed minimum Level of Service standard. **HIGHLIGHTED** values are a significant impact

Traffic Signal Warrants

The volume of traffic occurring at the project's access to Santa Fe Avenue was compared to MUTCD peak hour traffic signal warrants to determine whether a traffic signal may be justified. The posted speed limit on Santa Fe Drive is 55 mph, which suggests that "rural" warrant criteria are applicable. As shown in Table 12, with access as proposed the traffic volumes at the western access reach satisfaction in the a.m. peak hour but do not reach the level that satisfies peak hour warrants in the p.m. peak hour. However, if the SR 59 access were to be closed, the resulting traffic volumes would exceed the minimum requirements under peak hour warrants.

TABLE 12
PEAK HOUR TRAFFIC SIGNAL WARRANTS AT SANTA FE DRIVE ACCESS

Location	Time	Access	Hourly Volume		Signal Warrants met	
			Major Street	Minor Street (left turn)	Rural	Urban
West Access	AM	As proposed	1,392	93	Yes	No
		Close SR 59 driveway	1,392	305	Yes	Yes
	PM	As proposed	1,770	69	No	No
		Close SR 59 driveway	1,770	241	Yes	Yes

Impacts to Alternative Transportation Modes

Pedestrians. The project could attract pedestrians from the neighborhoods to the east, north and south of the site, although the exact number of pedestrians is unknown. These pedestrians would be unlikely if the site was not re-designated for a retail commercial use. The project would be accompanied by standard City of Merced street frontage improvements that include sideways. With the project frontage improvements and completion of the Caltrans safety project, adequate facilities will exit to deliver pedestrians to the east side of SR 59 and the south side of Santa Fe Drive.

From that point existing facilities for pedestrians are intermittent, as was noted in the existing setting. Thus, project generated pedestrians would need to use the same shoulders and other unimproved surfaces that are used today. As is the case today, the gap in the pedestrian circulation system on the west side of SR 59 south of Olive Avenue to Cooper Drive will remain. Eliminating that gap would require acquiring right of way to install a sidewalk. While perhaps desirable, this action does not appear feasible at this time.

Bicycles. The project can be expected to attract bicyclists from various Merced neighborhoods. As noted in the Setting, bicycle facilities already exist as Class I trails on the east side of SR 59, but are nonexistent elsewhere. Bicycle lanes are not designated on SR 59 north of Olive Avenue

on Santa Fe Drive nor on Olive Avenue in the Merced County General Plan Circulation Element. Under the Circulation Element bicycles are expected to mix with motor vehicles on other streets.

Transit. The project will likely attract some persons from throughout the Merced area who may wish to use public transit. Route M1 passes the site on SR 59 every thirty minutes and M6 reaches the Olive Avenue / Loughborough Drive intersection. These services are adequate for a project of this nature, and the impacts of the project on transit are not significant.

LONG TERM YEAR 2035 CUMULATIVE CONDITIONS

Overview

The cumulative Year 2035 analysis presented herein is intended to evaluate the relative cumulative impact of the project assuming implementation of long term circulation system improvements and continuing development in the Merced area. The Merced County Association of Governments (MCAG) regional travel demand forecasting model is the tool employed for this analysis.

Land Use. The MCAG Year 2035 model's land use data set was employed. However, based on instruction from City of Modesto staff the model's land use was modified to include a portion of the City of Atwater's pending Ferrari Ranch Annexation. That project covers approximately 330-acres located adjacent to the eastern city limits of the City of Atwater abutting the Atwater Merced Expressway (AME). This 330-acre area was the subject of recent Annexation, General Plan Amendment, and Prezoning approvals from the City of Atwater, but no specific development proposal has come forward.

The anticipated buildout schedule for the Ferrari Ranch Annexation could exceed 40 years, and only a portion of the area might reasonably be expected to be occupied by the Year 2035. For this analysis City staff suggested that this analysis assume that one half of the Ferrari Ranch Sub-Area within the overall annexation be assumed to develop by 2035.

Circulation System Improvements. The City of Merced General Plan Circulation element and GPUE EIR suggest that appreciable improvements will be needed to accommodate the future traffic volumes accompanying build out of the General Plan. SR 59 is projected to be a 6-lane facility from W. 16th Street to Yosemite Avenue (refer to GP Table 4.4) and a four-lane facility north of Yosemite Avenue. Santa Fe Drive and Olive Avenue are to be 6-lane arterials. Regionally, the General Plan envisions the completion of the Atwater Merced Expressway and Campus Parkway.

Anticipated funding constrains the level of future improvements assumed in this analysis. The MCAG model reflects implementation of Tier I improvements noted in the 2014 Regional Transportation Plan. In addition, at the direction of City of Merced staff the model was refined to reflect the extension of Campus Parkway beyond SR 140 to Yosemite Avenue. However, as directed by City staff this analysis assumes that the AME is not extended beyond its current terminus at Green Sands Avenue. Similarly, this analysis assumes that SR 59 is widened to provide two through travel lanes in each direction in the area from W. 16th Street to Olive Avenue. The section of SR 59 north of Olive Avenue is assumed to remain a two lane roadway.

Approach to Developing Traffic Volume Forecasts. To provide the level of detail needed to address project driveways and study area intersections under long term cumulative conditions a three step process was developed to generate cumulative traffic volumes. An incremental approach was taken to producing future traffic volumes that is intended to address the relative

difference between baseline model forecasts and actual traffic counts. This approach follows these steps:

- Run the refined models for baseline and future conditions.
- Compare baseline model forecasts with future forecasts to identify the incremental change in daily approach volume at each intersection and on each roadway segment.
- Add that increment to the existing approach or segment volumes counted in 2017 to create "adjusted future" volumes.
- Compare existing and adjusted future volumes to identify the growth rate on each approach or segment.
- Multiply each intersection approach by the growth rate and adjust the results to balance using the "Furness" techniques from the Transportation Research Board's (TRB) NCHRP Report 255, *Highway Traffic Data for Urbanized Area Project Planning and Design.*

For this analysis the traffic model was used to forecast Year 2035 Plus Project traffic volumes. A separate TAZ was created and the project was loaded accordingly. The Year 2035 No Project condition was created by manually subtracting the project's net new trips.

Daily Traffic Volumes / Levels of Service

Traffic Volumes. Table 13 identifies projected Year 2035 traffic volumes and resulting Level so Service. As indicated the volume of traffic on study area roads is projected to increase appreciably in the future. The daily traffic volume on SR 59 is projected to approach the capacity of the highway with and without the proposed project.

Levels of Service. As indicated, while Santa Fe Drive and Olive Avenue are projected to operate with Level of Service that satisfy the City's LOS D minimum, SR 59 is projected to operate at LOS F with and without the project. To meet the City's minimum standard SR 59 would need to be widened in a manner that is consistent with the facility anticipated for General Plan buildout (i.e., 6-lanes) in the area south of Olive Avenue, and a four lane section is needed to the north. Alternatively, completion of other elements of the regional street system may alter the volume of traffic on these roads under Year 2035 conditions.

Because conditions exceed the adopted minimum LOS standard with and without the proposed project, the significance of the project's impact on roadways segments is determined based the incremental change in traffic volume attributed to the project. As shown, the project adds, roughly 4.0% and 1.7 % to the projected daily volume on SR 59 north and south of the W. Olive Avenue intersection. As these changes do not exceed the 5.0% increment permitted under City of Merced policy, the project's impact to mainline SR 59 is not significant, and mitigation to address this impact is not required.

TABLE 13
YEAR 2035 PLUS PROJECT ROADWAY SEGMENTS VOLUMES AND LEVELS OF SERVICE

Street	from	To	Classification	No Project		Year 2035 Plus Project			
				Daily Volume	LOS	Daily Volume			LOS
						Project Only	Total	Percentage Increase	
SR 59	Buena Vista Dr	W. Olive Ave	2 lane Arterial	**24,060**	**F**	965	**25,025**	4.0%	**F**
	W. Olive Ave	BN&SF RR	4 lane Arterial	**46,375**	**F**	775	**47,150**	1.7%	**F**
	BN&SF RR	W 16th Street	4 lane Arterial	**47,310**	**F**	390	**47,700**	0.8%	**F**
Santa Fe Drive	Beachwood Dr	SR 59	4 lane Arterial	27,750	C	580	28,330	2.1%	C
W. Olive Ave	SR 59	Loughborough Dr	6 lane Arterial	36,770	C	1,930	38,700	5.3%	C

BOLD values exceed minimum Level of Service standard. **HIGHLIGHTED** values are a significant impact

Peak Hour Intersection Volumes and Levels of Service

Traffic Volumes. Resulting Year 2035 traffic volumes with and without the project are presented in Figures 6 and 7. These figures also identify assumed improvements to intersections that would accompany the assumed widening of SR 59 to 4 lanes from W. Olive Avenue to W. 16th Street. This analysis assumes that two through lanes would be provided in each direction on SR 59 through the Olive Avenue intersection but would not continue to Buena Vista Drive.

Intersection Level of Service. Table 14 displays the a.m. and p.m. peak hour Levels of Service at each study intersection under future Cumulative Year 2035 conditions with and without the project.

Year 2035 No Project. If the project does not proceed and the site remains vacant, then two intersections are projected to operate with Level of Service that exceed the LOS D minimum standard. The **SR 59 / Olive Avenue / Santa Fe Drive intersection** is projected to operate at LOS F. This conclusion is consistent with Level of Service projected for SR 59 on a daily basis. Regional and local improvements might be considered to alleviate this deficiency. Regionally the extension of AME to Bellevue Road could alter travel patterns, although simply completing that improvements may not result in conditions that satisfy the minimum standard, and funding for that improvement is not secured. Locally, widening the intersection to provide additional capacity would be needed to achieve LOS D. These improvements are consistent with the planned 6 lane facilities and include:

1. Reconstruct westbound Olive Avenue to provide dual left turn lanes onto Southbound SR 59.
2. Reconfigure the westbound right turn lane to create a combination through & right turn lane, and extend that through lane across SR 59 along the project's frontage.
3. Reconstruct the existing northbound right turn lane as a "free" right turn with median island separating eastbound and right turning traffic.
4. Reconstruct the Eastbound Santa Fe Drive approach to provide dual left turn lane.

This level of improvement would yield Level of Service D in the a.m. peak hour and LOS D in the p.m. peak hour.

The **SR 59 / W. 16th Street intersection** is also projected to operate at LOS F if the proposed project does not proceed. At this location the introduction of a second southbound left turn lane would reduce delays, and LOS D would result. This improvement would be consistent with widen the highway to 4 lanes.

Year 2035 Plus Project Conditions. The addition of project trips will increase the length of delays at all intersections, but under City of Merced guidelines the impact of the project is only significant at one off-site intersection. The **SR 59 / Olive Avenue / Santa Fe Drive intersection** is projected to operate at LOS F. Because the intersection is projected to operate at LOS F with and without the project, the significance of the project's impact is determined based on the

incremental difference in average delay. In this case, the project adds 22.1 and 14.6 seconds during the a.m. and p.m. peak hour, respectively. As these increases exceed the City's 5.0 second permissible increment, ***the project's impact is cumulatively significant.***

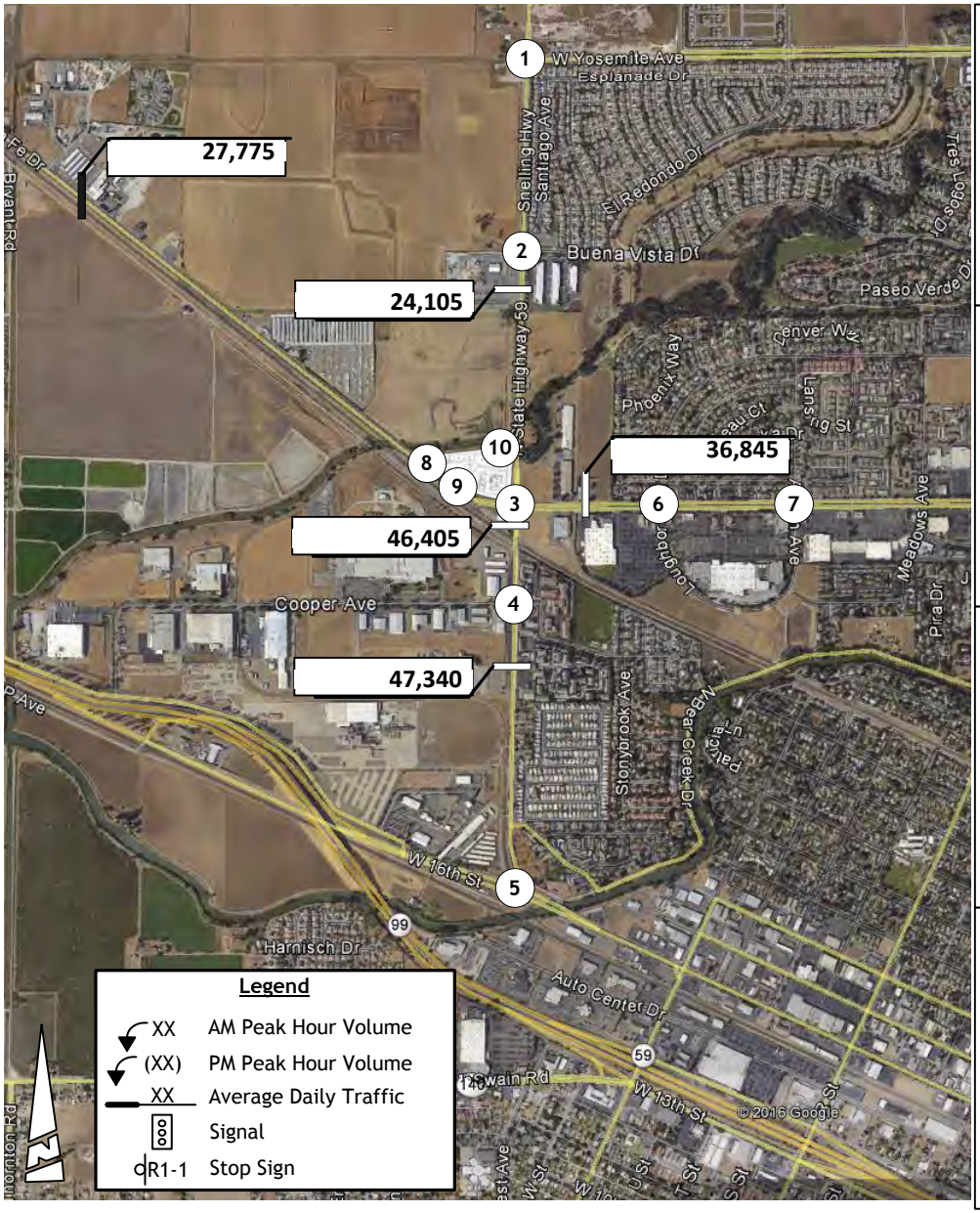
The measures identified for background conditions would also reduce the project's impact and deliver Level of Service meeting the City's LOS D minimum stand were considered. The project should contribute its fair share to the cost of these improvements, and with this mitigation the project's impact is less than significant.

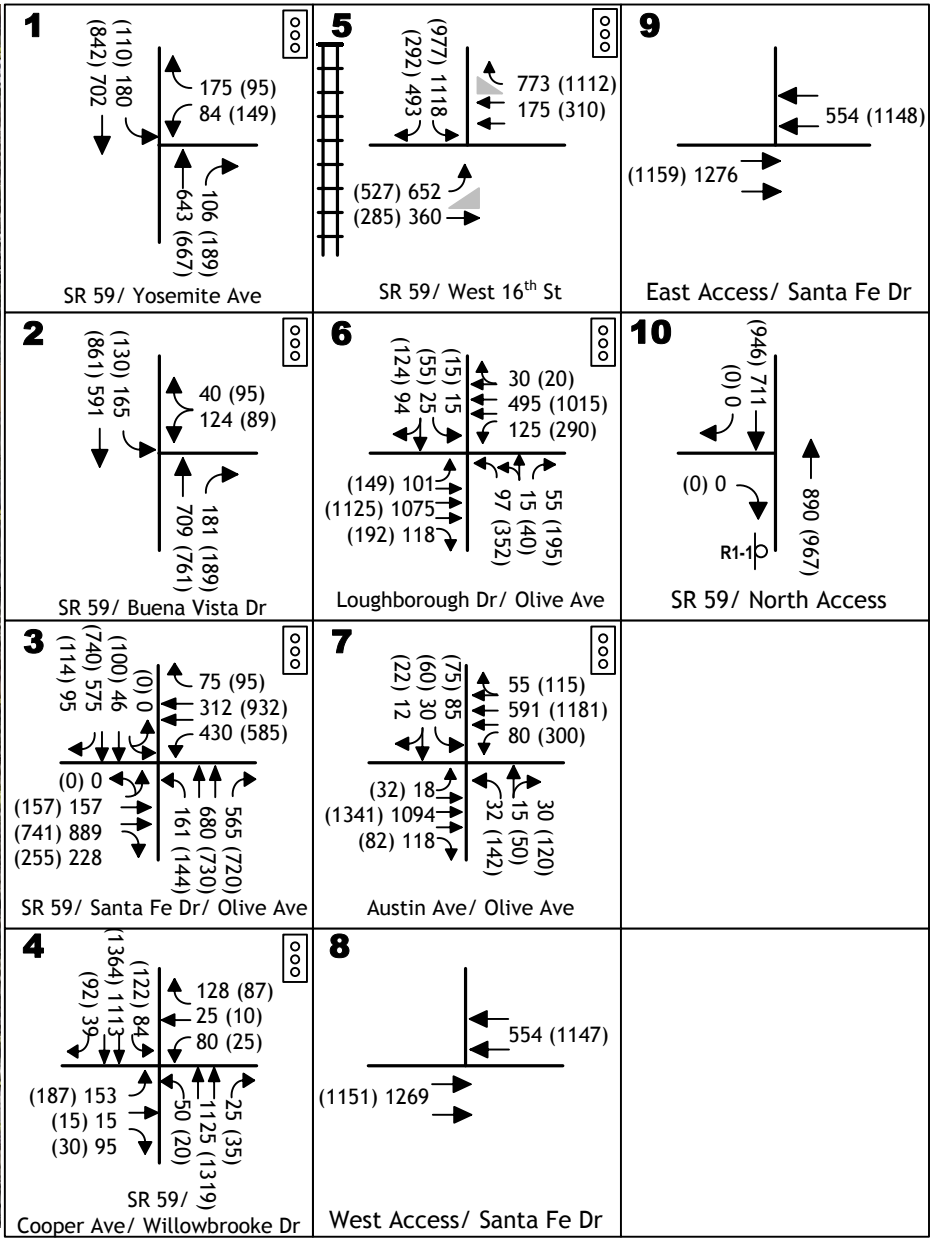
The SR 59 / W. 16th Street intersection is projected to operate at LOS F with and without the project. Because the increment change in delay is less than the 5.0 second threshold employed by the City of Merced, the project's impact to this location is not significant, and mitigation is not required.

The project's western access is projected to operate at LOS F in the a.m. and p.m. peak hour. The issues associated with this access under cumulative conditions and potential mitigations are the same as those discussed under Existing Plus Project conditions.

Southbound SR 59 Queues

Table 15 compares southbound queues on SR 59 approaching the W. Olive Avenue intersection with and without the proposed project. The left turn and through lane queues will extend beyond the driveway if no improvements are made. The improvements required to mitigate cumulative intersection LOS impacts will reduce the length of queues slightly but the measures noted under Existing plus Project conditions will remain necessary.



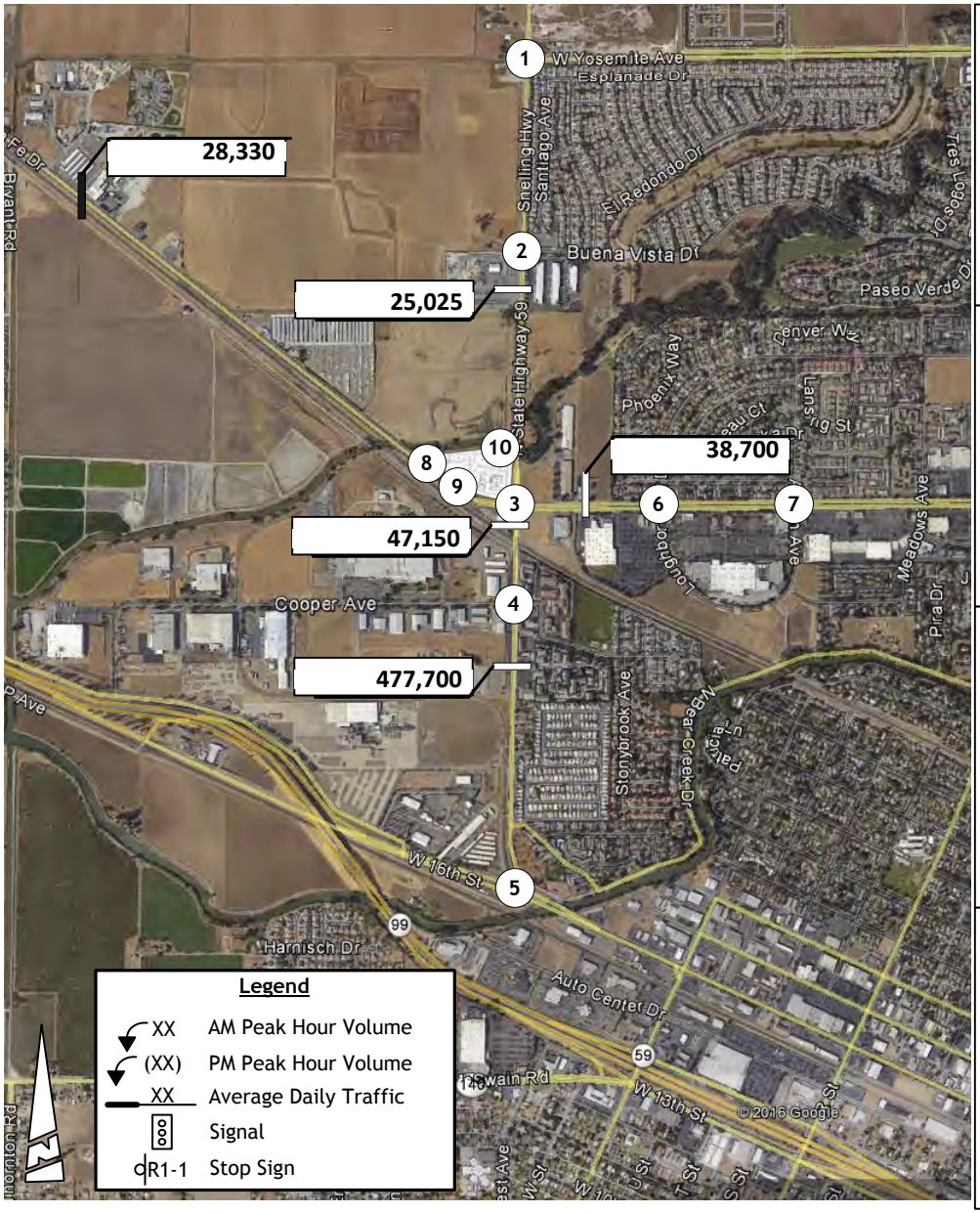


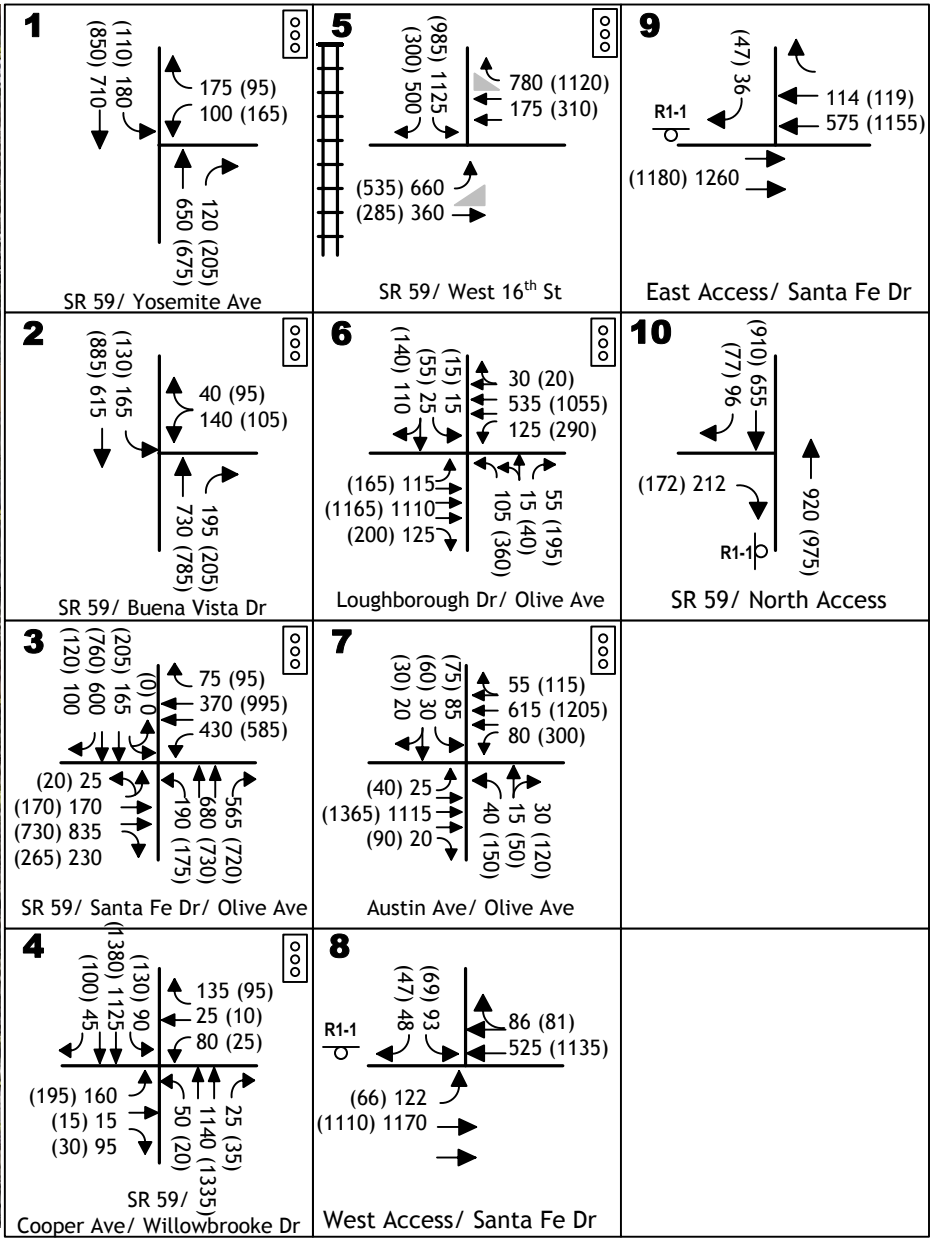
CUMULATIVE NO PROJECT
TRAFFIC VOLUMES AND LANE CONFIGURATIONS

KD Anderson & Associates, Inc.
Transportation Engineers

0780-06 RA 1/3/2018

figure 6





CUMULATIVE PLUS PROJECT
TRAFFIC VOLUMES AND LANE CONFIGURATIONS

KD Anderson & Associates, Inc.
Transportation Engineers

0780-06 RA 1/3/2018

figure 7

TABLE 14
YEAR 2035 PLUS PROJECT PEAK HOUR LEVELS OF SERVICE

#	Intersection	Control	AM Peak Hour				PM Peak Hour			
			Year 2035		2035 Plus Project		Year 2035		2035 Plus Project	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	SR 59 / Yosemite Avenue	Signal	18.9	B	19.4	B	12.9	B	13.7	B
2	SR 59 / Buena Vista Drive	Signal	13.7	B	14.9	B	12.4	C	13.2	B
3	SR 59 / Santa Fe Dr / W. Olive Ave	Signal	**86.8**	**F**	**108.9**	**F**	**128.9**	**F**	**143.5**	**F**
		w/mit	-	-			-	-	53.3	D
4	SR 59/ Cooper Ave / Willowbrook Dr	Signal	19.2	B	20.9	C	23.4	C	25.8	C
5	SR 59 / W. 16th Street	Signal	**136.7**	**F**	**140.1**	**F**	**102.4**	**F**	**105.7**	**F**
6	W. Olive Avenue / Loughborough Dr	Signal	17.9	B	18.8	B	42.6	C	47.2	D
7	W. Olive Avenue / Austin Avenue	Signal	10.0	B	10.4	B	19.5	C	20.7	B
8	SR 59 / Access EB right turn	EB Stop			25.2	D			**39.7**	**E**
9	Santa Fe Drive / West Access SB approach EB left turn	SB Stop			**114.1** 9.6	**F** A			**305.4** 13.0	**F** B
10	Santa Fe Drive / East Access SB right turn	SB stop			10.6	B			14.6	B

BOLD values are Levels of Service in excess of LOS D. **HIGHLIGHTED** values are a significant impact

TABLE 15 YEAR 2035 SOUTHBOUND PEAK HOUR QUEUES											
Approach	**Lane**	**AM Peak Hour**					**PM Peak Hour**				
		Year 2035 No Project		**Year 2035 Plus Project**			**Year 2035 No Project**		**Year 2035 Plus Project**		
		Volume	**95th % Queue (feet)**	**Volume**		**95th % Queue (feet)**	**Volume**	**95th % Queue (feet)**	**Volume**		**95th % Queue (feet)**
				Project Only	**Total**				**Project Only**	**Total**	
Southbound	Left turn	46	99	119	165	329	100	232	105	205	421
	Through	575	372	25	600	394	740	484	20	760	469
	Right turn	95	<25	5	100	236	114	40	6	120	46

Traffic Signal Warrants

The volume of traffic occurring at the project's access to Santa Fe Avenue under Year 2035 conditions was compared to MUTCD peak hour traffic signal warrants to determine whether a traffic signal may be justified. As shown in Table 16, traffic signal warrants are satisfied if SR 59 access is closed but are not satisfied if that access remains open.

TABLE 16
CUMULATIVE PLUS PROJECT
PEAK HOUR TRAFFIC SIGNAL WARRANTS AT SANTA FE DRIVE ACCESS

Location	Time	Access	Hourly Volume		Signal Warrants Met?	
			Major Street	Minor Street (left turn)	Rural	Urban
West Access	AM	As proposed	1,903	93	Yes	No
		SR 59 access closed	1,903	305	Yes	Yes
	PM	As proposed	2,392	69	No	No
		SR 50 access closed	2,392	241	Yes	Yes

IMPROVEMENTS / MITIGATION

The preceding analysis has identified impacts on traffic operations that would occur without roadway improvements or mitigation. The text that follows identifies measures for improving traffic operations with the goal of achieving the City's LOS D minimum standard.

Existing Conditions

All study intersections and roadways currently operate at LOS D or better, which satisfies the City's minimum LOS D threshold. No specific improvements are required.

The existing pedestrian circulation system lacks a connection on the west side of SR 59 from Olive Avenue to Cooper Drive. While eliminating this bottleneck is desirable, right of way would have to be acquired to construct a sidewalk.

Existing Plus SR 59 / Olive Avenue Retail Center Build Out with Access as Proposed

Level of Service Impacts. The traffic impact analysis concludes that without improvements one intersection will operate with Levels of Service that exceed the minimum LOS D standard during some time period.

Motorists waiting to turn onto Santa Fe Drive from the projects **Western Access** will experience delays that are indicative of LOS F conditions, which exceed the LOS D minimum. Options to improve the Level of Service included:

- *Reconfigure Santa Fe Drive to provide a Two-Way Left Turn Lane (TWLT) lane in the area between the access and the eastbound left turn lane approaching the SR 59 intersection.* This might be accomplished by moving the driveway to the east to create space for the TWLT lane or by leaving the driveway at the proposed location and modifying the SR 59 / Santa Fe Drive intersection to provide shorter dual left turn lanes and space or the TWLT lane. The later concept would however, require two northbound lanes on SR 59 north of the Santa Fe Drive intersection, or.
- *Install a traffic signal at the western access.* While a traffic signal could deliver an adequate Level of Service, the feasibility of another signal in relatively close proximity to the signalized SR 59 intersection is questionable, or
- *Prohibit outbound left turns.* The approach Level of Service would be improved if outbound left turns onto eastbound Santa Fe Drive were prohibited. However, this action would divert southbound traffic to the project's SR 59 driveway which would be undesirable.

Southbound SR 59 Queue Impacts. The project access will occasionally be blocked by the queue of southbound traffic. To address this issue the southbound left turn lane on SR 59 shall be lengthened to extend beyond the driveway.

Pedestrian Impacts. The project will include sidewalks as part of its frontage improvements required by the City of Merced.

Cumulative Plus SR 59 / Olive Avenue Retail Center with Access as Proposed Conditions

Level of Service Impacts. The traffic impact analysis concludes that without improvements the **SR 59 / Olive Avenue intersection** will operate with Levels of Service that exceed the minimum LOS D standard during some time period and will be significantly impacted by the project. The project shall contribute its fair share to the cost of intersection improvements that include:

- Reconstruct westbound Olive Avenue to provide dual left turn lanes onto Southbound SR 59,
- Reconfigure the westbound right turn lane to create a combination through & right turn lane, and extend that through lane across SR 59 along the project's frontage, and
- Reconstruct the existing northbound right turn lane as a "free" right turn with median island separating eastbound and right turning traffic. Reconstruct the Eastbound Santa Fe Drive approach to provide dual left turn lane.

This level of improvement would yield Level of Service D in the a.m. peak hour and LOS D in the p.m. peak hour.

REFERENCES

Documents Cited

Institute of Transportation Engineers. 2012. Trip Generation, 9th Edition. Washington, D.C. http://www.ite.org/tripgeneration/trippubs.asp

Merced, City of. 2010. Merced Vision 2030 General Plan. Merced, CA.

Merced, City of. 2010. Merced Vision 2030 General Plan, Draft Program Environmental Impact Report. Merced, CA.

Merced, City of. 2004. Sample Traffic Study Scope of Work. Merced, CA.

Transportation Research Board. 1982. National Cooperative Highway Research Program (NCHRP) Report 255, Highway Traffic Data for Urbanized Area Project Planning and Design. Washington, D.C. http://pubsindex.trb.org/view/1982/m/188432

Transportation Research Board. 2010. Special Report 209, Highway Capacity Manual 2010. Washington, D.C. http://hcm.trb.org/?qr=1

California Department of Transportation. 2014. California Manual on Uniform Traffic Control Devices for Streets and Highways – 2014 Edition. Sacramento, CA http://www.dot.ca.gov/hq/traffops/engineering/mutcd/

APPENDICES

Appendices available upon request.

NOTICE OF PUBLIC HEARING
FOR ANNEXATION / PREZONE #15-01; GENERAL PLAN AMENDMENT #15-04; PRE-ANNEXATION DEVELOPMENT AGREEMENT; AND NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

A public hearing will be held by the Merced City Planning Commission on Wednesday, June 6, 2018, at 7:00 p.m., or as soon thereafter as may be heard, in the City Council Chambers located in the Civic Center at 678 W. 18th Street, Merced, CA, concerning Annexation and Pre-zoning #15-01, General Plan Amendment #15-04, and associated Pre-Annexation Development Agreement, initiated by Louann Bianchi, property owner. This application involves annexing 8.83 acres of land at the northwest and southwest corners of North Highway 59 and Santa Fe Drive into the City of Merced; changing the General Plan designation for the northwest corner from Open Space (OS) to Thoroughfare Commercial (CT) and pre-zoning the northwest corner as Thoroughfare Commercial (C-T). The General Plan designation for the southwest corner would remain Industrial (IL) and this corner would be pre-zoned Light Industrial (I-L). Said property is more particularly described as Parcels 1 and 2 as described in the Grant Deed recorded in Volume 3428 at Page 811 of Merced County Records; also known as Assessor's Parcel Numbers (APN) 057-200-067 and -029; and all of that property described in the Grant Deed recorded as Document Number 2017-000058 of Merced County Records, also known as Assessor's Parcel Number (APN) 057-200-042.

An environmental review checklist has been filed for this project, and a draft mitigated negative declaration (i.e., no significant effect in this case because of mitigation measures and/or modifications described in the draft) has been prepared. A copy of this staff evaluation ("Initial Study") is available for public inspection at the City of Merced Planning Department during regular business hours, at 678 West 18th Street. A copy of this document can also be purchased at the Planning Department for the price of reproduction.

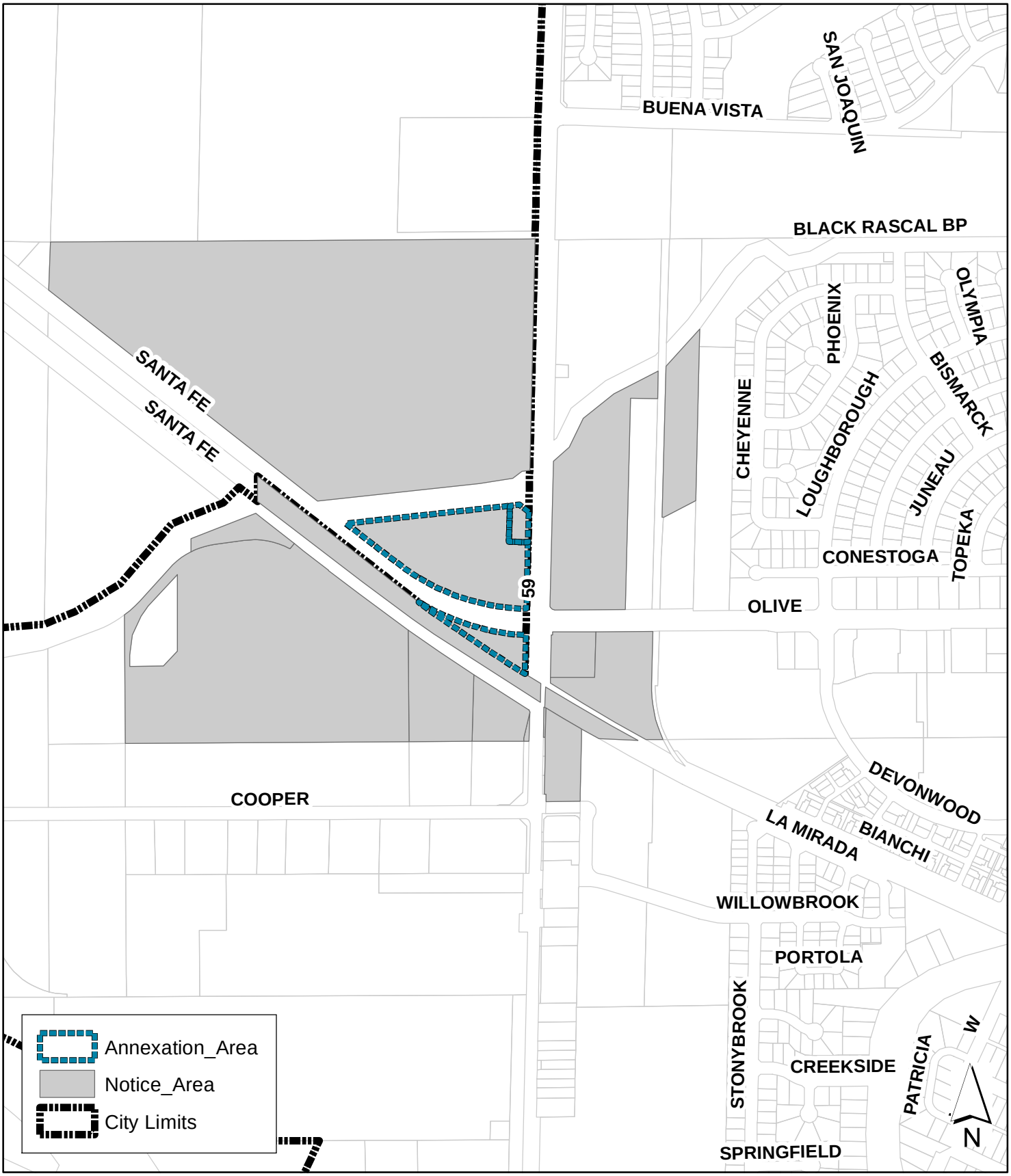
All persons in favor of, opposed to, or in any manner interested in this Annexation, Pre-zoning, General Plan Amendment, and associated Pre-Annexation Development Agreement are invited to attend this hearing or forward written comments to the Director of Development Services, City of Merced, 678 W. 18th Street, Merced, CA 95340. The public review period for the environmental determination begins on May 17, 2018, and ends on June 6, 2018. Please feel free to call the Planning Department at (209) 385-6858 for additional information. If you challenge this action in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the City at, or prior to, the public hearing.

After the Planning Commission makes its decision on this matter, the matter will also be considered at a public hearing before the City Council. A separate notice of that public hearing will also be given.

May 14, 2018

/s/ Kim Espinosa
KIM ESPINOSA,
Planning Manager

ATTACHMENT M



Disclaimer: This document was prepared for general inquiries only. The City of Merced makes no warranty, representation, or guarantee regarding the accuracy of this map. The City of Merced is not responsible for errors or omissions that might occur. Official information regarding specific parcels should be obtained from official recorded or adopted City documents.

Annexation/Pre-Zoning Application #15-01
General Plan Amendment #15-04

ATTACHMENT N

ENVIRONMENTAL REVIEW #15-36
Mitigation Monitoring Program

MITIGATION MONITORING CONTENTS

This mitigation monitoring program includes a brief discussion of the legal basis and purpose of the mitigation monitoring program, a key to understanding the monitoring matrix, a discussion of noncompliance complaints, and the mitigation monitoring matrix itself.

LEGAL BASIS AND PURPOSE OF THE MITIGATION MONITORING PROGRAM

Public Resource Code (PRC) 21081.6 requires public agencies to adopt mitigation monitoring or reporting programs whenever certifying an environmental impact report or mitigated negative declaration. This requirement facilitates implementation of all mitigation measures adopted through the California Environmental Quality Act (CEQA) process.

The City of Merced has adopted its own "Mitigation Monitoring and Reporting Program" (MMC 19.28). The City's program was developed in accordance with the advisory publication, *Tracking CEQA Mitigation Measures*, from the Governor's Office of Planning and Research.

As required by MMC 19.28.050, the following findings are made:

1) The requirements of the adopted mitigation monitoring program for Annexation and Pre-Zone Application #15-01 and General Plan Amendment #15-04 shall run with the real property. Successive owners, heirs, and assigns of this real property are bound to comply with all of the requirements of the adopted program.
2) Prior to any lease, sale, transfer, or conveyance of any portion of the subject real property, the applicant shall provide a copy of the adopted program to the prospective lessee, buyer, transferee, or one to whom the conveyance is made.

MITIGATION MONITORING PROCEDURES

In most cases, mitigation measures can be monitored through the City's construction plan approval/plan check process. When the approved project plans and specifications, with mitigation measures, are submitted to the City Development Services Department, a copy of the monitoring checklist will be attached to the submittal. The Mitigation Monitoring Checklist will be filled out upon project approval with mitigation measures required. As project plans and specifications are checked, compliance with each mitigation measure can be reviewed.

In instances where mitigation requires on-going monitoring, the Mitigation Monitoring Checklist will be used until monitoring is no longer necessary. The Development Services Department will be required to file periodic reports on how the implementation of various mitigation measures is progressing or is being maintained. Department staff may be required to conduct periodic inspections to assure compliance. In some instances, outside agencies and/or consultants may be required to conduct necessary periodic inspections as part of the mitigation monitoring program. Fees may be imposed per MMC 19.28.070 for the cost of implementing the monitoring program.

GENERAL PLAN MITIGATION MEASURES

As a second tier environmental document, Initial Study #15-36 incorporates some mitigation measures adopted as part of the *Merced Vision 2030 General Plan Program Environmental Impact Report* (SCH# 2008071069), as mitigation for potential impacts of the Project.

NONCOMPLIANCE COMPLAINTS

Any person or agency may file a complaint asserting noncompliance with the mitigation measures associated with the project. The complaint shall be directed to the Director of Development Services in written form providing specific information on the asserted violation. The Director of Development Services shall cause an investigation and determine the validity of the complaint. If noncompliance with a mitigation measure has occurred, the Director of Development Services shall cause appropriate actions to remedy any violation. The complainant shall receive written confirmation indicating the results of the investigation or the final action corresponding to the particular noncompliance issue. Merced Municipal Code (MMC) Sections 19.28.080 and 19.28.090 outline the criminal penalties and civil and administrative remedies which may be incurred in the event of noncompliance. MMC 19.28.100 spells out the appeals procedures.

MONITORING MATRIX

The following pages provide a series of tables identifying the mitigation measures proposed specifically for Annexation and Pre-zone Application #15-01 and General Plan Amendment #15-04 The columns within the tables are defined as follows:

Mitigation Measure:	Describes the Mitigation Measure (referenced by number).
Timing:	Identifies at what point in time or phase of the project that the mitigation measure will be completed.
Agency/Department Consultation:	This column references any public agency or City department with which coordination is required to satisfy the identified mitigation measure.
Verification:	These columns will be initialed and dated by the individual designated to verify adherence to the project specific mitigation.

Annexation and Pre-Zone Application #15-01 and General Plan Amendment #15-04
Mitigation Monitoring Checklist

Project Name:_____ **File Number:**_____
Approval Date:_____ **Project Location** _____
Brief Project Description_____

The following environmental mitigation measures were incorporated into the Conditions of Approval for this project in order to mitigate identified environmental impacts to a level of insignificance. A completed and signed checklist for each mitigation measure indicates that this mitigation measure has been complied with and implemented, and fulfills the City of Merced's Mitigation Monitoring Requirements (MMC 19.28) with respect to Assembly Bill 3180 (Public Resources Code Section 21081.6).

A) Aesthetics				
Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
AES-4	AES-4) *Lighting should be designed to provide ambiance, safety, and security without unnecessary spillover or glare onto adjacent properties.* *The quality of light, level of light (measured in foot-candles) and the type of bulb or source should be carefully addressed. Lighting levels should not be so intense as to draw attention to the flow or glare of the project site. The lighting plan should incorporate current energy-efficient fixtures and technology.* *Glare from any site lighting should be shielded from adjacent properties and directed at a specific object or target area. Exposed bulbs shall not be used.* *Wall-mounted light fixtures shall not extend above the height of the wall to which the fixtures are mounted.* *Blinking and flashing lights used to illuminate building facades or to outline buildings shall not be used.* *When security lighting is necessary, it should be recessed, hooded and located to illuminate only the intended area. Off-site glare and light trespass is prohibited.* *Pedestrian areas, sidewalks, parking lots, and building entrances shall be adequately lit to provide safety and security.* *All exterior lighting fixtures shall be efficient in terms of design and energy use.*	Building Permits	Planning Department	

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
AES-4	AES4a - *The project shall comply with Mitigation Measure 3.1-4 required by the Mitigation and Reporting Program for the Merced Vision 2030 General Plan EIR.*	Building Permits	Planning Department	
D) Biological Resources				
BIO-1	BIO-1) *Pre-construction surveys by a qualified biologist or other qualified professional shall be conducted for nesting Swainson's hawks within 0.25 miles of the project site shall be done if construction commences between March 1 and September 15. If active nests are found, a qualified biologist shall determine the need (if any) for temporal restrictions on construction. The determination shall utilize criteria set forth by CDFW (CDFG 1994).*	Building Permit	Planning Department	
	BIO-1a) *Pre-construction surveys by a qualified biologist or other qualified professional shall be conducted for western pond turtles and their nests shall be conducted if construction commences between April 1 through October 31. This survey shall include a search for nests in uplands adjacent to the creek. If nest sites are located, a 50-foot buffer rea around the nest, a 50-foot buffer area around the nest shall be established and work shall be delayed until hatching is complete and the young have left the nest site.*	Building Permit	Planning Department	
	BIO-1b) *Pre-construction surveys by a qualified biologist or other qualified professional shall be conducted for birds protected by the Migratory Bird Treaty Act of 1918. If nesting birds are found, work in the vicinity of the nest shall be delayed until the young fledge.*	Building Permit	Engineering Department	

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
BIO-3	BIO-3) *Avoidance of jurisdictional Waters of the U.S. is recommended, if possible. If complete avoidance of Black Rascal Creek is infeasible, impact shall be minimized to the maximum extent practicable, and permits from ACOE, CDFW, RWQCB, and possibly CVFPS shall be secured prior to the placement of any fill material (e.g., culverts, fill dirt, rock) within jurisdictional Waters of the U.S.*	Building Permit	Planning/ Engineering Department	
CUL-1	CUL-1) *In the event that buried historic or archaeological resources are discovered during construction, operations shall stop within 50 feet of the find and a qualified archaeologist shall be consulted to evaluate the resource in accordance with CEQA Guidelines 15064.5. The applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. If the resource does not qualify as a significant resource, then no further protection or study is necessary. If the resource does qualify as a significant resource then the impacts shall be avoided by project activities. If the resource cannot be avoided, adverse impacts to the resource shall be addressed. The archaeologist shall make recommendations concerning appropriate mitigation measures that shall be implemented to protect the resources, including but not limited to excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Any previously undiscovered resources found during construction within the project area should be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and evaluated for significance in terms of CEQA criteria.*	Grading	Inspection Services/ Panning Department	

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
CUL-3	CUL-3) *In the event that fossils or fossil-bearing deposits are discovered during construction activities, excavations within a 50-foot radius of the find shall be temporarily halted or diverted. The project contractor shall notify a qualified paleontologist to examine the discovery. The applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The paleontologist shall document the discovery as needed in accordance with Society of Vertebrate Paleontology standards and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction activities are allowed to resume at the location of the find. If the Applicant determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of construction activities on the discovery. The plan shall be submitted to the City of Merced for review and approval prior to implementation, and the Applicant shall adhere to the recommendations in the plan.*	Grading	Inspection Services/ Panning Department	

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
CUL-4	CUL-4) *Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code (PRC) Sections 5097.94 and 5097.98 must be followed. If during the course of project development there is accidental discovery or recognition of any human remains, the following steps shall be taken:* *1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted and determines if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the most likely descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.* *2. Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the project site in a location not subject to further subsurface disturbance:*	Grading	Inspection Services/ Panning Department	

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
	• *The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission.* • *The descendant identified fails to make a recommendation.* • *The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.* *Additionally, California Public Resources Code Section 15064.5 requires the following with regards to Native American Remains:* *When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code Section 5097.98. The applicant may develop a plan for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC.*	Grading	Inspection Services/ Panning Department	
GEO-2	*GEO-2) Prior to the approval of a tentative subdivision map or building permit, the City shall review plans for drainage and storm water run-off control systems and their component facilities to ensure that these systems are non-erosive in design.*	Tentative Map Building Permit	Engineering Department	

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
GEO-2	*GEO-2a) Upon completion of phased construction, subsequent phases shall re-vegetate all exposed soil surfaces within 30 days, or as otherwise approved by the City, to minimize potential topsoil erosion. Reasonable alternatives to re-vegetation may be employed, especially during peak high temperature periods or to avoid negative impacts to nearby agricultural activities, subject to the approval of the City.*	*Building Permit*	*Inspection Services*	
GEO-4	*GEO-4 A geotechnical study shall be provided prior to the issuance of a building or grading permit for this site. All recommendations for addressing expansive soils and site grading shall be implemented as well as any other recommendations determined relevant by the Chief Building Official or City Engineer.*	*Building Permit*	*Inspection Services/ Engineering*	
HAZ-5	*HAZ-5 Prior to the issuance of any subsequent land use entitlement for construction of a building or the issuance of a building permit, the developer shall demonstrate compliance with the requirements of the Merced County Airport Land Use Compatibility Plan (ALUCP). If compliance is not feasible, the development plan shall be modified to make compliance possible.*	*Site Plan Review/Building Permit*	*Planning Department*	
HYD-1	*HYD 1a Prior to the issuance of grading permits, the applicant shall file a "Notice of Intent" with and obtain a facility identification number from the State Water Resources Control Board. The project shall also submit a Stormwater Pollution Prevention Plan (SWPPP) to the City of Merced that identifies specific actions and Best Management Practices (BMP's) to prevent stormwater pollution during construction activities.* *(continued on next page)*	*Grading Permit*	*Inspection Services/ Engineering*	

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
HYD-1	*The SWPPP shall identify a practical sequence for BMP implementation, site restoration, contingency measures, responsible parties, and agency contacts. The SWPPP shall include, but not be limited to, the following elements:* • *Comply with the requirements of the State of California's most current Construction Stormwater Permit.* • *Temporary erosion control measures shall be implemented on all disturbed areas.* • *Disturbed surfaces shall be treated with erosion control measures during the October 15 to April 15 rainy season.* • *Sediment shall be retained on-site by a system of sediment basins, traps, or other BMPs.* • *The construction contractor shall prepare Standard Operating Procedures for the handling of hazardous materials on the construction site to eliminate discharge of materials to storm drains.* • *BMP performance and effectiveness shall be determined either by visual means where applicable (e.g., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination (such as inadvertent petroleum release) is required by the Central Valley Regional Water Quality Control Board to determine adequacy of the measure.* *(continues on next page)*	*Grading Permit*	*Inspection Services/ Engineering*	

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
HYD-1	*In the event of significant construction delays or delays in final landscape installation, native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance, as an interim erosion control measure throughout the wet season.*			
HYD-1	*HYD-1b Prior to the issuance of building permits, the project applicant shall submit a final Storm Water Mitigation Plan (SWMP) to the City of Merced for review and approval. The plan shall be developed using the California Stormwater Quality Association's "New Development and Redevelopment Handbook." The SWMP shall identify pollution prevention measures and BMPs necessary to control stormwater pollution from operational activities and facilities, and provide for appropriate maintenance over time. The SWMP shall include design concepts that are intended to accomplish a "first flush" objective that would remove contaminants from the first 2 inches of stormwater before it enters area waterways. The project applicant shall also prepare and submit an Operations and Maintenance Agreement to the City identifying procedures to ensure that stormwater quality control measures work properly during operations.*	*Grading Permit*	*Inspection Services/ Engineering*	

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
HYD-5	*HYD-5 Prior to the issuance of a building permit for this project, the applicant shall demonstrate to the City that proposed storm drainage facilities are adequate to meet the Project demands and that improvements are consistent with the City's Storm Drainage Master Plan and the Post Construction Standards for the City's Phase II MS4 permit.*	*Grading Permit*	*Inspection Services/ Engineering*	
HYD-8	*HYD-8 Development of the site is required to provide fill dirt to raise the elevation of the site and achieve protection from flooding. The fill must be elevated above the computed 200-year flood elevation and freeboard is highly recommended by DWR (note: freeboard is the difference between the fill elevation and the computed flood elevation).* *A freeboard of 1-foot or greater will help to account for the inherent uncertainty in estimating peak flood discharges and the computed flood elevations. A Summary of the proposed fill elevations is provided in the Table below. The required fill elevation ranges from 168.4 to 167.7 ft. (NAVD88 vertical datum)*	*Grading Permit*	*Inspection Services/ Engineering*	

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
NOI-1	*NOI-1 The construction contractor shall limit all noise-producing construction activities, including deliveries and warming up of equipment, to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday. No such work shall be permitted on Sundays or federal holidays without prior approval from the City.*	*Grading Permit*	*Inspection Services/ Engineering*	
NOI-1	*NOI-2 Any outdoor dining areas or other outdoor uses shall have the following setbacks to maintain an acceptable noise level of 70 dB for outdoor uses:* *Road/Railroad — Required Setback* *Santa Fe Drive — 54 Ft.* *North Highway 59 — 89 Ft.* *BNSF Railroad — 137 Ft.*	*Building Permit*	*Inspection Services/ Planning*	
TRA-1	*TRA-1 Prior to construction, the Site Plan Review Committee shall review the site design and determine which alternative at the western driveway is best to reduce the expected impacts. The alternatives may include those alternatives included in the traffic analysis or another alternative such as moving the driving further to the west. The developer shall provide any additional documentation or studies needed for the Site Plan Review Committee to make this determination.*	*Site Plan Review*	*Planning*	
	TRA-1a The southbound left-turn lane on SR 59 shall be lengthened as determined by the City Engineer and approved by Caltrans.			

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
TRA-1	*TRA-1b The development shall contribute its fair share to the cost of improvements for the intersection of SR 59 and Olive Avenue:* • *Reconstruct westbound Olive Avenue to provide dual left turn lanes on southbound SR 59; and,* • *Reconfigure the westbound right turn lane to create a combination through and right turn lane, and extend that through lane across SR 59 along the project's frontage; and,* • *Reconstruct the existing northbound right turn lane as a "free" right turn with median island separating eastbound and right turning traffic. Reconstruct the eastbound Santa Fe Drive approach to provide dual left turn lanes.*	*Building Permit*	*Planning*	
TRA-6	*TRA-6 Prior to the issuance of a building permit, the developer shall work with the Merced County Transit Authority (aka: The Bus) to determine if a bus stop is needed at this location. If a bus stop is required, the stop shall be in an area to allow the bus to move completely out of the travel lanes. The location of all bus stops shall be subject to approval by the City Engineer and Caltrans if along SR 59.*	*Building Permit*	*Planning*	

Certificate of Completion:
By signing below, the environmental coordinator confirms that the required mitigation measures have been implemented as evidenced by the Schedule of Tasks and Sign-Off Checklist, and that all direct and indirect costs have been paid. This act constitutes the issuance of a *Certificate of Completion*.

_____ _____

Environmental Coordinator Date

RECORDED AT THE REQUEST OF
City Clerk
City of Merced
A California Charter Municipal Corporation

WHEN RECORDED RETURN TO
City Clerk
City of Merced
678 West 18th Street
Merced, California 95340

(Space Above Line For Recorder's Use)

PRE-ANNEXATION DEVELOPMENT AGREEMENT

PENDING ANNEXATION/PRE-ZONING NO. 15-01

"HIGHWAY 59 & SANTA FE ANNEXATION"

LOUANN BIANCHI

Date: _____

PRE-ANNEXATION DEVELOPMENT AGREEMENT
BETWEEN
CITY OF MERCED
AND
LOUANN BIANCHI

This Pre-Annexation Development Agreement ("Agreement") is entered into to be effective on the date it is recorded with the Merced County Clerk/County Recorder (the "Effective Date") by and among the City of Merced, a California Charter Municipal Corporation ("City") and the persons listed below ("Owner"):

Louann Bianchi
151 N. Ulukoa Pl.
Lahaina, HI 96761-1969

RECITALS

A. To provide for orderly planning, City has the authority pursuant to California Government Code Sections 65300 and 65301 to include in its General Plan land outside its boundaries which is in the City's sphere of influence or in the City's judgment bears a relation to its planning and, pursuant to Section 65450, to adopt specific plans for any part of the area covered by the General Plan. City also has the authority pursuant to California Government Code Section 65859 to pre-zone property adjoining the City for the purpose of determining the zoning designation that will apply to the property in the event of a subsequent annexation of the property to the City.

B. The Legislature of the State of California has adopted California Government Code Section 65864-65869.5 ("Development Agreement Legislation") which authorizes a city to enter into a binding development agreement with persons having legal or equitable interests in real property located within a city's municipal boundaries or in unincorporated territory within a city's sphere of influence for the development of such property in order to, among other things: encourage and provide for the development of public facilities; to support development projects; provide certainty in approval of development projects in order to avoid a waste of resources and escalation in project costs and encourage

an investment in and commitment to comprehensive planning, which will make maximum efficient utilization of resources at the least economic cost to the public land; provide assurance to the applicants for development projects that they may proceed with their projects in accordance with existing policies, rules and regulations and subject to the conditions of approval of such projects as provided in such annexation and/or development agreements.

C. Pursuant and subject to the Development Agreement Legislation, the City's police powers, and City Council Resolution No. 95-6, City is authorized to enter into binding agreements with persons having legal or equitable interest in real property located within the City's municipal boundaries or sphere of influence thereby establishing the conditions under which such property may be developed in the City or may be annexed into the City and governing development of such property upon its annexation.

D. By electing to enter into this Agreement, City shall bind future Members of the City Council of City by the obligations specified herein and further limit the future exercise of certain governmental and proprietary powers by any Member of the City Council to the extent such limitation is provided in the Development Agreement Legislation.

E. The terms and conditions of this Agreement have undergone extensive review by the staff of the City, the City's Planning Commission, the City Council of City, and Owner, and have been found to be fair, just, and reasonable.

F. City finds and determines that it will be in the best interests of its citizens and the public health, safety and welfare will be served by entering into this Agreement.

G. All of the procedures of the California Environmental Quality Act have been met with respect to this Agreement.

H. City was incorporated on April 1, 1889, and the City Charter was approved on April 12, 1949 and last amended on in January 2008.

I. Owner is the fee or equitable owner of two parcels totaling approximately 7.83 acres of undeveloped land located within the City's sphere of influence, hereinafter referred to as the "Property" as legally described in Exhibit "A" and depicted on the map thereto, both attached hereto and made a part herein by this reference.

J. Owner has requested City to apply to the Merced County Local Agency Formation Commission ("LAFCO") to annex the Property. City is not opposed to Owner's request and will consider said request upon Owner's execution of this Agreement.

K. City and Owner desire that the Property be developed pursuant to the land uses and conditions of Pending Annexation and Prezoning #15-01and Expanded Initial Study #15-36.

L. The City Council of City hereby finds and determines that:

(1) The environmental impacts of the Project have been reviewed and all measures deemed feasible to mitigate adverse impacts thereof have been incorporated into the City approvals for the Project.

(2) No other mitigation measures for environmental impacts created by the Project, as presently approved, shall be required for development of the Project unless mandated by law.

(3) City may, pursuant to and in accordance with its rules, regulations, and ordinances, conduct an environmental review of subsequent discretionary entitlements for the development of the Project or any changes, amendments, or modifications to the Project. The City, as a result of such review, may impose additional measures (or conditions) to mitigate as permitted by law the adverse environmental impacts of such development entitlement which were not considered or mitigated at the time of approval of the Project.

M. As a Mitigated Negative Declaration was prepared for the Project vested by this Agreement, the following language is to be included:

(1) Within forty-eight (48) hours of the effective date of this Agreement, Owner shall deliver to the City's Planning Department a check payable to the County Clerk in the amount of Two Thousand Three Hundred Thirty Dollars and Seventy-Five Cents ($2,330.75.), which includes the Two Thousand Two Hundred Eighty Dollars and Seventy-Five Cents ($2,280.75) fee required by Fish and Game Code Section 711.4(d)(3) plus the Fifty Dollar ($50.00) County administrative fee to enable the City to file the Notice of Determination required under Public Resources Code Section 21152 and 14 Cal. Code of Regulations 15075. If within such forty-eight (48) hour period the Owner has not delivered to the City's Planning Department the check required above, this Agreement shall be void by reason of failure of a material condition, Fish and Game Code Section 711.4.

N. City Council of City has approved this Agreement by Ordinance No. ____ adopted on _____, 2018, and effective on _____, 2018.

NOW, THEREFORE, in consideration of the above Recitals and of the mutual covenants hereinafter contained and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged and agreed, the parties hereto do hereby agree as follows:

1. Incorporation of Recitals. The RECITALS above are true and correct and constitute an enforceable provision of this Agreement.

2. Definitions. In this Agreement, unless the context otherwise requires, the following words and phrases shall have the meaning set forth below:

2.1 "City" is the City of Merced.

2.2 "County" is the County of Merced.

2.3 "Development Exaction" means any requirement of City in connection with or pursuant to any Land Use Regulation or Existing Development Approval for the dedication of land, the construction of improvements or public facilities, or the payment of fees in order to lessen, offset, mitigate or compensate for the impacts of development on the environment or other public interests.

2.4 "Development Plan" means the Existing Development Approvals defined in Section 2.6 below which are applicable to development of the Project.

2.5 "Effective Date" means the date upon which the Ordinance approving this Agreement becomes effective, which date is thirty (30) days following the date the City Council adopted such Ordinance absent a referendum challenge.

2.6 "Existing Development Approval(s)" means those certain development approvals in effect as of the effective date of this Agreement with respect to the Property, including, without limitation, the "Existing Development Approvals" listed in Exhibit "B" attached hereto and incorporated herein by this reference, which were approved by the City.

2.7 "Financing District" means a Community Facilities District formed pursuant to the Mello-Roos Community Facilities Act of 1982,

(California Government Code Sections 53311 *et seq.*, as amended, and referred to hererin as the "Mello-Roos" Law); an assessment district formed pursuant to the Landscaping and Lighting Act of 1972, (California Streets and Highways Code Sections 22500 *et seq.*, as amended); a special assessment district formed pursuant to the Municipal Improvement Act of 1913, (California Streets and Highways Code Section 10100, *et seq.,* as amended); or any other special assessment district pursuant to State law or by virtue of the City's status as a Charter City, formed for the purposes of financing the cost of public improvements, facilities, services and/or public facilities fees within a specific geographical area of the City.

2.8 "Future General Regulations" means all ordinances, resolutions, codes, rules, regulations, and official policies of City applicable to all properties in the City after the Effective Date and as stipulated in Section 14 of this Agreement.

2.9 "Land Use Regulations" means all ordinances, resolutions, codes, rules, regulations, and official policies of City, governing the development and use of land including without limitation, the permitted use of land; the density or intensity of use; subdivision requirements; the maximum height and size of proposed buildings; the provisions for reservation or dedication of land for public purposes; and the design, improvement, and construction standards and specifications applicable to the development of the Property listed on Exhibit "C" attached hereto and incorporated herein by this reference, which are a matter of public record on the Effective Date of this Agreement. "Land Use Regulations" does not include any County or City ordinance, resolution, code, rule, regulation, or official policy governing:

(a) The conduct of businesses, professions, and occupations;

(b) Taxes and assessments;

(c) The control and abatement of nuisances;

(d) The provision, maintenance, expansion, termination, conditions and limitations of municipal water and sewer services;

(e) The granting of encroachment permits and the conveyance of rights and interests which provide for the use of or the entry upon public property;

(f) The exercise of the power of eminent domain.

2.10 "Owner" means the person or entity having a legal or equitable interest in the Property and Project and all successors, transferees, or assigns thereof;

2.11 "Project" or "Projects" is the development of the Property in accordance with the Development Plan.

2.12 "Property" is the real property legally described in Exhibit "A" and depicted on the map thereto, both attached hereto and incorporated herein by this reference.

2.13 "Subdivision" shall have the same meaning as that term is defined in Government Code Section 66424.

2.14 "Subsequent Development Approvals" means all development approvals required subsequent to the Effective Date in connection with development of the Property.

2.15 "Subsequent Land Use Regulation" means any Land Use Regulation adopted and effective after the Effective Date of this Agreement.

3. Interest of Owner. Owner represents that it has the fee title or equitable interest in the Property, and that all other persons holding legal or equitable interests in the Property are to be bound by this Agreement.

4. Exhibits. The following documents are referred to in this Agreement attached hereto, incorporated herein, and made a part hereof by this reference:

Exhibit Designation	Description
Exhibit A	Property Legal Description and Map
Exhibit B	Existing Development Approvals
Exhibit C	Land Use Regulations
Exhibit D	Public Benefits
Exhibit E	Notice of Default to Mortgagee

5. Term of Agreement.

5.1 Term. The term of this Agreement shall commence on the Effective Date and shall extend for a period of ten (10) years thereafter, unless this Agreement is sooner terminated, modified, or extended by circumstances set forth in this Agreement or by mutual consent of the parties hereto.

5.2 Time to Annex. Except as otherwise expressly provided in this Agreement, this Agreement shall terminate and be of no further force and effect if the change of organization or reorganization ("Annexation") of the Property is not approved by the Merced County Local Agency Formation Commission ("LAFCO") and the City Council of City and any other appropriate public agencies having jurisdiction thereover within two (2) years after the effective date of this Agreement unless extended in writing by mutual agreement of the parties.

5.3 Termination by Litigation. This Agreement shall terminate and be of no force and effect upon the occurrence of the entry of a final judgment or issuance of a final order after exhaustion of any appeals directed against the City as a result of any lawsuit filed against the City to set aside, withdraw, or abrogate the approval by the City Council of City of this Agreement.

5.4 Subdivision Map Act Compliance. Any tentative map prepared for the Subdivision under this Agreement shall comply with the provisions of Government Code Section 66473.7.

6. Permitted Use and Density. The permitted use of the Property is a commercial center to include a gas station, mini-market, car wash, fast-food restaurant, and drive-through coffee shop along with other unknown commercial uses.

7. Public Benefits. In accordance with Section 1 of City Resolution No. 2005-101, specific public benefits are provided to City beyond those already forthcoming through Project approvals in return for the City's commitments to maintain present plans as regulations for the determinate period set forth in this Agreement. These specific public benefits are set forth on Exhibit "D" attached hereto and incorporated herein by this reference as if set forth in full. Owner agrees to provide all public benefits identified in said Exhibit "D" in such manner and within such timeframe as provided therein.

8. Annexation.

8.1 Annexation-Owner's Obligations. Owner shall take all actions reasonably necessary to process and complete proceedings before LAFCO on the Annexation. Owner shall pay all LAFCO processing fees required in connection with the Annexation and shall pay any generally applicable City processing fees required for the Annexation. Owner shall

reimburse City for its actual and reasonable costs incurred in the processing of this Agreement. Owner agrees to take all steps reasonably necessary to support annexation to the City, including voting in favor of annexation. Owner shall assist City in preparing the Plan of Services required by LAFCO.

8.2 City's Duty to Cooperate. City shall cooperate and assist in the processing of the Annexation before LAFCO by timely taking the following actions:

(a) Providing all information reasonably required or requested by LAFCO with respect to the Annexation including, without limitation, a Plan of Services providing information to LAFCO with respect to the provision of municipal services to the Annexation Property by the City; and,

(b) Providing a written statement of support for the Annexation to LAFCO prior to the LAFCO public hearing on the Annexation.

9. Assignment.

9.1 Right to Assign. The Owner shall have the right to sell, transfer, or assign the Property in whole or in part (provided that no such partial transfer shall violate the Subdivision Map Act, Government Code Sections 66410, *et seq.*, or Chapter 18.04 of the Merced Municipal Code to any person, partnership, joint venture, firm, limited liability company, or corporation at any time during the term of this Agreement; provided, however, that any such sale, transfer, or assignment shall include the assignment and assumption of the rights, duties, and obligations arising under or from this Agreement and be made in strict compliance with the following conditions precedent:

(a) No sale, transfer, or assignment of any right or interest under this Agreement shall be made unless made together with the sale, transfer, or assignment of all or a part of the Property. Owner agrees to provide specific notice of this Agreement, including the record or document number, where a true and correct copy of this Agreement may be obtained from the County Clerk/County Recorder of the County of Merced, in any grant deed or other document purporting to transfer the title or an interest in

the Property during the term of this Agreement or any extension thereof.

(b) No less than thirty (30) business days prior to any such sale, transfer, or assignment, the Owner shall notify City, in writing, of such sale, transfer, or assignment and shall provide City with an executed Assignment and Assumption Agreement, in a form acceptable to the City Attorney, by the purchaser, transferee, or assignee and providing therein that the purchaser, transferee, or assignee expressly and unconditionally assumes all the duties and obligations of the owner under this Agreement. Where multiple sales, transfers, or assignments are contemplated by Owner to more than one purchaser, transferee, or assignee, said Assignment and Assumption Agreement shall expressly specify and apportion shared obligations amongst various purchasers, transferees, or assignees.

Any sale, transfer, or assignment not made in strict compliance with the foregoing conditions shall be null and void and shall constitute a material default by the Owner under this Agreement. Notwithstanding the failure of any purchaser, transferee, or assignee to execute the agreement required by Paragraph (b) of this Subsection, the burdens of this Agreement placed upon Owner shall run with the land and shall be binding upon any purchaser, transferee, or assignee, but the benefits of this Agreement shall not inure to such purchaser, transferee, or assignee until and unless such agreement is executed.

9.2 Release of Transferring Owner. Notwithstanding any sale, transfer, or assignment, a transferring Owner shall continue to be obligated under this Agreement unless such transferring Owner is given a release in writing by City, which release shall be provided by City upon the full satisfaction by such transferring Owner of **ALL** of the following conditions:

(a) The Owner no longer has a legal interest in all or any part of the Property except as a beneficiary under a deed of trust.

(b) The Owner is not then in default under this Agreement.

(c) The Owner or purchaser has provided City with the notice and executed Assignment and Assumption Agreement required under Paragraph (b) of Subsection 9.1 above.

(d) The purchaser, transferee, or assignee provides City with security equivalent to or better than any security previously provided by Owner to secure performance of its obligations hereunder.

(e) The Owner has reimbursed City for any and all City costs associated with Owner's transfer of all or a portion of the Property.

(f) The Owner has reimbursed City for any and all costs relating to this Agreement.

(g) The conditions in Section 20.4 (Sewer Facility Capital Expansion Improvement Bonds) have been completely satisfied, are no longer required or the obligations under Section 20.4 have been completely and unequivocally assumed by the subsequent Owner.

9.3 Termination of Agreement with Respect to Individual Lots upon Sale to Public and Completion of Construction. With the exception of Section 20.4, the provisions of Subsection 9.1 shall not apply to the sale or lease (for a period longer than one year) of any lot which has been finally subdivided and is individually (and not in "bulk") sold or leased to a member of the public or other ultimate user. Notwithstanding any other provisions of this Agreement, this Agreement shall terminate with respect to any lot and such lot shall be released and no longer be subject to this Agreement without the execution or recordation of any further document upon satisfaction of all of the following conditions:

(a) The lot has been finally subdivided and individually (and not in "bulk") sold or leased (for a period longer than one year) to a member of the public or other ultimate user; and

(b) A Certificate of Occupancy has been issued for a building on a lot, and the fees set forth in this Agreement have been paid; and

(c) The conditions in Section 20.4 (Sewer Facility Capital Expansion Improvement Bonds) have been completely satisfied or are no longer required.

9.4 Subsequent Assignment. Any subsequent sale, transfer, or assignment after an initial sale, transfer, or assignment shall be made only in accordance with and subject to the terms and conditions of this Section.

10. Mortgagee Protection. Neither entering into this Agreement nor committing a Default under this Agreement shall defeat, render invalid, diminish, or impair the lien of Mortgagees having a Mortgage on any portion of the Property made in good faith and for value, unless otherwise required by law. No Mortgagee shall have an obligation or duty under this Agreement to perform Owner's obligations, or to guarantee such performance prior to any foreclosure or deed in lieu of foreclosure, but upon acquiring the right to possession pursuant to a Mortgage on the Property or any portion thereof, the Mortgagee shall be subject to the terms and conditions of this Agreement. The term of this Agreement shall not be extended based on the fact that a Mortgagee held title to the Property for all or any part of the term of this Agreement.

11. Notice of Default to Mortgagee; Right to Cure.

11.1 Timely Notice to City Clerk. If the City Clerk timely receives notice, on the form set forth on Exhibit "E," attached hereto and incorporated herein by this reference, from a Mortgagee requesting a copy of any Notice of Default given to Owner under the terms of the Agreement, the City shall endeavor to provide a copy of that notice to the Mortgagee within ten (10) days of sending the Notice of Default to Owner. City shall have no liability for damages or otherwise to Owner, Owner's successor, or to any Mortgagee or successor therefor for failure to provide such notice.

11.2 Mortgagee Right to Cure. The Mortgagee shall have the right, but not the obligation, for a period up to ninety (90) days after the receipt of such notice from the City to cure or remedy, or to commence to cure or remedy, the Default unless a further extension of time to cure is granted in writing by the City. However, a Mortgagee to avail itself of the rights provided by this Section must notify the City in writing of its intent to attempt to remedy or cure within twenty (20) days of the date of the Notice of Default from City to Mortgagee. A failure by a Mortgagee to provide such timely notice to City shall extinguish the rights and protections provided by this Section. By providing the notice to City, Mortgagee is agreeing and consenting to the

provisions of this Section and is further waiving the right to claim a prior lien on the Property. If the Default is of a nature which can only be remedied or cured by such Mortgagee upon obtaining possession, such Mortgagee shall seek to obtain possession with diligence and continually through foreclosure, a receiver, or otherwise, and shall thereafter remedy or cure the Default within thirty (30) days after obtaining possession. If the Default cannot, with diligence, be remedied or cured within this thirty (30) day period, then the Mortgagee shall have such additional time as the City Council determines is reasonably necessary to remedy or cure the Default, if the Mortgagee commences cure during the thirty (30) day period and thereafter diligently pursues and completes the cure.

11.3 City Council Review of Mortgagee's Efforts. Such diligence by the Mortgagee on effectuating such cure shall be reviewed by the City's City Council every thirty (30) days thereafter until any and all Defaults are cured. If at any such review, the City Council determines that the Mortgagee is not making good faith efforts to cure any and all Defaults, the City Council shall have the authority to terminate this Agreement at its sole and complete discretion.

11.4 Reservation of City's Rights During Cure Period. In return for City granting to Owner, Owner's successors and transferees, and the Mortgagees of each of them, an extended time to remedy or cure a Default, Owner, Owner's successors and transferees, and the Mortgagees of each of them agree that once a Default is declared by City's City Council, the City may take the actions set forth below and lien and burden the Property for the costs thereof -- irrespective of any lien priority, construction loan, deed of trust, or other encumbrance. Such actions include the following:

(a) Abate public nuisances following the City-adopted public nuisance ordinance;

(b) Remedy any health or safety threat posed by the Property, construction, or other activities going on on the Property;

(c) Control storm water run-off from the Property pursuant to Chapter 8.08 of the Merced Municipal Code and in compliance with all Post Construction Standards required by the City's Municipal Separate Storm Sewer System (MS-4) Permit;

(d) Screen any unsightly appearance on the Property for aesthetic purposes;

(e) Abate weeds; and,

(f) Control noise, dust, or other offensive conditions on the Property.

11.5 Mortgagee Extension of Cure to Possession of Agency. In the event any obligation of Owner is for the payment of money or fees, other than standard permit or processing fees, and a Default is declared by City based upon such failure to pay, a Mortgagee may be granted an extended time to remedy or cure until such time as Mortgagee obtains possession of the Property; provided, Mortgagee agrees that any money due City which remains unpaid shall bear the higher of the legal rate of interest or the United States Department of Labor San Francisco-Oakland-San Jose Consumer Price Index as the measure of inflation.

12. Mortgagee Rights. The parties hereto agree that this Agreement shall not prevent or limit Owner, in any manner, at Owner's sole discretion, from encumbering the Property or any portion thereof or any improvement thereon by any mortgage, deed of trust, or other security device securing financing with respect to the Property. City acknowledges that the lenders providing such financing may require certain Agreement interpretations and modifications and agrees upon request, from time to time, to meet with the Owner and representatives of such lenders to negotiate in good faith any such request for interpretation or modification. City will not unreasonably withhold its consent to any such requested interpretation or modification provided such interpretation or modification is consistent with the intent and purposes of this Agreement. Owner shall reimburse City for any and all of City's reasonable costs associated with said negotiations, interpretations, and modifications and shall make reimbursement payments to City within thirty (30) days or receipt of an invoice from City.

Any Mortgagee of the Property shall be able to rely upon the provisions hereof and except as expressly provided in this Agreement, neither entering into this Agreement nor a breach of this Agreement shall defeat, render invalid, diminish, or impair the lien of any mortgage on the Property made in good faith and for value, unless otherwise required by law or specified herein.

13. California Codes. This Agreement does not prevent the City from adopting and amending in compliance with State law certain Codes which are

based on recommendations of a multi-state professional organization and which become applicable throughout the City -- including the Project and Property subject to this Agreement. Such Codes include, but are not limited to, the California Building Code, California Mechanical Code, California Electrical Code, and California Fire Code.

14. Public Health and Safety Concerns, Application to Project of Future General Regulations.

14.1 City Authority to Adopt Future General Regulations. This Agreement does not prevent the City from adopting Future General Regulations and applying such Future General Regulations to the Project and the Property, provided the City Council adopts findings that a failure to apply such Future General Regulations would result in a condition injurious or detrimental to the public health and safety. These findings shall be based upon substantial evidence in the record from a hearing conducted by the City Council at which the Owner was provided at least ten (10) days advance written notice.

14.2 Application of Future General Regulations to Project. Notwithstanding Section 14.1 above, the City shall not apply to the Project or the Property any Future General Regulations which prevent, preclude, or unreasonably delay or alter or in any way affect the implementation of all or any portion of the Development Plan, unless the City Council, in accordance with Section 14.1 above also makes a finding that such Future General Regulations are reasonably necessary to correct or avoid such injurious or detrimental condition. Any Future General Regulations applied to the Project or the Property pursuant to this Section 14.2 shall only apply for the duration necessary to correct or avoid such injurious or detrimental condition.

15. Binding Effect of Agreement. The burdens of this Agreement bind and the benefits of the Agreement inure to the successors-in-interest to the parties to it in accordance with the provisions of and subject to the limitations of this Agreement.

16. Project as a Private Undertaking/Relationship of Parties. It is specifically understood and agreed by and between the parties hereto that the development of the Project is a private development, that neither party is acting as the agent of the other in any respect hereunder, and that each party is an independent contracting entity with respect to the terms, covenants, and conditions contained in this Agreement. No partnership, joint venture, or other association of any kind is formed by this Agreement. The only relationship between City and

Owner is that of a government entity regulating the development of private property and the owner of such property.

17. Changes in Project. City may expand the permitted uses for the Property without amending this Agreement so long as Owner or Owner's successor retains his/her/their existing entitlements.

18. Timing of Development; Pardee Construction case. The parties acknowledge that Owner cannot at this time predict when, or at the rate at which the Property will be developed. Such decisions depend upon numerous factors which are not within the control of Owner, such as market orientation and demand, interest rates, absorption, completion and other similar factors. Since the California Supreme Court held in *Pardee Construction Co. v. City of Camarillo*, 37 Cal.3d 465 (1984), that the failure of the parties therein to provide for the timing of development resulted in a later adopted initiative restricting the timing of development to prevail over such parties, it is the parties intent to cure that deficiency by acknowledging and providing that the Owner shall have the right to develop the Property in such order, at such rate, and at such times as the Owner deems appropriate within the exercise of its subjective business judgment, subject only to any timing or phasing requirements set forth in the Development Plan and this Agreement.

19. Indemnity and Cost of Litigation.

19.1 Hold Harmless. The Owner shall indemnify, protect, defend, and hold harmless the City, and any agency or instrumentality thereof, and officers, employees, or agents thereof, from any and all claims, actions, suits, proceedings, or judgments against the City, or any agency or instrumentality thereof, and any officers, employees, or agents thereof to attack, modify, set aside, void, or annul, an approval of the City, or any agency or instrumentality thereof, advisory agency, appeal board, or legislative body, including actions approved by the voters of the City, concerning the Property, the Project, and the approvals related thereto. Furthermore, Owner shall indemnify, protect, defend, and hold harmless the City, or any agency or instrumentality thereof, and officers, employees, or agents thereof, against any and all claims, actions, suits, proceedings, or judgments against another governmental entity in which Owner's project is subject to that other governmental entity's approval and a condition of such approval is that the City indemnify and defend such governmental entity. City shall promptly notify the Owner of any claim, action, or proceeding. City shall further cooperate in the defense of the action by providing staff witnesses, documents, and related

information. It is understood that the duty of Owner to indemnify and hold harmless includes the duty to defend as set forth in Section 2778 of the California Civil Code. Acceptance by City of insurance certificates and endorsements required under this Agreement does not relieve Owner from liability under this indemnification and hold harmless clause. Owner agrees to and shall indemnify, protect, defend, and hold harmless the City and its officers, employees, agents, and representatives from actions for damages caused or alleged to have been suffered by reason of the operations referred to in this paragraph, regardless of whether or not City prepared, supplied, or approved plans or specifications for the Project. This indemnification requirement shall extend beyond the termination or expiration of this Agreement. By execution of this Agreement, Owner acknowledges and agrees to the provisions of this Section and that it is a material element of consideration.

19.2 Hold Harmless—Damages & Injury. Owner further agrees to and shall indemnify, protect, defend, and hold City, its officers, employees, agents, and representatives harmless from liability for any and all damage or claims for damage for personal injury, including death, and claims for property damage, resulting from intentional or negligent acts, errors, or omissions which may arise from the direct or indirect operations of the Owner or those of its employees, officers, agents, contractors, subcontractors, or other person acting on its behalf which relate to the Project, or from any violation of any federal, state, municipal law, ordinance, or regulation, to the extent caused, in whole or in part, by the intentional or negligent acts, errors, or omissions of Owner or its employees, officers, agents, contractors, subcontractors, or other person acting on its behalf, or by the quality or character of Owner's work, or resulting from the negligence of the City, its officers, employees, volunteers and agents, except for loss caused by the sole negligence of the City. It is understood that the duty of Owner to indemnify and hold harmless includes the duty to defend as set forth in Section 2778 of the California Civil Code. Acceptance by City of insurance certificates and endorsements required under this Agreement does not relieve Owner from liability under this indemnification and hold harmless clause. Owner agrees to and shall indemnify, protect, defend, and hold harmless the City and its officers, employees, agents, and representatives from actions for damages caused or alleged to have been suffered by reason of the operations referred to in this paragraph, regardless of whether or not City prepared, supplied, or approved plans or specifications for the Project. This indemnification requirement shall extend beyond the termination or expiration of this Agreement. By execution of this Agreement, Owner acknowledges and

agrees to the provisions of this Section and that it is a material element of consideration.

19.3 Third Party Litigation Concerning Agreement. Owner shall indemnify, protect, defend, and hold harmless City, its officers, employees, or agents against any loss, cost, expense, claim, or counter-claim, complaint, or proceeding to attack, modify, set aside, void, or annul the approval of this Agreement or the approval of any permit or entitlement granted pursuant to this Agreement brought by a third party. City shall promptly notify Owner of any such claim, action, or proceeding, and City shall cooperate in the defense of the action by providing staff witnesses, documents, and related information. If City fails to promptly notify Owner of any such claim, action, or proceeding, or if City fails to cooperate in the defense, Owner shall not thereafter be responsible to indemnify, protect, defend, or hold harmless City. City may in its discretion participate in the defense of any such claim, action, or proceeding.

19.4 Environmental Assurances. Owner shall indemnify, protect, defend, and hold harmless City, its officers, employees, agents, assigns, and any successor or successors to City's interest from and against all claims, actual damages (including but not limited to special and consequential damages), natural resources damages, punitive damages, injuries, costs, response remediation and removal costs, losses, demands, debts, liens, liabilities, causes of action, suits, legal or administrative proceedings, interest, fines, charges, penalties and expenses (including but not limited to attorneys' and expert witness fees and costs incurred in connection with defending against any of the foregoing or in enforcing this indemnity) of any kind whatsoever paid, incurred, or suffered by, or asserted against, City or its officers, employees, or agents arising from or attributable to any repair, cleanup, or detoxification, or preparation and implementation of any removal, remedial, response, closure, or other plan (regardless of whether undertaken due to governmental action) concerning any Hazardous Substance or hazardous wastes at any place within the Property which is the subject of this Agreement. The foregoing indemnity extends beyond the term of this Agreement and is intended to operate as an agreement pursuant to Section 107(e) of the Comprehensive Environmental Response, Compensation, and Liability Act, "CERCLA," 42 U.S.C. Section 9667(e), and California Health and Safety Code Section 25364, and their successor statutes, to insure, protect, defend, hold harmless, and indemnify City from liability.

19.5 Release. Except for non-damage remedies, including the remedy of specific performance and judicial review as provided for in Sections

27.4 and 27.5 hereof, Owner, for itself, its successors and assignees, hereby releases the City, its officers, agents, and employees from any and all claims, demands, actions, or suits of any kind or nature arising out of any liability, known or unknown, present or future, including, but not limited to, any claim or liability, based or asserted, pursuant to Article I, Section 19 of the California Constitution, the Fifth Amendment of the United States Constitution, or any other law or ordinance which seeks to impose any other liability or damage, whatsoever, upon the City because it entered into this Agreement or because of the terms and/or operation of this Agreement.

19.6 Reservation of Rights. Owner's obligation to indemnify, protect, defend, and hold harmless under Sections 19.1 to 19.3 herein shall be provided at Owner's sole expense, including but not limited to attorneys' fees and court costs, with legal counsel which Owner selects, hires, or otherwise engages to defend City hereunder to be approved by City. City reserves the right to conduct its own defense, provided, however, that Owner shall reimburse City forthwith for any and all reasonable expenses incurred for such defense, including, but not limited to, attorneys' fees and court costs, upon billing and accounting therefor.

19.7 Survival. The provisions of this Section 19 shall survive the termination of this Agreement.

20. Public Benefits, Public Improvements and Facilities.

20.1 Intent. The parties acknowledge and agree that this Agreement confers private benefits on the Owner which should be balanced by commensurate public benefits. Accordingly, the parties intend to provide consideration to the public to balance the private benefits conferred on the Owner by providing more fully for the satisfaction of the public needs resulting from development of the Project, as set forth on Exhibit "D" attached hereto and incorporated herein by this reference. Owner agrees to provide all public benefits identified in said Exhibit "D" in such manner and within such timeframe as provided therein.

20.2 Development Fees. Owner shall also pay all other customary and typical development exactions, for a Project of this size and nature, in existence as of the Effective Date and throughout the term of this Agreement, including but not limited to, Fire, Traffic Signal Mitigation, Public Facility Financing Plan Impact Fees, School Impact Fees (SB50), sewer and water connection fees, and permit fees pursuant to the provisions of City

ordinances and resolutions in existence at the time of payment, including any periodic adjustments provided by said ordinances and resolutions.

20.3 Public Improvements. If Owner is required by this Agreement, or any other obligation, to construct any public improvements which will be dedicated to City or any other public agency upon completion, and if required by applicable laws to do so, Owner shall construct such improvements in the same manner and subject to the same requirements as would be applicable to City or such other public agency should it have undertaken such construction.

20.4 Sewer Facility Capital Expansion Improvement Bond. The City anticipates (i) forming one or more Financing Districts to finance the expansion of its sewer facilities and system to upgrade the City's sewer treatment facility to accommodate the additional sewer capacity required for growth attributable to the Project, and (ii) issuing sewer facility capital expansion improvement bonds or other indebtedness (the "Bonds") to be secured in whole or in part from assessments or special taxes levied within such Financing Districts, or similar fees and charges. Owner, on behalf of itself and its successors, transferees, assignees, and subsequent purchasers of the Property, or any portion thereof, agrees to form or annex to a Financing District or pay fees and charges in lieu thereof when established, agrees to include the Property within a Financing District, and agrees to pledge and encumber the Property for purposes of the issuance of the Bonds and authorize, by petition, vote, or otherwise, that inclusion of the Property in the Financing District, the issuance of the Bonds, and the imposition by the City of a special tax or assessment on the Property in order to secure the Bonds. The Owner acknowledges that an assessment lien or special tax lien will be recorded against the Property and that the lien will continue in force and effect until the assessment or special tax obligation is prepaid or permanently satisfied and the lien cancelled in accordance with the law. By executing this Agreement, Owner, on behalf of itself and its successors, transferees, assignees, and subsequent purchasers of the Property, or any portion thereof, agrees and consents to waive any protest, suit, claim, or challenge to the Bond or any proceedings related thereto. The terms and condition in this Section 20.4 shall run with the land and shall survive beyond the termination or expiration of this Agreement.

21. Reservation of Authority.

21.1 Limitations, Reservations, and Exceptions. Notwithstanding any other provision of this Agreement, the following Subsequent Land Use Regulations shall apply to the development of the Property:

(a) Processing fees and charges imposed by City to cover the estimated actual costs to City of processing applications for Subsequent Development Approvals.

(b) Procedural regulations relating to hearing bodies, petitions, applications, notices, findings, records, hearings, reports, recommendations, appeals, and any other matter of procedure.

(c) Regulations imposing Development Exactions; provided, however, that no such subsequently adopted Development Exactions shall be applicable to development of the Property unless such Development Exactions are applied uniformly to development throughout the City.

(d) Regulations governing construction standards and specifications including without limitation, the City's Building Code, Plumbing Code, Mechanical Code, Electrical Code, and Fire Code.

(e) Regulations governing:

(1) The control and abatement of public nuisances;

(2) Storm water run-off from the Property;

(3) The remedy of any health or safety threat posted by the Property; and,

(4) The provision, maintenance, expansion, termination, conditions and limitations of municipal water and sewer services.

(f) Regulations which are in conflict with the Development Plan. Any regulation, whether adopted by initiative or otherwise, limiting the rate or timing of development of

the Property shall be deemed to conflict with the Development Plan and shall therefore not be applicable to the development of the Property.

(g) Regulations which are in conflict with the Development Plan provided Owner has given written consent to the application of such regulations to development of the Property.

21.2 Subsequent Development Approvals. This Agreement shall not prevent City, in acting on Subsequent Development Approvals, from applying the Subsequent Land Use Regulations which do not conflict with the Development Plan, nor shall this Agreement prevent City from denying or conditionally approving any Subsequent Development Approval on the basis of the Existing or Subsequent Land Use Regulations not in conflict with the Development Plan.

21.3 Modification or Suspension by State or Federal Law. In the event that State or Federal laws or regulations enacted after the Effective Date of this Agreement prevent or preclude compliance with one or more of the provisions of this Agreement, such provisions of this Agreement shall be modified or suspended as may be necessary to comply with such State or Federal laws or regulations, provided, however, that this Agreement shall remain in full force and effect to the extent it is not inconsistent with such laws or regulations and to the extent such laws or regulations do not render such remaining provisions impractical to enforce.

21.4 Regulation by Other Public Agencies. It is acknowledged by the parties that other public agencies not within the control of City possess authority to regulate aspects of the development of the Property separately from or jointly with City, and this Agreement does not limit the authority of such other public agencies.

22. Development of the Property, Vesting, and Changes/Amendments.

22.1 Rights to Develop. Contingent upon approval of Owner's annexation request by LAFCO and subject to the terms of this Agreement, Owner shall have a vested right to develop the Property in accordance with, and to the extent of the Development Plan. The Project shall remain subject to all Subsequent Development Approvals required to complete the Project as contemplated by the Development Plan. Except as otherwise provided in this

Agreement, the permitted uses of the Property, the density and intensity of use, the maximum height and size of proposed buildings, and provisions for reservation and dedication of land for public purposes shall be those set forth in the City's Zoning Ordinance for Thoroughfare Commercial (C-T) Zone. In exchange for the vested right to develop pursuant to this Agreement, Owner expressly waives for itself and its successors, transferees, assignees, and subsequent purchasers of the Property, or any portion thereof, the right to challenge or contest the validity of the annexation and any condition of approval attached to any entitlement which is a part of the Development Plan.

22.2 Payment of Fees. Owner, for itself and its successors, transferees, assignees, and subsequent purchasers of the Property, or any portion thereof, agrees to pay all City and school district fees, taxes, and/or assessments in effect on the Effective Date of this Agreement, any increase in those fees, taxes, and/or assessments, and any new fees, taxes, and/or assessments which are in effect at the time building permits are issued, which may include public facility impact fees, other impact fees as applicable, and any special assessments or Mello-Roos taxes—whether for infrastructure, services, or any other activity or project authorized by a special assessment law or the Mello-Roos law, etc., (and to comply with the additional conditions set forth in Exhibit "F," attached hereto and incorporated herein by this reference). Payment shall be made for each phase at the time of building permit issuance for such phase unless an Ordinance or other requirement of the City mandates or permits payment of such fees, taxes, and/or assessments at an earlier or subsequent time.

22.3 Compliance with Conditions. Owner agrees to comply with the conditions of approval set forth in Planning Commission Resolution No. _____, attached hereto as Exhibit "F," and within this Agreement and acknowledges that the conditions are necessary to mitigate the environmental impacts, if any, caused by Owner's development or are necessary to offset the costs to the City generated by Owner's development including sewer connection costs pursuant to Chapter 15.16 of the Merced Municipal Code.

22.4 Utility Connection Charge. Owner agrees to pay all sewer connection costs imposed by the City as delineated in Section 15.16.070 of the Merced Municipal Code and to pay all other costs required by Chapter 15.16 of the Merced Municipal Code.

22.5 Building Permits & Wastewater Treatment Plant Capacity. No building permit or other permit for the Project shall be issued if Owner is

not in full compliance with this Agreement. Notwithstanding any provision to the contrary, in the event the City's Wastewater Treatment Plant's capacity or operation is insufficient to serve all development projects in the City seeking connections, available building permits and sewer connections (hereinafter "Connection Permit"), shall be allocated as follows:

(a) The City reserves 5% of the available capacity, but not less than 100,000 gallons per day, to serve new commercial and industrial projects;

(b) Among residential projects, first priority shall be given for up to 5% of available capacity, but not less than 100,000 gallons per day, for projects legally covenanted and required to sell or lease to persons of low or moderate income;

(c) The balance of available capacity shall be allocated through the issuance of Connection Permits to Projects that have pledged their Property subject to this Agreement as security for the pubic financing essential to the expansion of the City's Wastewater Treatment Plant, and among those Projects that have done so meet the following additional criteria:

(1) Have approved final maps for their Project and completed all other discretionary approvals (such as Conditional Use Permits);

(2) Agree and are able to commence construction of buildings within 120 days of receiving a building permit;

(3) Agree pursuant to a construction phasing plan submitted with the Connection Permit application to diligently pursue construction until completion in accordance with the phasing plan; and,

(4) Allocation of Connection Permits shall be based on those applications approved meeting the requirements above with those approved first in time getting priority over those filing subsequent thereto.

Insufficient capacity shall be determined by the City Engineer considering existing agreements to serve and maximum flow to the Wastewater Treatment Plant at its highest average point.

This allocation method for Connection Permits shall continue until such time as capacity at the Wastewater Treatment Plant is able to meet all of the requests for service, as determined by the City Engineer, with a sufficient reserve capacity to meet unexpected needs or opportunities for the City.

If construction is not commenced within the time limit specified in Section 22.5(c)(2), any Connection Permit for which construction has not commenced under the building permit shall be deemed void and subject to reallocation.

Once a Connection Permit is issued for a Project, the Connection Permit is not transferable by the permit holder to another site or location. The Connection Permit may be transferred between parties, such as when one company buys out a site to complete the Project, so long as the location does not change. Any attempted transfer to another location shall be void and cause the Connection Permit to be immediately voided and subject to reallocation.

If construction of the Project is not commenced within five (5) years, any sewer capacity allocated to this Property by this annexation shall be terminated. If, after five (5) years the sewer capacity allocation is terminated, the City Engineer shall determine when sufficient capacity is available for development.

22.6 Effect of Agreement on Land Use Regulations. Except as otherwise provided under the terms of this Agreement, the rules, regulations, and official policies governing permitted uses of the Property, the density and intensity of use of the Property, the maximum height and size of proposed buildings, and the design, improvement and construction standards and specifications applicable to development of the Property shall be the existing Land Use Regulations in effect on the Effective Date of this Agreement. City shall exercise its lawful reasonable discretion in connection with Subsequent Development Approvals in accordance with the Development Plan, and as provided by this Agreement. City shall accept for processing, review, and action all applications for Subsequent Development Approvals, and such applications shall be processed in the normal manner for processing such matters. City may, at the request of Owner, contract for planning and engineering consultant services to expedite the review and processing of Subsequent Development Approvals, the cost of which shall be borne by Owner.

22.7 Changes and Amendments. The parties acknowledge that refinement and further development of the Project will require Subsequent Development Approvals and may demonstrate that changes are appropriate and mutually desirable in the Existing Development Approvals. In the event the Owner finds that a change in the Existing Development Approvals is necessary or appropriate, the Owner shall apply for a Subsequent Development Approval to effectuate such change. If approved by City under Section 25 below, any such change in the Existing Development Approvals shall be incorporated herein as addendum to this Agreement and may be further changed from time to time as provided in this Section. Owner, shall, within thirty (30) days of written demand by City, reimburse City for any and all reasonable costs, associated with any amendment or change to this Agreement that is initiated by Owner or Owner's successor -- without regard to the outcome of the request for amendment or change to this Agreement. Unless otherwise required by law, as determined in City's reasonable discretion, a change to the Existing Development Approvals shall be deemed "minor" and not require an amendment to this Agreement provided such change does not:

(a) Alter the permitted uses of the Property as a whole; or,

(b) Increase the density or intensity of use of the Property as a whole; or,

(c) Increase the maximum height and size of permitted buildings; or,

(d) Delete a requirement for the reservation or dedication of land for public purposes within the Property as a whole; or,

(e) Constitute a project requiring a subsequent or a supplemental Environmental Impact Report pursuant to Section 21166 of the Public Resources Code.

Notwithstanding the forgoing, the City is neither obligated nor required to make any change or amendment to this Agreement.

23. Periodic Review of Compliance with Agreement.

23.1 City Compliance Review. Pursuant to City Council Resolution No. 95-6, as it may be subsequently amended, City may review this Agreement at least once during every twelve (12) month period from the

Effective Date of this Agreement. The Owner or successor shall reimburse City for the reasonable and necessary costs of this review, within thirty (30) days of written demand from City.

23.2 Owner Good Faith Compliance. During each periodic review by City, the Owner is required to demonstrate good faith compliance with the terms of this Agreement. The Owner agrees to furnish such evidence of good faith compliance as City in the exercise of its discretion may require.

24. Financing District. In addition to any Financing District required by Section 20.4 hereof, upon the request of Owner, the parties shall cooperate in exploring the use of special assessment districts, special tax districts, and other similar financing districts for the financing of the construction, improvement, or acquisition of public infrastructure, facilities, lands, and improvements to serve the Project, whether located within or outside the Property. It is acknowledged that nothing contained in this Agreement shall be construed as requiring City or City Council to form such a district or to issue or sell bonds therefor.

25. Amendment or Cancellation of Agreement. This Agreement shall not be amended, modified, or canceled, in whole or in part, unless in writing signed by both parties hereto, and only by mutual consent of the parties and in the manner provided for in Government Code Sections 65868, 65867, and 65867.5. The provisions of this Section do not impact the right of the City to terminate this Agreement because of Owner's breach or failure to comply in good faith with the requirements of this Agreement.

26. Enforcement. Unless amended or canceled as herein provided, this Agreement is enforceable by any party to it notwithstanding a change in the applicable general or specific plan, zoning, subdivision, or building regulations adopted by the City which alter or amend the rules, regulations, or policies governing permitted uses of the land, density, design, improvement, and construction standards and specifications.

27. Enforced Delay, Default, Remedies and Termination.

27.1 Default by Owner. If the City alleges an Owner Default, the City shall provide sixty (60) days prior written notice of the alleged Owner Default and then conduct a hearing utilizing the Annual Review procedures in Section 23(a) before the City may terminate this Agreement. Failure by Owner to reserve or dedicate any property pursuant to the Development Plan, or to pay fees and charges as required by the Land Use Regulations and this Agreement

as they become due, shall constitute a separate material Owner Default. It shall also be deemed a material Owner Default of a material provision of this Agreement for more than forty-five (45) days to pass from City's written demand for reimbursement of any reimbursable costs under this Agreement and the receipt by City of such reimbursement. In the event of Owner Default, and in addition to any other remedy available to the City, the City shall have the right to rezone the Property back to its original designation.

27.2 Default by City. If Owner alleges a City Default the Owner shall provide written notice of the alleged City Default and the City shall have ninety (90) days to cure said Default. If the City has not cured the Default within ninety (90) days, Owner may pursue any legal or equitable remedy available to it under this Agreement. It is acknowledged by the parties that City would not have entered into this Agreement if City were to be subject to or liable for damages -- including monetary damages -- under or with respect to this Agreement or the application thereof, or with respect to the Project. Owner, for itself and its successors, transferees, assignees, and subsequent purchasers of the Property, or any portion thereof, expressly waives the right to seek damages -- including monetary damages -- against the City or any officer, employee, or agent thereof, for any default or breach of this Agreement. Owner, on behalf of itself and its successors, transferees, assignees, and subsequent purchasers of the Property, or any portion thereof, covenants and agrees not to sue for or claim any damages -- including monetary damages -- for any purported breach of this Agreement by City. During the time when Owner alleges the existence of a City Default and without limiting any of its other available remedies, Owner shall not be obligated to proceed with or complete the Project or any phase of the Project, nor to reserve or dedicate any property pursuant to the Development Plan or this Agreement. Upon a City Default, any resulting delays in Owner's performance shall neither be an Owner Default nor constitute grounds for termination or cancellation of this Agreement by the City.

27.3 Waiver. Failure or delay in giving Notice of Default shall not waive a Party's right to give future Notice of the same or any other Default, provided, however, this Section 27.3 shall not preclude a Party from the protections provided under law or equity by the defenses of estoppel and/or latches.

27.4 Specific Performance Remedy. Due to the elimination of damages as a remedy against City and to the size, nature, and scope of the Project, it will not be practical or possible to restore the Property to its pre-

existing condition once implementation of this Agreement has begun. After such implementation, Owner may be foreclosed from other choices it may have had to utilize the Property and provide for other benefits. Owner has invested significant time and resources and performed extensive planning and processing of the Project in agreeing to the terms of this Agreement and will be investing even more significant time and resources in implementing the Project in reliance upon the terms of this Agreement. It is not possible to determine the sum of money which would adequately compensate Owner for such efforts. For the above reasons, the City and Owner agree that damages would not be an adequate remedy if the City fails to carry out its obligations under this Agreement. Therefore, no money damages are available against City, or any officer, employee, or agent thereof. Specific performance of this Agreement is necessary as the exclusive remedy to compensate Owner if the City fails to carry out its obligations under this Agreement and is also available to City, if Owner defaults hereunder.

27.5 Judicial Review. In the event City elects to terminate this Agreement pursuant to the provisions of Sections 11.7, 25, or 27.1, the Owner may challenge such termination by instituting legal proceedings in which event the court shall exercise its review, based on substantial evidence, as to the existence of cause for termination.

28. Events of Default. Owner is in default under this Agreement upon the happening of one or more of the following events or conditions:

(a) If a warranty, representation, or statement made or furnished by Owner to City is false or proves to have been false in any material respect when it was made;

(b) More than forty-five (45) days have passed since City's making of a written request to Owner for payment or reimbursement for a fee or service authorized or agreed to pursuant to this Agreement;

(c) Failure by Owner to reserve or dedicate any property pursuant to the Development Plan, or to pay fees and charges as required by the Land Use Regulations and this Agreement as they become due; or

(d) A finding and determination by City that upon the basis of substantial evidence the Owner has not complied in

good faith with one or more of the terms or conditions of this Agreement.

29. Attorney's Fees and Costs. If legal action by either party is brought because of breach of this Agreement or to enforce a provision of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees and court costs.

30. Notices. All notices required or provided for under this Agreement shall be in writing and delivered in person or sent by certified mail, postage prepaid and presumed delivered upon actual receipt by personal delivery or within three (3) days following deposit thereof in United States Mail. Notice required to be given to City shall be addressed as follows:

To City: City of Merced
678 West 18th Street
Merced, California 95340
Attn: City Clerk

Notices required to be given to Owner shall be addressed as follows:

To Owner: Louann Bianchi
151 N. Ulukoa Pl.
Lahaina, HI 96761-1969

A party may change the address by giving notice in writing to the other party and thereafter notices shall be addressed and transmitted to the new address.

31. Cooperation. City agrees that it shall accept for processing and promptly take action on all applications, provided they are in a proper form and acceptable for required processing for discretionary permits, tract or parcel maps, or other land use entitlement for development of the Project in accordance with the provisions of this Agreement. City shall cooperate with Owner in providing expeditious review of any such applications, permits, or land use entitlement and, upon request and payment of any costs and/or extra fees associated therewith by Owner, City shall assign to the Project planner(s), building inspector(s), and/or other staff personnel as required to insure the timely processing and completion of the Project.

32. Further Actions and Instruments. Each of the Parties shall cooperate with and provide reasonable assistance to the other to the extent necessary to implement this Agreement. Upon the request of either Party at any time, the other

Party shall promptly execute, with acknowledgement or affidavit if reasonably required, and file or record such required instruments and writings and take any actions as may be reasonably necessary to implement this Agreement or to evidence or consummate the transactions contemplated by this Agreement. In the event, Owner or Owner's successor requires supplemental or additional agreements for purposes of securing financing or similar purposes, City will endeavor to assist in this respect, provided, however, Owner or Owner's successor shall reimburse the City for any and all costs associated with processing, reviewing, negotiating, or acting on such agreements. Owner or Owner's successor agrees to reimburse City within thirty (30) days of written demand therefor.

33. Rules of Construction and Miscellaneous Terms.

(a) The singular includes the plural; the masculine gender includes the feminine; "shall" is mandatory, "may" is permissive.

(b) If there is more than one signer of this Agreement their obligations are joint and several.

(c) The time limits set forth in this Agreement may be extended by mutual written consent of the parties in accordance with the procedures for adoption of the Agreement.

(d) This Agreement is made and entered into for the sole protection and benefit of the parties and their successors and assigns. No other person, including but not limited to third party beneficiaries, shall have any right of action based upon any provision of this Agreement.

34. Running with Land. To the extent allowed by law, the conditions of this Agreement constitute covenants running with the land, and shall be enforceable by the City or by any present or future owner of any of the land described in Exhibit "A."

35. Waiver. In the event that either City or Owner shall at any time or times waive any breach of this Agreement by the other, such waiver shall not constitute a waiver of any other or succeeding breach of this Agreement, whether of the same or any other covenant, condition or obligation. Waiver shall not be deemed effective until and unless signed by the waiving party.

36. Venue. This Agreement and all matters relating to it shall be governed by the laws of the State of California and any action brought relating to this Agreement shall be held exclusively in a state court in the County of Merced.

37. Entire Agreement. This Agreement and the exhibits hereto contain the complete, final, entire, and exclusive expression of the agreement between the parties hereto, and is intended by the parties to completely state the agreement in full. Any agreement or representation respecting the matters dealt with herein or the duties of any party in relation thereto not expressly set forth in this Agreement shall be null and void.

38. Counterparts. This Agreement may be executed in multiple counterparts, each of which so fully executed counterpart shall be deemed an original. No counterpart shall be deemed to be an original or presumed delivered unless and until the counterpart executed by the other party to this Agreement is in the physical possession of the party seeking enforcement thereof.

39. Authority to Execute. Each party hereto expressly warrants and represents that he/she/they has/have the authority to execute this Agreement on behalf of his/her/their corporation, partnership, business entity, or governmental entity and warrants and represents that he/she/they has/have the authority to bind his/her/their entity to the performance of its obligations hereunder.

IN WITNESS WHEREOF this Pre-Annexation Development Agreement has been executed by the authorized representatives of the parties hereto.

CITY:

CITY OF MERCED
A California Charter Municipal Corporation

BY:_____
City Manager

ATTEST:
STEVE CARRIGAN, CITY CLERK

BY:_____
Assistant/Deputy City Clerk

APPROVED AS TO FORM:

BY:_____ 5-9-2018
City Attorney Date

ACCOUNT DATA:

BY:_____
Verified by Finance Officer

(Signatures Continued on Next Page)

OWNER:

BY: _____
Louann Bianchi

Taxpayer I.D. No. _____

ADDRESS: 151 N. Ulukoa Pl.
Lahaina, HI 96761-1969

TELEPHONE: _____
FACSIMILE: _____
E-MAIL: _____

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____)

On _____ before me, _____
(insert name and title of the officer)

personally appeared _____,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ **(Seal)**

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____)

On _____ before me, _____
(insert name and title of the officer)

personally appeared _____,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ **(Seal)**

EXHIBIT A
PROPERTY LEGAL DESCRIPTION AND MAP

EXHIBIT A
LEGAL DESCRIPTION

PARCEL 1: A portion of lot 96 and a portion of the West 40 feet of the 100 foot wide Southern Pacific Railroad-Oakdale Branch right-of-way (now abandoned) as shown an the map entitled, MAP OF THE CROCKER COLONY, recorded in Volume 5 of Official Plats, Page 6, Merced County Records, said portions being described as a whole as follows:

Commencing at the Northwest corner of said Lot 96 and running thence North 85° 48' 00" East 83.54 feet along the North line of said Lot 96 to a point on the Northeasterly line of Santa Fe Drive (a County Road) said point being the true point of beginning of this description; thence South 53° 11' 13" East, 308.33 feet along said Northeasterly line of Santa Fe Drive; thence Southeasterly along said northeasterly line of Santa Fe Drive along a 1,464.11 foot radius curve to the left, the long chord of which bears south 69° 35' 30" East 825.20 feet, through a central angle of 32° 44' 12", an arc distance of 836.54 feet, thence North 18° 36' 31" East 17.45 feet along said Northeasterly line of Santa Fe Drive to a point on the West line of State Highway 59; thence North 01° 24' 30" East 375.88 feet along the West line of State Highway 59 to the southeast corner of that certain real property described as Parcel II in deed from Crocker Land Company to Merced Water Company recorded in Volume 1483, Official Records, page 111, Merced County Records; thence North 8° 35' 30" West 100.00 feet to the Southwest corner of said Parcel II; thence North 01° 24' 30" East 180.34 feet along the West line of said Parcel II to a point on the North line of the aforesaid Lot 96; thence south 83° 48' 00" West 945.081 feet along the North line of said Lot 96 to the true point of beginning, all as delineated on map entitled, "RECORD OF SURVEY FOR J.F. COLLINS CO.", recorded in Book 13 of surveys, page 35, Merced County Records.

EXCEPTING therefrom all that portion conveyed to the County of Merced for road widening by deed recorded January 13, 1984, in volume 2407, page 718, Merced County Records.

ALSO EXCEPTING therefrom the property and property rights and reserved in deeds recorded August 4, 1961, in Volume 1539, page 504, as Instrument No. 14501, Official Records, March 3, 1971, in Volume 1881, page 555, as Instrument No. 3989, Official Records and March 3, 1972, in volume 1881, page 572, as Instrument No. 3991, Official Records, being all oil, gas and other hydrocarbons and all other mines and minerals found in solid, gaseous or viscid state lying below a depth of 500 feet.

APN: 057-200-067

PARCEL 2: A portion of Lot 96 and a portion of the West 40 feet of the 100 foot wide Southern Pacific Railroad-Oakdale Branch right-of-way (now abandoned), according to the map entitled, MAP OF CROCKER COLONY, filed June 7, 1911, in book 5 of Maps, page 6 Merced County Records, and more particularly described as follows:

Commencing at a point that is the Southeast corner of said Lot 96, said point also being on the Northerly line of the Santa Fe Railroad right-of-way; thence South 88° 35' 30" East, 40.00 feet; thence North 01° 24' 30" West, a distance of 697 feet, to the true point of beginning; thence north 88° 25' 30" West, a distance of 100.00 feet; thence North 01° 24' 30" East, a distance of 189.93

feet; thence South 51° 47’ 00” East, a distance of 74.78 feet; thence South 40° 05’ 55” East, a distance of 60.36 feet; thence South 01° 24’ 30” West, a distance of 100.00 feet to the true point of beginning.

EXCEPTING therefrom the property and property rights excepted and reserved in deeds recorded August 4, 1961, in Volume 1539, page 504, as Instrument No. 14501, Official Records, March 3, 1971, in Volume 1881, page 555, as Instrument No. 3989, Official Records and March 3, 1972, in Volume 1881, page 572, as Instrument No. 3991, Official Records, being all oil, gas and other hydrocarbons and all other mines and minerals found in solid, gaseous or viscid state lying below a depth of 500 feet.

APN: 057-200-029

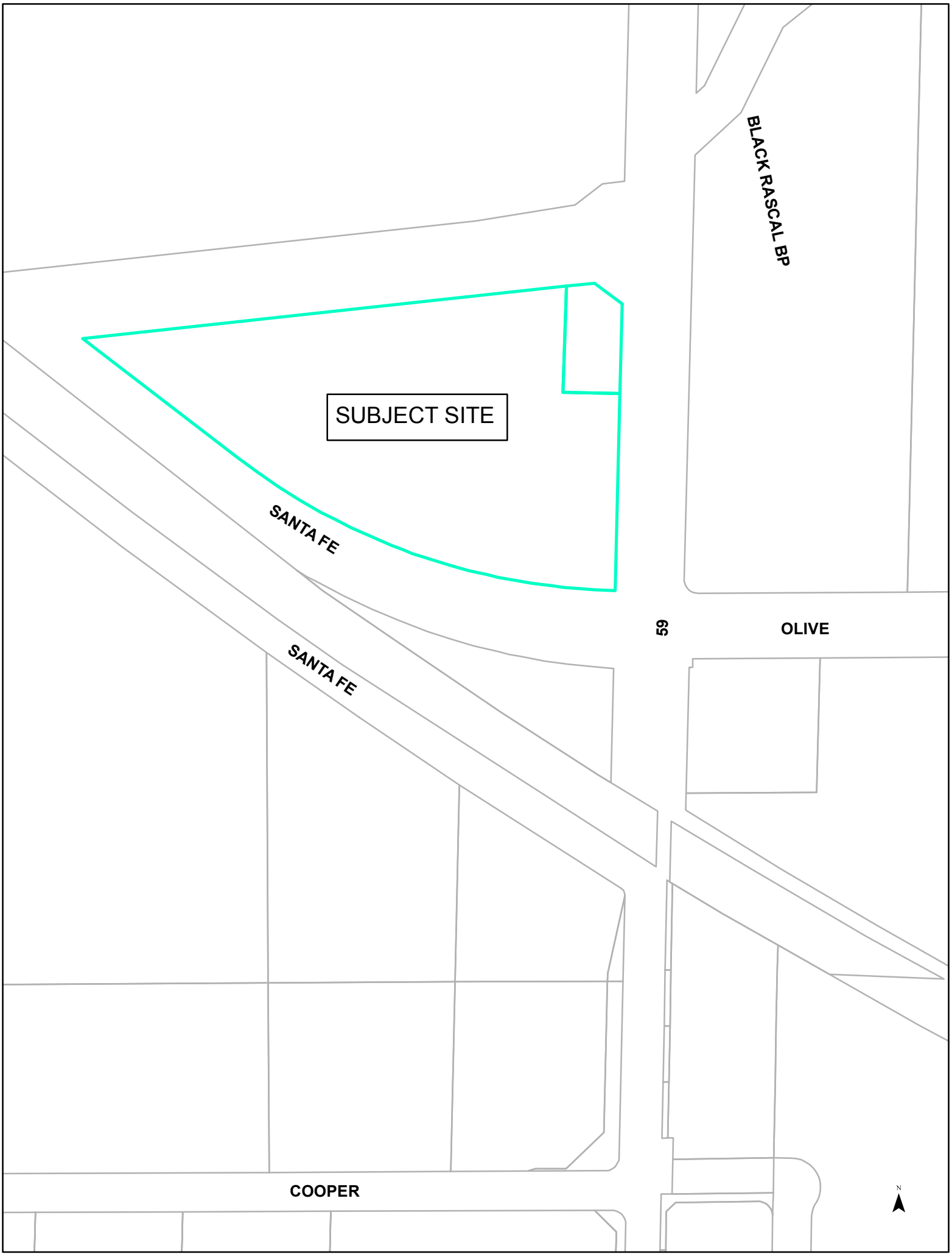

BLACK RASCAL BP
SUBJECT SITE
SANTA FE
SANTA FE
69
OLIVE
COOPER
N

EXHIBIT B

DEVELOPMENT APPROVALS

- Annexation/Pre-Zoning No. 15-01
- General Plan Amendment No. 15-04
- Expanded Initial Study No. 15-36 (Mitigated Negative Declaration and Mitigation Monitoring Program)

EXHIBIT C
LAND USE REGULATIONS

- Merced Vision 2030 General Plan.
- Charter of the City of Merced.
- Merced Municipal Code.
- City of Merced Design Standards.

EXHIBIT D

PUBLIC BENEFITS

1. Owner shall participate in the upgrade to the sewer treatment plant and sewer transmission lines in proportion to the growth attributable to the Project, as called for in Section 4.4.

2. Owner shall improve/upgrade/replace the following County infrastructure (roads, utilities, etc.) adjacent to and within the Project consistent with City of Merced standards, pursuant to this Agreement:

a) Construct curb, gutter, sidewalk, install street lights and street trees along the full property frontage on Santa Fe Avenue and North State Highway 59.

b) Provide fire hydrants as determined by the City of Merced Fire Department.

c) Extend water and sewer lines across the entire property frontage on Santa Fe Avenue and North Highway 59.

d) Provide storm drainage tie-in into the existing storm drainage system.

3. Owner shall underground all utilities serving the property along the property frontage, but is not responsible for undergrounding existing utilities beyond the property frontage.

4. Owner shall connect all development to the City sewer and water system and pay all applicable connection fees.

5. Owner must agree to annex into the City Community Facilities District for Services (CFD No. 2003-2) for the maintenance of street lights, storm drain facilities, landscaping in the public right-of-way, and the cost of police and fire services.

The forgoing improvements are to be jointly and severally constructed and paid for by Owner.

EXHIBIT E
REQUEST FOR NOTICE OF DEFAULT UNDER
PRE-ANNEXATION DEVELOPMENT AGREEMENT

Pre-Annexation Development Agreement: Date:
Specific Plan No. , *{Name ofDevelopment[*
Planning Application No.

To: City Clerk and Director of Development Services, City of Merced

Pursuant to Section 6(b) and (c) of the above-referenced Pre-Annexation Development Agreement, request is hereby made by as Mortgagee for the property (or portion thereof) to receive copies of any Notice of Default issued by City against Owner in accordance with the terms and conditions of such Pre-Annexation Development Agreement. Copies of any such Notices should be mailed to the following address:

_____ (Mortgagee)
_____ (Person/Department)
_____ (Address)
_____ (City/State/Zip)
_____ (Telephone No.)

A copy of this Notice should be filed with the project file to insure proper and timely notice is given. **Under the terms of said Pre-Annexation Development Agreement, _____ as Mortgagee is entitled to receive copies of any Notice of Default within ten (10) days of sending any such Notice to Owner. Failure to send any such Notice may have serious legal consequences for the City.**

This request is to remain in effect until revoked by _____ as Mortgagee or the Pre-Annexation Development Agreement is terminated.

The person executing this document on behalf of said Mortgagee warrants and represents that the entity he/she represents is a bonafide Mortgagee of said property and is entitled to receive copies of Notices of Default under said Pre-Annexation Development Agreement.

The undersigned declares the above information is true and correct under the penalty of perjury under the laws of the State of California.

Dated: _____, 20____.

MORTGAGEE

By:

_____
(signature)

_____
(printed name)

Its: _____
(title)

[Notary required]

This Notice is to be sent to both the City Clerk and Director of Development Services for the City of Merced at 678 West 18th Street, Merced, California 95340 or such other location as Merced City Hall may be located in the future.

EXHIBIT F

PLANNING COMMISSION RESOLUTION
INCLUDING THE MITIGATION MONITORING PROGRAM
FOR EXPANDED INITIAL STUDY #15-36

Will be provided after Planning Commission meeting.

CITY OF MERCED
Planning Commission

Resolution #_____

WHEREAS, the Merced City Planning Commission at its regular meeting of June 6, 2018, held a public hearing and considered **Pending Annexation and Pre-zoning Applications #15-01 and General Plan Amendment #15-04,** initiated by Louann Bianchi, and Quad LLC, property owners. This application involves annexing 8.83 acres of land at the northwest and southwest corners of North Highway 59 and Santa Fe Drive into the City of Merced; changing the General Plan designation for the northwest corner from Open Space (OS) to Thoroughfare Commercial (CT) and pre-zoning the northwest corner as Thoroughfare Commercial (C-T) for the Thoroughfare Commercial development. The General Plan designation for the southwest corner would remain Industrial (IL) and this corner would be pre-zoned Light Industrial (I-L); also known as Assessor's Parcel Numbers 057-200-029, 057-200-067, and 057-200-042; and,

WHEREAS, the Merced City Planning Commission concurs with Findings A through M of Staff Report # 18-14; and,

WHEREAS, after reviewing the City's Initial Study and Draft Environmental Determination, and fully discussing all the issues, the Merced City Planning Commission does resolve to hereby recommend to City Council adoption of a Mitigated Negative Declaration and Mitigation Monitoring Program (Exhibit B) regarding Initial Study #15-36, and approval of Pending Annexation and Pre-zoning Applications #15-01 and General Plan Amendment #15-04, subject to the Conditions set forth in Exhibit A attached hereto.

Upon motion by Commissioner _____, seconded by Commissioner _____, and carried by the following vote:

AYES: Commissioner(s)

NOES: Commissioner(s)

ABSENT: Commissioner(s)
ABSTAIN: Commissioner(s)

ATTACHMENT I

Adopted this 6th day of June, 2018

_____
Chairperson, Planning Commission of
the City of Merced, California

ATTEST:

_____
Secretary

Attachment:
Exhibit A – Conditions of Approval
Exhibit B – Mitigation Monitoring Program

n:shared:planning:PC Resolutions:ANX-PREZ#15-01 & GPA#15-04 NorCal Foods

Conditions of Approval
Planning Commission Resolution # _____
Pending Annexation and Pre-zoning Applications #15-01
and General Plan Amendment #15-04

1. All new construction within the annexation area (including modifications to the developed site at the southwest corner of North Highway 59 and Santa Fe Drive) shall comply with all standard Municipal Code and Subdivision Map Act requirements as applied by the City Engineering Department.

2. All other applicable codes, ordinances, policies, etc. adopted by the City of Merced shall apply.

3. Approval of Pre-Annexation #15-01, Pre-zoning Application #15-01, and General Plan Amendment #15-04 is subject to the applicant's entering into a written (legislative action) agreement that they agree to all the conditions and shall pay all City and school district fees, taxes, and/or assessments, in effect on the date of any subsequent subdivision and/or permit approval, any increase in those fees, taxes, or assessments, and any new fees, taxes, or assessments, which are in effect at the time the building permits are issued, which may include public facilities impact fees, a regional traffic impact fee, Mello-Roos taxes—whether for infrastructure, services, or any other activity or project authorized by the Mello-Roos law, etc. Payment shall be made for each phase at the time of building permit issuance for such phase unless an Ordinance or other requirement of the City requires payment of such fees, taxes, and or assessments at an earlier or subsequent time. Said agreement to be approved by the City Council prior to the adoption of the ordinance, resolution, or minute action.

4. The developer/applicant shall indemnify, protect, defend (with counsel selected by the City), and hold harmless the City, and any agency or instrumentality thereof, and any officers, officials, employees, or agents thereof, from any and all claims, actions, suits, proceedings, or judgments against the City, or any agency or instrumentality thereof, and any officers, officials, employees, or agents thereof to attack, set aside, void, or annul, an approval of the City, or any agency or instrumentality thereof, advisory agency, appeal board, or legislative body, including actions approved by the voters of the City, concerning the project and the approvals granted

herein. Furthermore, developer/applicant shall indemnify, protect, defend (with counsel selected by the City), and hold harmless the City, or any agency or instrumentality thereof, against any and all claims, actions, suits, proceedings, or judgments against any governmental entity in which developer/applicant's project is subject to that other governmental entity's approval and a condition of such approval is that the City indemnify and defend such governmental entity. City shall promptly notify the developer/applicant of any claim, action, or proceeding. City shall further cooperate fully in the defense of the action. Should the City fail to either promptly notify or cooperate fully, the developer/applicant shall not thereafter be responsible to indemnify, defend, protect, or hold harmless the City, any agency or instrumentality thereof, or any of its officers, officials, employees, or agents.

5. The developer/applicant shall construct and operate all future projects within the annexation area in strict compliance with the approvals granted herein, City standards, laws, and ordinances, and in compliance with all State and Federal laws, regulations, and standards. In the event of a conflict between City laws and standards and a State or Federal law, regulation, or standard, the stricter or higher standard shall control.

<u>The following conditions apply to new construction within the annexation area:</u>

6. Community Facilities District (CFD) formation is required for annual operating costs for police and fire services as well as storm drainage, public landscaping, public landscaping within State rights-of-way, street trees, street lights, parks and open space. CFD procedures shall be initiated before final map or first building permit approval. Developer/Owner shall submit a request agreeing to such a procedure, waiving right to protest and post deposit as determined by the City Engineer to be sufficient to cover procedure costs and maintenance costs expected prior to first assessments being received.

<u>The following conditions apply to the future development at the northwest corner of North Highway 59 and Santa Fe Drive:</u>

7. All development shall be subject to the Mitigation Measures outlined in the Mitigation Monitoring Program for Initial Study #15-36.

8. Site Plan Review is required prior to construction on the northwest corner, the Site Plan Review Committee shall review the site design and determine which alternative at the western driveway is best to reduce the expected impacts. The alternatives may include those alternatives included in the traffic analysis or another alternative such as moving the driveway further to the west. The developer shall provide any additional documentation or studies needed for the Site Plan Review Committee to make this determination (Mitigation Measure TRA-1).

9. The southbound left-turn lane on SR 59 shall be lengthened as determined by the City Engineer and approved by Caltrans (Mitigation Measure TRA-1a).

10. The development shall contribute its fair share to the cost of improvements for the intersection of SR 59 and Olive Avenue (Mitigation Measure TRA-1b):

    - Reconstruct westbound Olive Avenue to provide dual left turn lanes on southbound SR 59; and,
    - Reconfigure the westbound right turn lane to create a combination through and right turn lane, and extend that through lane across SR 59 along the project's frontage; and,
    - Reconstruct the existing northbound right turn lane as a "free" right turn with a median island separating eastbound and right-turning traffic. Reconstruct the eastbound Santa Fe Drive approach to provide dual left turn lanes.

11. Prior to the issuance of a building permit, the developer shall work with the Merced County Transit Authority (aka: The Bus) to determine if a bus stop is needed at this location. If a bus stop is required, the stop shall be in an area to allow the bus to move completely out of the travel lanes. The location of all bus stops shall be subject to approval by the City Engineer and Caltrans if along SR 59 (Mitigation Measure TRA-6).

12. Any outdoor dining areas or other outdoor uses shall have the following setbacks to maintain an acceptable noise level of 70 dB for outdoor uses (Mitigation Measure NOI-2):

    - Road/Railroad - Required Setback
    - Santa Fe Drive - 54 Ft.

- North Highway 59 - 89 Ft.
- BNSF Railroad - 137 F

13. At the time of construction, all required public improvements shall be installed along the property frontage. This includes, but is not limited to, sidewalk, curb, gutter, street lights, and street trees.

14. The developer shall work with Caltrans and obtain all necessary permits for all work done within the state right of way.

15. All construction shall comply with Post Construction Standards in accordance with the requirement for the City's Phase II MS-4 Permit (Municipal Separate Storm Sewer System).

16. All new utilities serving the site shall be installed underground.

17. All City sewer, water, and storm drain lines serving the site shall be extended across the full frontage of the property unless it is determined by the Public Works Director that these lines are not likely to be extended to serve any other property (consistent with Merced Municipal Code Section 15.40.030).

18. All storm water shall be contained onsite and metered out to the City's storm water system in accordance with City Standards.

19. A minimum turning radius of 33 feet inside, curb-to-curb and 49 feet wall-to-wall for fire apparatus access must be provided throughout the project site or as required by the Fire Department.

20. The future commercial development shall provide pedestrian and bicycle access throughout the site. Connectivity throughout the site shall be provided by pedestrian pathways. Bicycle parking shall be provided as required by the City's Zoning Ordinance.

21. The developer shall use proper dust control procedures during site development in accordance with San Joaquin Valley Air Pollution Control District rules.

22. All landscaping shall be in compliance with the City's Water Efficient Landscaping and Irrigation Ordinance (Merced Municipal Code Section 17.60) and all state-mandated conservation and drought restrictions as well as the City's Zoning Ordinance Section 20.36 – Landscaping. This shall include the use of xeriscape landscaping as appropriate.

23. Irrigation for all onsite landscaping shall be provided by a low-volume system in accordance with the State's Emergency Regulation for Statewide Urban Water Conservation or any other state or city-mandated water regulations dealing with the current drought conditions.

24. All landscaping in the public right-of-way shall comply with the most recently adopted water regulations by the State and City addressing water conservation measures. If turf is proposed to be installed in medians or parkstrips, high quality artificial turf (approved by the City Engineer and Development Services Director) shall be installed.

25. Parking lot trees shall be installed per the City's Parking Lot Landscape Standards. Trees shall be a minimum of 15 gallons, and be of a type that provides a 30-foot minimum canopy at maturity (trees shall be selected from the City's approved tree list). Trees shall be installed at a ratio of 1 tree for every 6 parking spaces. A reduced number of trees may be required where there are carports with solar panels over the parking spaces. However, if all the parking spaces are covered by a carport with solar panels, then additional trees may be required at the discretion of the Development Services Director. Trees within the PG&E easement shall comply with the regulations of this easement which limits the height of trees to a maximum of 15 feet at full maturity.

26. All mechanical equipment shall be screened from public view.

n:shared:planning:PC Resolutions:ANX-PREZ#15-01 & GPA#15-04 Exhibit A

ENVIRONMENTAL REVIEW #15-36
Mitigation Monitoring Program

MITIGATION MONITORING CONTENTS

This mitigation monitoring program includes a brief discussion of the legal basis and purpose of the mitigation monitoring program, a key to understanding the monitoring matrix, a discussion of noncompliance complaints, and the mitigation monitoring matrix itself.

LEGAL BASIS AND PURPOSE OF THE MITIGATION MONITORING PROGRAM

Public Resource Code (PRC) 21081.6 requires public agencies to adopt mitigation monitoring or reporting programs whenever certifying an environmental impact report or mitigated negative declaration. This requirement facilitates implementation of all mitigation measures adopted through the California Environmental Quality Act (CEQA) process.

The City of Merced has adopted its own "Mitigation Monitoring and Reporting Program" (MMC 19.28). The City's program was developed in accordance with the advisory publication, *Tracking CEQA Mitigation Measures*, from the Governor's Office of Planning and Research.

As required by MMC 19.28.050, the following findings are made:

1) The requirements of the adopted mitigation monitoring program for Annexation and Pre-Zone Application #15-01 and General Plan Amendment #15-04 shall run with the real property. Successive owners, heirs, and assigns of this real property are bound to comply with all of the requirements of the adopted program.
2) Prior to any lease, sale, transfer, or conveyance of any portion of the subject real property, the applicant shall provide a copy of the adopted program to the prospective lessee, buyer, transferee, or one to whom the conveyance is made.

MITIGATION MONITORING PROCEDURES

In most cases, mitigation measures can be monitored through the City's construction plan approval/plan check process. When the approved project plans and specifications, with mitigation measures, are submitted to the City Development Services Department, a copy of the monitoring checklist will be attached to the submittal. The Mitigation Monitoring Checklist will be filled out upon project approval with mitigation measures required. As project plans and specifications are checked, compliance with each mitigation measure can be reviewed.

In instances where mitigation requires on-going monitoring, the Mitigation Monitoring Checklist will be used until monitoring is no longer necessary. The Development Services Department will be required to file periodic reports on how the implementation of various mitigation measures is progressing or is being maintained. Department staff may be required to conduct periodic inspections to assure compliance. In some instances, outside agencies and/or consultants may be required to conduct necessary periodic inspections as part of the mitigation monitoring program. Fees may be imposed per MMC 19.28.070 for the cost of implementing the monitoring program.

EXHIBIT B

GENERAL PLAN MITIGATION MEASURES

As a second tier environmental document, Initial Study #15-36 incorporates some mitigation measures adopted as part of the *Merced Vision 2030 General Plan Program Environmental Impact Report* (SCH# 2008071069), as mitigation for potential impacts of the Project.

NONCOMPLIANCE COMPLAINTS

Any person or agency may file a complaint asserting noncompliance with the mitigation measures associated with the project. The complaint shall be directed to the Director of Development Services in written form providing specific information on the asserted violation. The Director of Development Services shall cause an investigation and determine the validity of the complaint. If noncompliance with a mitigation measure has occurred, the Director of Development Services shall cause appropriate actions to remedy any violation. The complainant shall receive written confirmation indicating the results of the investigation or the final action corresponding to the particular noncompliance issue. Merced Municipal Code (MMC) Sections 19.28.080 and 19.28.090 outline the criminal penalties and civil and administrative remedies which may be incurred in the event of noncompliance. MMC 19.28.100 spells out the appeals procedures.

MONITORING MATRIX

The following pages provide a series of tables identifying the mitigation measures proposed specifically for Annexation and Pre-zone Application #15-01 and General Plan Amendment #15-04 The columns within the tables are defined as follows:

Mitigation Measure:	Describes the Mitigation Measure (referenced by number).
Timing:	Identifies at what point in time or phase of the project that the mitigation measure will be completed.
Agency/Department Consultation:	This column references any public agency or City department with which coordination is required to satisfy the identified mitigation measure.
Verification:	These columns will be initialed and dated by the individual designated to verify adherence to the project specific mitigation.

EXHIBIT B

Annexation and Pre-Zone Application #15-01 and General Plan Amendment #15-04
Mitigation Monitoring Checklist

Project Name:_____ **File Number:**_____
Approval Date:_____ **Project Location** _____
Brief Project Description_____

The following environmental mitigation measures were incorporated into the Conditions of Approval for this project in order to mitigate identified environmental impacts to a level of insignificance. A completed and signed checklist for each mitigation measure indicates that this mitigation measure has been complied with and implemented, and fulfills the City of Merced's Mitigation Monitoring Requirements (MMC 19.28) with respect to Assembly Bill 3180 (Public Resources Code Section 21081.6).

EXHIBIT B

A) Aesthetics

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
AES-4	AES-4) *Lighting should be designed to provide ambiance, safety, and security without unnecessary spillover or glare onto adjacent properties.* *The quality of light, level of light (measured in foot-candles) and the type of bulb or source should be carefully addressed. Lighting levels should not be so intense as to draw attention to the flow or glare of the project site. The lighting plan should incorporate current energy-efficient fixtures and technology.* *Glare from any site lighting should be shielded from adjacent properties and directed at a specific object or target area. Exposed bulbs shall not be used.* *Wall-mounted light fixtures shall not extend above the height of the wall to which the fixtures are mounted.* *Blinking and flashing lights used to illuminate building facades or to outline buildings shall not be used.* *When security lighting is necessary, it should be recessed, hooded and located to illuminate only the intended area. Off-site glare and light trespass is prohibited.* *Pedestrian areas, sidewalks, parking lots, and building entrances shall be adequately lit to provide safety and security.* *All exterior lighting fixtures shall be efficient in terms of design and energy use.*	Building Permits	Planning Department	

EXHIBIT B

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
AES-4	AES4a - *The project shall comply with Mitigation Measure 3.1-4 required by the Mitigation and Reporting Program for the Merced Vision 2030 General Plan EIR.*	Building Permits	Planning Department	
D) Biological Resources				
BIO-1	BIO-1) *Pre-construction surveys by a qualified biologist or other qualified professional shall be conducted for nesting Swainson's hawks within 0.25 miles of the project site shall be done if construction commences between March 1 and September 15. If active nests are found, a qualified biologist shall determine the need (if any) for temporal restrictions on construction. The determination shall utilize criteria set forth by CDFW (CDFG 1994).*	Building Permit	Planning Department	
	BIO-1a) *Pre-construction surveys by a qualified biologist or other qualified professional shall be conducted for western pond turtles and their nests shall be conducted if construction commences between April 1 through October 31. This survey shall include a search for nests in uplands adjacent to the creek. If nest sites are located, a 50-foot buffer rea around the nest, a 50-foot buffer area around the nest shall be established and work shall be delayed until hatching is complete and the young have left the nest site.*	Building Permit	Planning Department	
	BIO-1b) *Pre-construction surveys by a qualified biologist or other qualified professional shall be conducted for birds protected by the Migratory Bird Treaty Act of 1918. If nesting birds are found, work in the vicinity of the nest shall be delayed until the young fledge.*	Building Permit	Engineering Department	

EXHIBIT B

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
BIO-3	BIO-3) *Avoidance of jurisdictional Waters of the U.S. is recommended, if possible. If complete avoidance of Black Rascal Creek is infeasible, impact shall be minimized to the maximum extent practicable, and permits from ACOE, CDFW, RWQCB, and possibly CVFPS shall be secured prior to the placement of any fill material (e.g., culverts, fill dirt, rock) within jurisdictional Waters of the U.S.*	Building Permit	Planning/ Engineering Department	
CUL-1	CUL-1) *In the event that buried historic or archaeological resources are discovered during construction, operations shall stop within 50 feet of the find and a qualified archaeologist shall be consulted to evaluate the resource in accordance with CEQA Guidelines 15064.5. The applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. If the resource does not qualify as a significant resource, then no further protection or study is necessary. If the resource does qualify as a significant resource then the impacts shall be avoided by project activities. If the resource cannot be avoided, adverse impacts to the resource shall be addressed. The archaeologist shall make recommendations concerning appropriate mitigation measures that shall be implemented to protect the resources, including but not limited to excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Any previously undiscovered resources found during construction within the project area should be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and evaluated for significance in terms of CEQA criteria.*	Grading	Inspection Services/ Panning Department	

EXHIBIT B

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
CUL-3	CUL-3) *In the event that fossils or fossil-bearing deposits are discovered during construction activities, excavations within a 50-foot radius of the find shall be temporarily halted or diverted. The project contractor shall notify a qualified paleontologist to examine the discovery. The applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The paleontologist shall document the discovery as needed in accordance with Society of Vertebrate Paleontology standards and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction activities are allowed to resume at the location of the find. If the Applicant determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of construction activities on the discovery. The plan shall be submitted to the City of Merced for review and approval prior to implementation, and the Applicant shall adhere to the recommendations in the plan.*	Grading	Inspection Services/ Panning Department	

EXHIBIT B

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
CUL-4	CUL-4) *Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code (PRC) Sections 5097.94 and 5097.98 must be followed. If during the course of project development there is accidental discovery or recognition of any human remains, the following steps shall be taken:* *1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted and determines if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the most likely descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.* *2. Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the project site in a location not subject to further subsurface disturbance:*	Grading	Inspection Services/ Panning Department	

EXHIBIT B

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
	• *The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission.* • *The descendant identified fails to make a recommendation.* • *The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.* *Additionally, California Public Resources Code Section 15064.5 requires the following with regards to Native American Remains:* *When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code Section 5097.98. The applicant may develop a plan for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC.*	Grading	Inspection Services/ Panning Department	
GEO-2	*GEO-2) Prior to the approval of a tentative subdivision map or building permit, the City shall review plans for drainage and storm water run-off control systems and their component facilities to ensure that these systems are non-erosive in design.*	Tentative Map Building Permit	Engineering Department	

EXHIBIT B

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
GEO-2	*GEO-2a) Upon completion of phased construction, subsequent phases shall re-vegetate all exposed soil surfaces within 30 days, or as otherwise approved by the City, to minimize potential topsoil erosion. Reasonable alternatives to re-vegetation may be employed, especially during peak high temperature periods or to avoid negative impacts to nearby agricultural activities, subject to the approval of the City.*	*Building Permit*	*Inspection Services*	
GEO-4	*GEO-4 A geotechnical study shall be provided prior to the issuance of a building or grading permit for this site. All recommendations for addressing expansive soils and site grading shall be implemented as well as any other recommendations determined relevant by the Chief Building Official or City Engineer.*	*Building Permit*	*Inspection Services/ Engineering*	
HAZ-5	*HAZ-5 Prior to the issuance of any subsequent land use entitlement for construction of a building or the issuance of a building permit, the developer shall demonstrate compliance with the requirements of the Merced County Airport Land Use Compatibility Plan (ALUCP). If compliance is not feasible, the development plan shall be modified to make compliance possible.*	*Site Plan Review/Building Permit*	*Planning Department*	
HYD-1	*HYD 1a Prior to the issuance of grading permits, the applicant shall file a "Notice of Intent" with and obtain a facility identification number from the State Water Resources Control Board. The project shall also submit a Stormwater Pollution Prevention Plan (SWPPP) to the City of Merced that identifies specific actions and Best Management Practices (BMP's) to prevent stormwater pollution during construction activities. (continued on next page)*	*Grading Permit*	*Inspection Services/ Engineering*	

EXHIBIT B

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
HYD-1	*The SWPPP shall identify a practical sequence for BMP implementation, site restoration, contingency measures, responsible parties, and agency contacts. The SWPPP shall include, but not be limited to, the following elements:* • *Comply with the requirements of the State of California's most current Construction Stormwater Permit.* • *Temporary erosion control measures shall be implemented on all disturbed areas.* • *Disturbed surfaces shall be treated with erosion control measures during the October 15 to April 15 rainy season.* • *Sediment shall be retained on-site by a system of sediment basins, traps, or other BMPs.* • *The construction contractor shall prepare Standard Operating Procedures for the handling of hazardous materials on the construction site to eliminate discharge of materials to storm drains.* • *BMP performance and effectiveness shall be determined either by visual means where applicable (e.g., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination (such as inadvertent petroleum release) is required by the Central Valley Regional Water Quality Control Board to determine adequacy of the measure.* *(continues on next page)*	*Grading Permit*	*Inspection Services/ Engineering*	

EXHIBIT B

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
HYD-1	*In the event of significant construction delays or delays in final landscape installation, native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance, as an interim erosion control measure throughout the wet season.*			
HYD-1	*HYD-1b Prior to the issuance of building permits, the project applicant shall submit a final Storm Water Mitigation Plan (SWMP) to the City of Merced for review and approval. The plan shall be developed using the California Stormwater Quality Association's "New Development and Redevelopment Handbook." The SWMP shall identify pollution prevention measures and BMPs necessary to control stormwater pollution from operational activities and facilities, and provide for appropriate maintenance over time. The SWMP shall include design concepts that are intended to accomplish a "first flush" objective that would remove contaminants from the first 2 inches of stormwater before it enters area waterways. The project applicant shall also prepare and submit an Operations and Maintenance Agreement to the City identifying procedures to ensure that stormwater quality control measures work properly during operations.*	*Grading Permit*	*Inspection Services/ Engineering*	

EXHIBIT B

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
HYD-5	*HYD-5 Prior to the issuance of a building permit for this project, the applicant shall demonstrate to the City that proposed storm drainage facilities are adequate to meet the Project demands and that improvements are consistent with the City's Storm Drainage Master Plan and the Post Construction Standards for the City's Phase II MS4 permit.*	*Grading Permit*	*Inspection Services/ Engineering*	
HYD-8	*HYD-8 Development of the site is required to provide fill dirt to raise the elevation of the site and achieve protection from flooding. The fill must be elevated above the computed 200-year flood elevation and freeboard is highly recommended by DWR (note: freeboard is the difference between the fill elevation and the computed flood elevation).* *A freeboard of 1-foot or greater will help to account for the inherent uncertainty in estimating peak flood discharges and the computed flood elevations. A Summary of the proposed fill elevations is provided in the Table below. The required fill elevation ranges from 168.4 to 167.7 ft. (NAVD88 vertical datum)*	*Grading Permit*	*Inspection Services/ Engineering*	

EXHIBIT B

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
NOI-1	*NOI-1 The construction contractor shall limit all noise-producing construction activities, including deliveries and warming up of equipment, to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday. No such work shall be permitted on Sundays or federal holidays without prior approval from the City.*	*Grading Permit*	*Inspection Services/ Engineering*	
NOI-1	*NOI-2 Any outdoor dining areas or other outdoor uses shall have the following setbacks to maintain an acceptable noise level of 70 dB for outdoor uses:* *Road/Railroad — Required Setback* *Santa Fe Drive — 54 Ft.* *North Highway 59 — 89 Ft.* *BNSF Railroad — 137 Ft.*	*Building Permit*	*Inspection Services/ Planning*	
TRA-1	*TRA-1 Prior to construction, the Site Plan Review Committee shall review the site design and determine which alternative at the western driveway is best to reduce the expected impacts. The alternatives may include those alternatives included in the traffic analysis or another alternative such as moving the driving further to the west. The developer shall provide any additional documentation or studies needed for the Site Plan Review Committee to make this determination.*	*Site Plan Review*	*Planning*	
	TRA-1a The southbound left-turn lane on SR 59 shall be lengthened as determined by the City Engineer and approved by Caltrans.			

EXHIBIT B

Impact No.	***Mitigation Measures***	***Timing***	***Agency or Department***	***City Verification (date and initials)***
TRA-1	*TRA-1b The development shall contribute its fair share to the cost of improvements for the intersection of SR 59 and Olive Avenue:* • *Reconstruct westbound Olive Avenue to provide dual left turn lanes on southbound SR 59; and,* • *Reconfigure the westbound right turn lane to create a combination through and right turn lane, and extend that through lane across SR 59 along the project's frontage; and,* • *Reconstruct the existing northbound right turn lane as a "free" right turn with median island separating eastbound and right turning traffic. Reconstruct the eastbound Santa Fe Drive approach to provide dual left turn lanes.*	*Building Permit*	*Planning*	
TRA-6	*TRA-6 Prior to the issuance of a building permit, the developer shall work with the Merced County Transit Authority (aka: The Bus) to determine if a bus stop is needed at this location. If a bus stop is required, the stop shall be in an area to allow the bus to move completely out of the travel lanes. The location of all bus stops shall be subject to approval by the City Engineer and Caltrans if along SR 59.*	*Building Permit*	*Planning*	

EXHIBIT B

Certificate of Completion:
By signing below, the environmental coordinator confirms that the required mitigation measures have been implemented as evidenced by the Schedule of Tasks and Sign-Off Checklist, and that all direct and indirect costs have been paid. This act constitutes the issuance of a *Certificate of Completion*.

_____ _____
Environmental Coordinator Date

EXHIBIT B