Community and Economic Development
Planning Division

Jamie Bax
Deputy Director

- 200 W. Fourth St.
- Suite 3100
- Madera, CA 93637
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PLANNING COMMISSION DATE: January 8, 2019

AGENDA ITEM: #3

PRJ	**#2018-006**	**General Plan Amendment and Rezone to General**
APN	**026-272-011**	**Commercial**
	026-272-036	**Applicant/Owner: Fagundes Brothers**
CEQA	**MND #2018-27**	**Mitigated Negative Declaration**

REQUEST:

Fagundes Brothers are requesting approval of a 38 acre General Plan Amendment from AR (Agricultural Residential) and VLDR (Very Low Density Residential) to CC (Community Commercial) and a Rezone and from AR-5 (Agricultural Rural – 5 Acre) and RRS (Residential Rural Single Family) Districts to CRG (Commercial Rural General) District to allow for General Commercial establishments.

LOCATION:

The property is located on the northwest and northeast corners of the intersection of Highway 152 and Road 14 1/2 (14181 Highway 152 and no situs), Chowchilla.

ENVIRONMENTAL ASSESSMENT:

A Mitigated Negative Declaration (MND #2018-27) has been prepared and is subject to approval by the Board of Supervisors.

RECOMMENDATION: Recommend approval of PRJ #2018-006, GP #2018-005, CZ #2018-004, subject to conditions and MND #2018-27 with corresponded Mitigation Monitoring and Reporting Program.

GENERAL PLAN DESIGNATION (EXHIBIT A):

SITE: AR (Agricultural Residential) and VLDR (Very Low Density Residential) Designations.

SURROUNDING: AR (Agricultural Residential), VLDR (Very Low Density Residential), and AE (Agricultural Exclusive) Designations.

PROPOSED: CC (Community Commercial) Designation.

ZONING (EXHIBIT B)

SITE: AR-5 (Agricultural Rural – 5 Acre) and RRS (Residential Rural Single Family) Districts.

SURROUNDING: AR-5 (Agricultural Rural – 5 Acre), RRS (Residential Rural Single Family), ARE-20 (Agricultural Rural – 20 Acre), and OS (Open Space) Districts.

PROPOSED: CRG (Commercial Rural General) District.

LAND USE:

SITE: The project site is currently in agricultural production.

SIZE OF PROPERTY (EXHIBIT C): Approximately 38 acres of 105.71 acres is part of this project.

ACCESS (EXHIBIT C):

The site is proposed to access from Road 14 1/2 via Robertson Boulevard or SR 152.

WILLIAMSON ACT:

The subject property is not subject to a Williamson Act (Agricultural Preserve) contract.

BACKGROUND AND PRIOR ACTIONS:

There are no prior actions related to the project site.

PROJECT DESCRIPTION:

Fagundes Brothers are requesting approval of a General Plan Amendment from AR (Agricultural Residential) and VLDR (Very Low Density Residential) to CC (Community Commercial) and a Rezone and from AR-5 (Agricultural Rural – 5 Acre) and RRS (Residential Rural Single Family) Districts to CRG (Commercial Rural General) District to allow for General Commercial establishments. General Commercial Establishments include such uses as Service stations, tire sales stores, and cabinet shops. It is proposed that the site will be in operation year round and is expected several hundred customers will visit the site each day.

ORDINANCES/POLICIES:

Madera County Code (Chapter 18.04.220) General Commercial Establishments

Madera County General Plan Part 1, Land Use Designations

ANALYSIS:

The project site is located in an area with already established commercial uses and direct access to major transportation corridors. The uses will benefit both the local community and the motoring public. The proposed change to Commercial Rural General will allow for a multitude of general commercial uses. A Traffic Impact Study (TIS) was prepared to analyze impacts of the project. The TIS includes mitigation for intersection and roadway improvements. In addition, Caltrans reviewed the TIS and also included mitigation measures as well. The portion of the property that is part of this proposal runs along the southern portion of the two parcels, the remainder of the parcels will remain in agricultural use. Uses allowed in the proposed zone district, and which were analyzed as part of the TIS are such uses as a service station, warehouse, tire shop, automobile repair, etc.

The site has historically been planted in orchards which aren't capable of supporting biological habitats due to constant farming practices. Water use for the commercial uses will be dramatically reduced as the 38 acres comes out of agricultural production. The site is located on the valley floor; however, is not located in a flood hazard area. Conditions of approval have been applied including storm water design, development of on-site water and waste-water systems, and complying with all mitigation measures listed in the MMRP.

The application was circulated to internal and external agencies for comments, including Native American tribes per Assembly Bill 52 requirements. Comments were received from internal departments and Caltrans. Caltrans was involved in the review of the TIS and provided comments accordingly.

If this project is approved, the applicant will need to submit a check, made out to the County of Madera, in the amount of $2,404.75 to cover the Notice of Determination (CEQA) filing at the Madera County Clerks' office. The amount covers the $2,354.75 Department of Fish and Wildlife fee that took effect January 1, 2019 and the County Clerk $50.00 filing fee. In lieu of the Fish and Wildlife fee, the applicant may choose to contact the Fresno office of the Department of Fish and Wildlife to apply for a fee waiver. The County Clerk Fee, Department of Fish and Wildlife Fee (or waiver if approved) is due within five days of approval of this permit at the Board of Supervisors.

GENERAL PLAN CONSISTENCY:

With preparation of the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program, this application complies with the Madera County General Plan and will not have a significant environmental impact. Uses allowed within the Community Commercial Designation includes retail, wholesale, services, restaurants, professional and administrative offices, hotels and motels, public and quasi-public uses, and similar and compatible uses. The proposed zone district, with the allowance of such uses as service stations and wholesale, amongst number conditional uses permitted, is consistent with the proposed General Plan designation.

RECOMMENDATION:

The analysis contained in this report supports approval of PRJ #2018-006, which includes GP #2018-005 and CZ #2018-004, subject to conditions and MND #2018-27 with its corresponding MMRP.

CONDITIONS:

See attached conditions of approval.

JB

ATTACHMENTS:

1. Exhibit A, General Plan Map
2. Exhibit B, Zoning Map
3. Exhibit C, Assessor Map
4. Exhibit D, Site Plan
5. Exhibit E, Aerial Map
6. Exhibit F, Topographical Map
7. Exhibit G, Operational Statement
8. Exhibit H, Environmental Health Division comments
9. Exhibit I, Public Works Department comments
10. Exhibit J, Traffic Impact Study
11. Exhibit K, Initial Study
12. Exhibit L, Mitigation Monitoring and Reporting Program

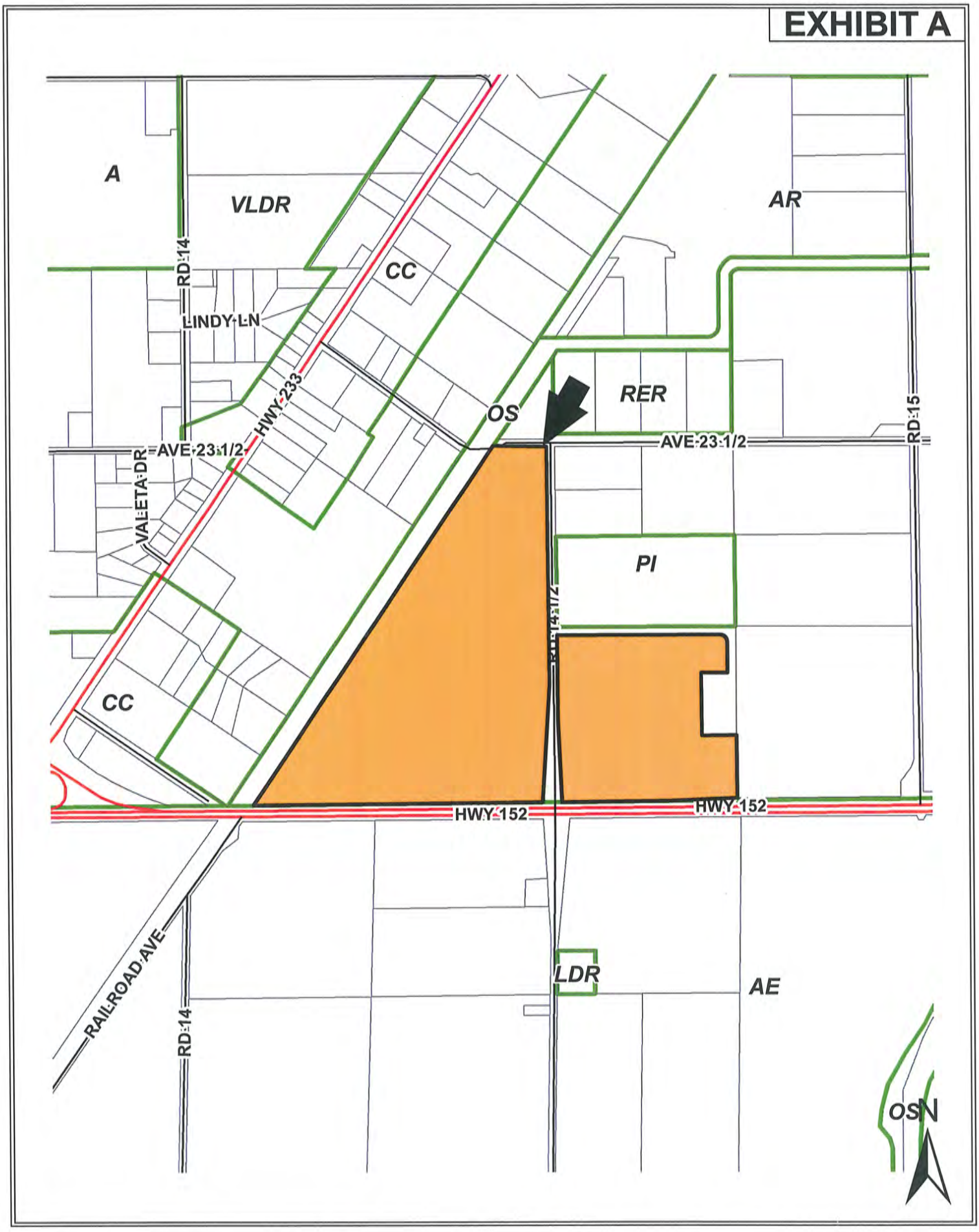
CONDITIONS OF APPROVAL

PROJECT NAME: PRJ #2018-006
PROJECT LOCATION: The project is located on the northwest and northeast corners of the intersection of Highway 152 and Road 14 1/2 (14181 Highway 152 and no situs) Chowchilla.
PROJECT DESCRIPTION: General Plan Amendment from AR and VLDR to CC. Rezone from AR-5 and RRS to CRG.

APPLICANT: Fagundes Brothers
CONTACT PERSON/TELEPHONE NUMBER: (209) 534-6252

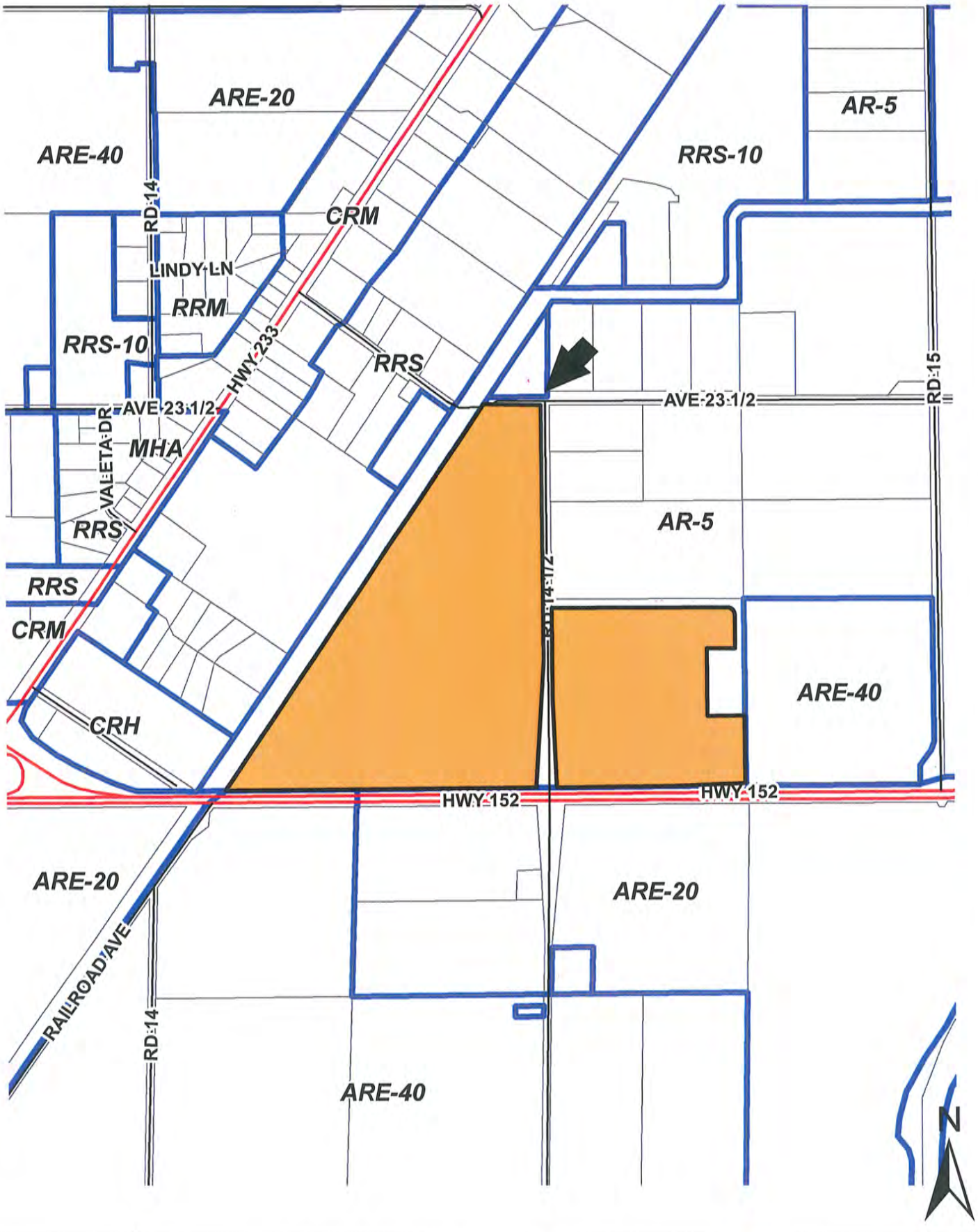
No.	Condition	Department/Agency	Verification of Compliance		
			Initials	Date	Remarks
ENVIRONMENTAL HEALTH DIVISION					
1	The applicant must comply with Madera County Code(s) Title 13 throughout the property development as it pertains to Onsite Wastewater Treatment System(s) (OWTS) and Water System(s).				
2	Onsite Wastewater Treatment Systems (OWTS) that is projected to have daily waste water flow equal or greater then 8, 000 gallons per day will require a Regional Water Quality Control Board approval prior to an Environmental Health Division approval.				
3	All new proposed public water systems must comply with Senate Bill (SB) 1263.				
4	Solid waste collection with sorting for green, recycle, and garbage is required.				
5	Any construction performed on-site and ongoing operations must be done in a manner that shall not allow any type of public nuisance(s) to occur including but not limited to the following nuisance(s); Dust, Odor(s), Noise(s), Lighting, Vector(s) or Litter. This must be accomplished under accepted and approved Best Management Practices (BMP) and as required by the County General Plan, County Ordinances and any other related State and/or Federal jurisdiction.				
BUILDING AND FIRE DIVISION					
1	None				
PLANNING DIVISION					
1	The applicant shall comply with the submitted operational statement.				
2	All mitigation measures outlined in the Mitigated Negative Declaration shall be implemented in development of this project unless added to, deleted from, and/or otherwise modified.				
PUBLIC WORKS DEPARTMENT					
1	Prior to any construction where such construction is proposed within an existing public right-of-way, the developer is required to apply for an Encroachment Permit from both the County and Caltrans. Said permits must be approved prior to commencing the work.				
2	The developer shall provide flood control or drainage systems within the proposed development to carry storm runoff both tributary to and originating within the land division in accordance with the flood control practices established by the county. Post development drainage flow shall be limited to the predevelopment rate.				
3	The developer shall submit a grading and drainage plan, onsite storm runoff storage calculation, to the Public Works Department for review and approval. This plan shall identify onsite retention for any increase in storm water runoff generated by the proposed development.				
4	All required road improvement shall be constructed in accordance with the approved plans and specifications, subject to inspection and acceptance by the Public Works Department. Caltrans design standards and specifications can also be used if the County does not have the necessary standard details or guidelines.				
5	Due to the project being adjacent to Caltrans' facilities, the applicant is hereby to comply with Caltrans' conditions of approval.				

No.	Condition	Department/Agency	Verification of Compliance		
			Initials	Date	Remarks
7	The California High-Speed Rail Authority (CHSRA) has several track alignment alternatives proposed along the north and south sides of SR 152 for the Central Valley Wye development package. The applicant is encouraged to contact the Authority for the latest updates on the alignment alternative because they might be affect the way how the subdivision get access to the nearest public roads.				
8	The applicant is required to provide a traffic impact study to the Department for review and approval due to the changes in zone designations.				
9	Any work shall be done in accordance with the Mitigation Monitoring and Report Program (MMRP), County of Madera standards drawings and specification and/or any reference applicable sections of the California Building Codes standard specifications and standard plans or latest publication thereof.				
10	The developer/contractor is responsible for determining the locations of all existing, possibly unknown or undocumented utilities located within the remainder of the proposed development. Should it become necessary to change positions, or permanently or temporarily remove/relocate any existing electrical conduits, power poles, or wires in order to clear the structures being built or to stay outside of County road right-of-way during the construction of these phases, the developer/contractor is responsible accommodate such tasks and work with appropriate parties to determine how the existing service will be maintained during the construction phases of the developments.				
11	Provide any proposed street, storm drain pipeline layouts and capacities, onsite pond and inlet boundary and capacity calculations to Public Works Department for review. If there are existing infrastructures on site, the developer is required to verify the facilities are still fully functional and have adequate capacity to accommodate the additional demand from the proposed development.				
12	Provide methods of erosion & sediment controls within the limits of construction.				
13	The design and construction of all roads and road appurtenances will be the responsibility of the developer, who will employ a California registered civil engineer and/or land surveyor to do all survey work, and a California registered civil engineer to do all road and road appurtenance design, testing, construction supervision, and inspection.				
14	All National Pollution Discharge Elimination System (NPDES) storm water regulations and standards shall be met. It is possible that the quality of storm water may be affected by pollutants. The applicant shall mitigate any impacts associated with storm water contamination caused by this project. A Storm Water Pollution Prevention Plan (SWPPP) is required for all projects 1-acre or more of site disturbance.				
15	All stabilized construction on and off site access locations shall be constructed per the latest edition of the California Stormwater Quality Association (CASQA) details to effectively prevent tracking of sediment onto paved areas. All BMPS to be inspected weekly and before and after each rain event. Repair or replace as necessary. The contractor shall abide all of the laws, ordinances, and regulations associated with the NPDES and the Clean Water Act.				
16	Contractor shall be responsible for locating all underground utilities prior to the start of any work by contacting Underground Service Alert (USA) 48 hours prior to any excavations; Contractor shall be responsible for contacting the appropriate party in advance of any work for necessary inspections in compliance to these plans, standard plans and standard specifications.				



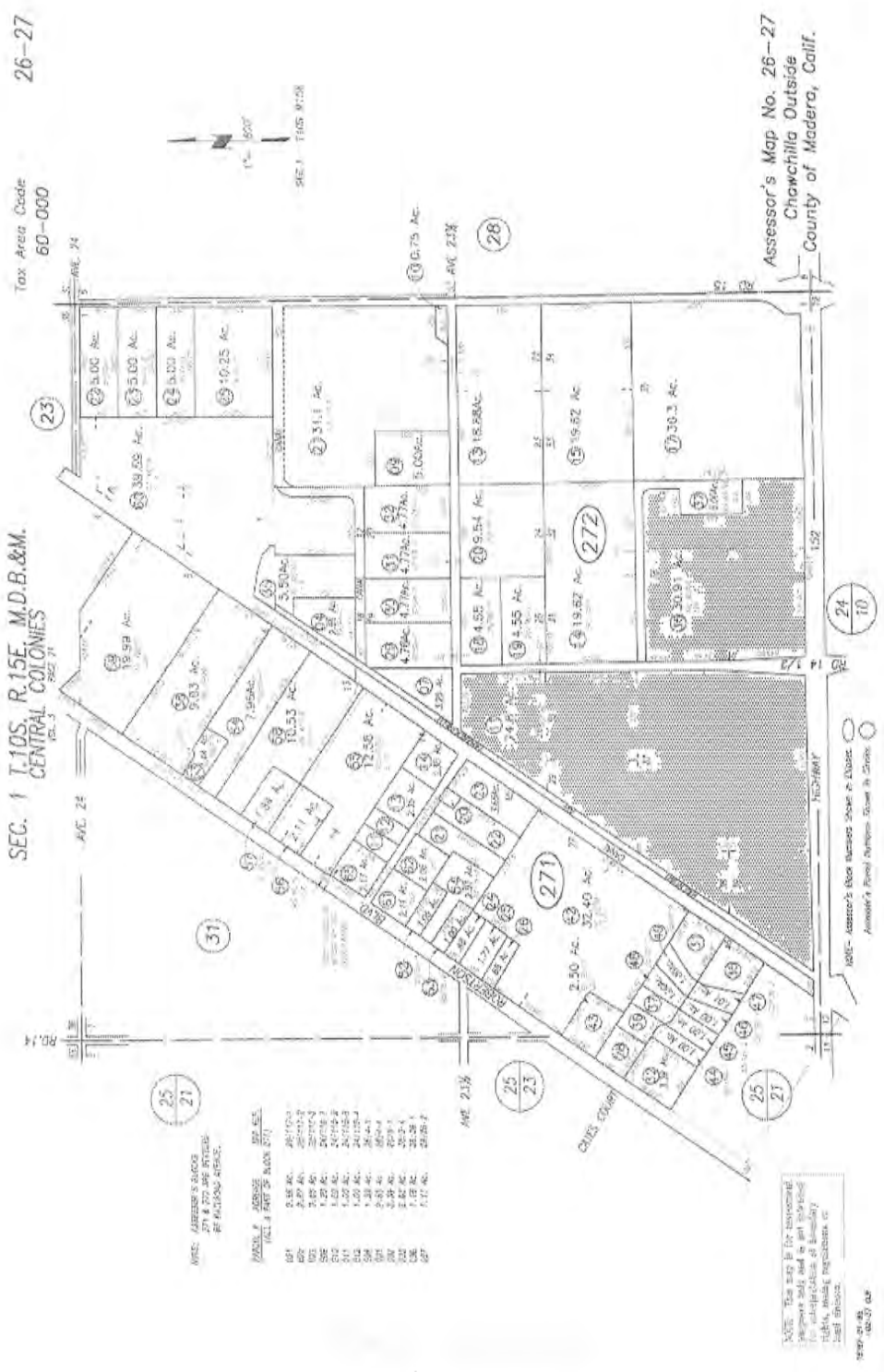
GENERAL PLAN MAP

EXHIBIT B



ZONING MAP

EXHIBIT C



ASSESSOR'S MAP

SITE PLAN

LAND USE MAP

LEGEND:

- EXISTING AR (AGRICULTURAL RESIDENTIAL) DESIGNATION
- EXISTING VLDR (VERY LOW DENSITY RESIDENTIAL) DESIGNATION
- PROPOSED CC (COMMUNITY COMMERCIAL) DESIGNATION

ZONING MAP

LEGEND:

- EXISTING AR-5 (AGRICULTURAL RURAL-5 ACRE) DISTRICT
- EXISTING RRS (RESIDENTIAL. RURAL. SINGLE FAMILY) DISTRICT
- PROPOSED CRG (COMMERCIAL, RURAL, GHENERAL) DISTRICT

SCALE 1" = 500'

0 250' 500' 1000'

NOTES:

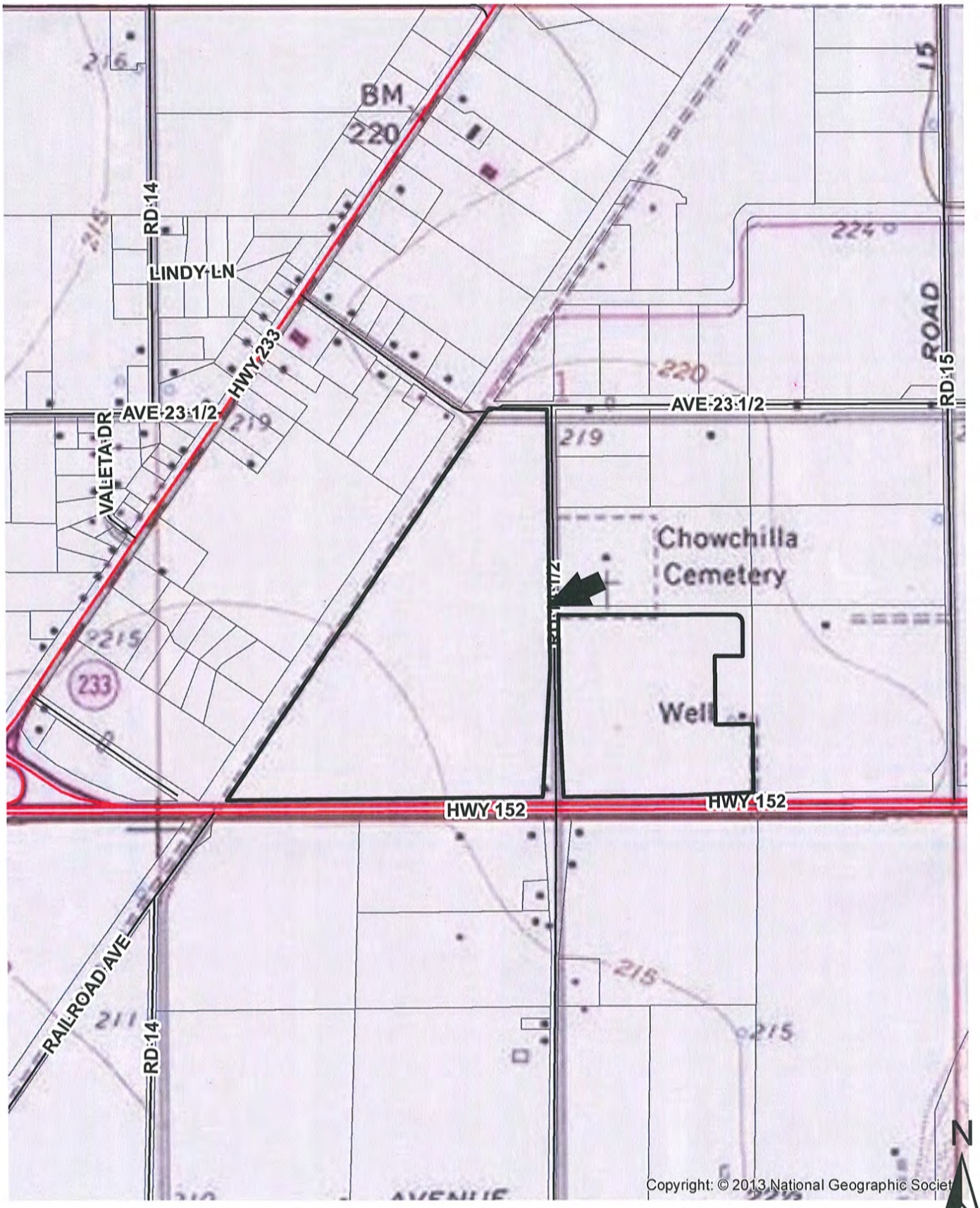
1) THE SUBJECT PROPERTIES ARE BEING SUBMITTED FOR A GENERAL PLAN AMENDMENT AND A REZONE
2) GENERAL PLAN AMENDMENT FROM AR (AGRICULTURAL RESIDENTIAL) DESIGNATION AND VLDR (VERY LOW DENSITY RESIDENTIAL) DESIGNATION TO CC (COMMUNITY COMMERCIAL) DESIGNATION
3) REZONE FROM AR-5 (AGRICULTURAL, RURAL-5 ACRE) DISTRICT AND RRS (RESIDENTIAL, RURAL, SINGLE FAMILY) DISTRICT TO CRG (COMMERCIAL, RURAL, GENERAL) DISTRICT
4) TOTAL AREA FOR PROPOSAL IS 38± ACRES (SEE SHEET 2)

EXHIBIT D

EXHIBIT E

AERIAL MAP

EXHIBIT F



TOPOGRAPHICAL MAP

Community and Economic Development
Planning Division

Norman L. Allinder, AICP
Director

- 200 W 4th Street
- Suite 3100
- Madera, CA 93637
- (559) 675-7821
- FAX (559) 675-6573
- TDD (559) 675-8970
- mc_planning@madera-county.com

EXHIBIT G

OPERATIONAL/ENVIRONMENTAL STATEMENT CHECKLIST

It is important that the operational/environmental statement provides for a complete understanding of your project proposal. Please be as detailed as possible.

1. Please provide the following information:

Assessor's Parcel Number: 026-272-011 and 026-272-036

Applicant's Name: Fagundes Brothers

Address: PO Box 2717 Merced, CA 95344

Phone Number: 209-534-6252

2. Describe the nature of your proposal/operation.

General Plan Amendment from AR (Agricultural Residential) Designation and VLDR (Very Low Density Residential) Designation to CC (Community Commercial) Designation

Rezone from AR-5 (Agricultural, Rural-5 Acre) District and RRS (Residential, Rural, Single Family) District to CRG (Commercial, Rural, General) District

3. What is the existing use of the property?

Agriculture

4. What products will be produced by the operation? Will they be produced onsite or at some other location? Are these products to be sold onsite?

All products to be transported to site for commercial sales.

5. What are the proposed operational time limits?

Months (if seasonal): Year around

Days per week: 7 days a week

Hours (from____to _): Total Hours per day: 24 hours per day

6. How many customers or visitors are expected?

Average number per day: Several hundred

Maximum number per day: 900

What hours will customers/visitors be there? 24 hours

7. How many employees will there be?

Current: 5 seasonal employees

Future: 100

Hours they work: 24 hours

Do any live onsite? If so, in what capacity (i.e. caretaker)? No

8. What equipment, materials, or supplies will be used and how will they be stored? If appropriate, provide pictures or brochures.

Standard cleaning supplies for commercial businesses

9. Will there be any service and delivery vehicles? Yes

Number: 5 to 10

Type: Up to WB-50 commercial truck

Frequency: 3 days per week

10. Number of parking spaces for employees, customers, and service/delivery vehicles. Type of surfacing on parking area.

N/A

11. How will access be provided to the property/project? (street name)

Road 14 1/2 via Robertson Boulevard or SR 152

12. Estimate the number and type (i.e. cars or trucks) of vehicular trips per day that will be generated by the proposed development.

Please see traffic study

13. Describe any proposed advertising, inlcuding size, appearance, and placement.

N/A

14. Will existing buildings be used or will new buildings be constructed? Indicate which building(s) or portion(s) of will be utilized and describe the type of construction materials, height, color, etc. Provide floor plan and elevations, if applicable.

No existing structures will be utilized.

15. Is there any landscaping or fencing proposed? Describe type and location.

All future landscaping will comply with Madera County Drought Tolerant Landscape Ordinance

16. What are the surrounding land uses to the north, south, east and west property boundaries?

North - Agriculture; South - Agriculture; East - Agriculture; West - Agriculture

17. Will this operation or equipment used, generate noise above other existing parcels in the area?

There will be no operational noise, aside from vehicular traffic, audible from adjacent properties

18. On a daily or annual basis, estimate how much water will be used by the proposed development, and how is water to be supplied to the proposed development (please be specific).

N/A

19. On a daily or weekly basis, how much wastewater will be generated by the proposed project and how will it be disposed of?

N/A

20. On a daily or weekly basis, how much solid waste (garbage) will be generated by the proposed project and how will it be disposed of?

N/A

21. Will there be any grading? Tree removal? (please state the purpose, i.e. for building pads, roads, drainage, etc.)

Site is relatively flat and future grading for building pads will be minimal

22. Are there any archeological or historically significant sits located on this property? If so, describe and show location on site plan.

There are no known archaeological or historically significant sites on the property

23. Locate and show all bodies of water on application plot plan or attached map.

N/A

24. Show any ravines, gullies, and natural drainage courses on the property on the plot plan.

N/A

25. Will hazardous materials or waste be produced as part of this project? If so, how will they be shipped or disposed of?

There are no proposed uses that will produce hazardous waste or materials

26. Will your proposal require use of any public services or facilities? (i.e. schools, parks, fire and police protection or special districts?)

Normal calls for service from police and fire protection

27. How do you see this development impacting the surrounding area?

Will provide existing and future residents of convenient shopping opportunities as well as convenient access for travelers

28. How do you see this development impacting schools, parks, fire and police protection or special districts?

Will provide additional tax revenue for public services; property is not within a special district

29. If your proposal is for commercial or industrial development, please complete the following; Proposed

Use(s): CRG Uses from Madera County Code 18.30.010

Square feet of building area(s): Not to exceed 475,000 sq. ft.

Total number of employees: 100

Building Heights: Maximum of 35' in accordance with 18.30.030 - Structure height regulations

30. If your proposal is for a land division(s), show any slopes over 10% on the map or on an attached map.

N/A

EXHIBIT H

Community and Economic Development

Environmental Health Division

Dexter Marr
Deputy Director

- 200 W. Fourth St.
- Suite 3100
- Madera, CA 93637
- TEL (559) 661-5191
- FAX (559) 675-6573
- TDD (559) 675-8970

MEMORANDUM

TO: Jamie Bax

FROM: Dexter Marr, Environmental Health Division

DATE: December 14, 2018

RE: Fagundes Brothers - Project - BdS - Chowchilla (026-272-011-000)

Comments

TO:Planning Division

FROM:Environmental Health Division

DATE:March 28, 2018

RE:Project: PRJ #2018-006; Fagundes Brothers, Chowchilla, APN: 026-272-011

Environmental Health Division comments:

The applicant must comply with Madera County Code(s) Title 13 throughout the property development as it pertains to Onsite Wastewater Treatment System(s) (OWTS) and Water System(s).

All new propose public water systems must comply with Senate Bill (SB) 1263.

Onsite Wastewater Treatment Systems (OWTS) that is projected to have daily waste water flow equal or greater then 8, 000 gallons per day will require a Regional Water Quality Control Board approval prior to an Environmental Health Division approval.

Solid waste collection with sorting for green, recycle, and garbage is required.

Any construction performed on-site and ongoing operations must be done in a manner that shall not allow any type of public nuisance(s) to occur including but not limited to the following nuisance(s); Dust, Odor(s), Noise(s), Lighting, Vector(s) or Litter. This must be accomplished under accepted and approved Best Management Practices (BMP) and as required by the County General Plan, County Ordinances and any other related State and/or Federal jurisdiction.

If there are any questions or comments regarding this information please contact our Division at (559) 675-7823.

Statutes

Madera County Title 13

Senate Bill 1263

Community and Economic Development

Environmental Health Division

Dexter Marr
Deputy Director

- 200 W. Fourth St.
- Suite 3100
- Madera, CA 93637
- TEL (559) 661-5191
- FAX (559) 675-6573
- TDD (559) 675-8970

MEMORANDUM

TO: Becky Beavers

FROM: Dexter Marr, Environmental Health Division

DATE: December 14, 2018

RE: Fagundes Brothers - Project - BdS - Chowchilla (026-272-011-000)

Comments

TO:Planning Division

FROM:Environmental Health Division

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Statutes

Madera County Title 13

Senate Bill 1263

EXHIBIT I

COUNTY OF MADERA
DEPARTMENT OF PUBLIC WORKS

AHMAD M. ALKHAYYAT
DIRECTOR

200 West 4th Street
Madera, CA 93637-8720
Main Line - (559) 675-7811
Special districts - (559) 675-7820
Fairmead Landfill - (559) 665-1310

MEMORANDUM

DATE: December 14, 2018

TO: Jamie Bax

FROM: Phu Duong, Public Works

SUBJECT: Fagundes Brothers - Project - BdS - Chowchilla (026-272-011-000)

Comments

Public Works Department has the following general review comments:

Prior to any construction where such construction is proposed within an existing public right-of-way, the developer is required to apply for an Encroachment Permit from both the County and Caltrans. Said permits must be approved prior to commencing the work.

The developer shall provide flood control or drainage systems within the proposed development to carry storm runoff both tributary to and originating within the land division in accordance with the flood control practices established by the county. Post development drainage flow shall be limited to the predevelopment rate.

The developer shall submit a grading and drainage plan, onsite storm runoff storage calculation, to the Public Works Department for review and approval. This plan shall identify onsite retention for any increase in storm water runoff generated by the proposed development.

All required road improvement shall be constructed in accordance with the approved plans and specifications, subject to inspection and acceptance by the Public Works Department. Caltrans design standards and specifications can also be used if the County does not have the necessary standard details or guidelines.

Due to the project being adjacent to Caltrans' facilities, the applicant is hereby to comply with Caltrans' conditions of approval.

The California High-Speed Rail Authority (CHSRA) has several track alignment alternatives proposed along the north and south sides of SR 152 for the Central Valley Wye development package. The applicant is encouraged to contact the Authority for the latest updates on the alignment alternative because they might be affect the way how the subdivision get access to the nearest public roads.

The applicant is required to provide a traffic impact study to the Department for review and approval due to the changes in zone designations.

Any work shall be done in accordance with the Mitigation Monitoring and Report Program (MMRP), County of Madera standards drawings and specification and/or any reference applicable sections of the California Building Codes standard specifications and standard plans or latest publication thereof.

The developer/contractor is responsible for determining the locations of all existing, possibly unknown or undocumented utilities located within the remainder of the proposed development. Should it become necessary to change positions, or permanently or temporarily remove/relocate any existing electrical

conduits, power poles, or wires in order to clear the structures being built or to stay outside of County road right-of-way during the construction of these phases, the developer/contractor is responsible accommodate such tasks and work with appropriate parties to determine how the existing service will be maintained during the construction phases of the developments.

Provide any proposed street, storm drain pipeline layouts and capacities, onsite pond and inlet boundary and capacity calculations to Public Works Department for review. If there are existing infrastructures on site, the developer is required to verify the facilities are still fully functional and have adequate capacity to accommodate the additional demand from the proposed development.

Provide methods of erosion & sediment controls within the limits of construction.

The design and construction of all roads and road appurtenances will be the responsibility of the developer, who will employ a California registered civil engineer and/or land surveyor to do all survey work, and a California registered civil engineer to do all road and road appurtenance design, testing, construction supervision, and inspection. .

All National Pollution Discharge Elimination System (NPDES) storm water regulations and standards shall be met. It is possible that the quality of storm water may be affected by pollutants. The applicant shall mitigate any impacts associated with storm water contamination caused by this project. A Storm Water Pollution Prevention Plan (SWPPP) is required for all projects 1-acre or more of site disturbance.

All stabilized construction on and off site access locations shall be constructed per the latest edition of the California Stormwater Quality Association (CASQA) details to effectively prevent tracking of sediment onto paved areas. All BMPS to be inspected weekly and before and after each rain event. Repair or replace as necessary. The contractor shall abide all of the laws, ordinances, and regulations associated with the NPDES and the Clean Water Act.

Contractor shall be responsible for locating all underground utilities prior to the start of any work by contacting Underground Service Alert (USA) 48 hours prior to any excavations; Contractor shall be responsible for contacting the appropriate party in advance of any work for necessary inspections in compliance to these plans, standard plans and standard specifications.

COUNTY OF MADERA
DEPARTMENT OF PUBLIC WORKS

AHMAD M. ALKHAYYAT
DIRECTOR

200 West 4th Street
Madera, CA 93637-8720
Main Line - (559) 675-7811
Special districts - (559) 675-7820
Fairmead Landfill - (559) 665-1310

MEMORANDUM

DATE: December 14, 2018

TO: Becky Beavers

FROM: Phu Duong, Public Works

SUBJECT: Fagundes Brothers - Project - BdS - Chowchilla (026-272-011-000)

Comments

Public Works Department has the following general review comments:

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Due to the project being adjacent to Caltrans' facilities, the applicant is hereby to comply with Caltrans' conditions of approval.

The California High-Speed Rail Authority (CHSRA) has several track alignment alternatives proposed along the north and south sides of SR 152 for the Central Valley Wye development package. The applicant is encouraged to contact the Authority for the latest updates on the alignment alternative because they might be affect the way how the subdivision get access to the nearest public roads.

The applicant is required to provide a traffic impact study to the Department for review and approval due to the changes in zone designations.

Any work shall be done in accordance with the Mitigation Monitoring and Report Program (MMRP), County of Madera standards drawings and specification and/or any reference applicable sections of the California Building Codes standard specifications and standard plans or latest publication thereof.

The developer/contractor is responsible for determining the locations of all existing, possibly unknown or undocumented utilities located within the remainder of the proposed development. Should it become necessary to change positions, or permanently or temporarily remove/relocate any existing electrical

conduits, power poles, or wires in order to clear the structures being built or to stay outside of County road right-of-way during the construction of these phases, the developer/contractor is responsible accommodate such tasks and work with appropriate parties to determine how the existing service will be maintained during the construction phases of the developments.

Provide any proposed street, storm drain pipeline layouts and capacities, onsite pond and inlet boundary and capacity calculations to Public Works Department for review. If there are existing infrastructures on site, the developer is required to verify the facilities are still fully functional and have adequate capacity to accommodate the additional demand from the proposed development.

Provide methods of erosion & sediment controls within the limits of construction.

The design and construction of all roads and road appurtenances will be the responsibility of the developer, who will employ a California registered civil engineer and/or land surveyor to do all survey work, and a California registered civil engineer to do all road and road appurtenance design, testing, construction supervision, and inspection. .

All National Pollution Discharge Elimination System (NPDES) storm water regulations and standards shall be met. It is possible that the quality of storm water may be affected by pollutants. The applicant shall mitigate any impacts associated with storm water contamination caused by this project. A Storm Water Pollution Prevention Plan (SWPPP) is required for all projects 1-acre or more of site disturbance.

All stabilized construction on and off site access locations shall be constructed per the latest edition of the California Stormwater Quality Association (CASQA) details to effectively prevent tracking of sediment onto paved areas. All BMPS to be inspected weekly and before and after each rain event. Repair or replace as necessary. The contractor shall abide all of the laws, ordinances, and regulations associated with the NPDES and the Clean Water Act.

Contractor shall be responsible for locating all underground utilities prior to the start of any work by contacting Underground Service Alert (USA) 48 hours prior to any excavations; Contractor shall be responsible for contacting the appropriate party in advance of any work for necessary inspections in compliance to these plans, standard plans and standard specifications.

EXHIBIT J

Fagundes Brothers
General Plan Amendment

Traffic Impact Study

August 2018

Prepared for:
Fagundes Brothers
PO Box 2717
Merced, CA 95344

Prepared by:
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VRPA TECHNOLOGIES, INC.

Fagundes Brothers General Plan Amendment
Traffic Impact Study

Study Team

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Executive Summary

This Traffic Impact Study (TIS) has been prepared for the purpose of analyzing traffic conditions related to the proposed Fagundes Brothers General Plan Amendment (Project) located in the Madera County. The Project is located along State Route (SR) 152 at Road 14 ½.

The Project is located in Madera County, approximately four miles west of the State Route (SR) 152 and SR 99 interchange. The Project seeks to change the land use designations at 14181 State Route (SR) 152 from Agricultural Resignation and Very Low Density Residential to Community Commercial. The amendment will change the region's zoning from Agricultural, Rural-5 Acre and Residential, Rural, Single Family to Commercial, Rural, General. The land is located along SR 152 approximately one mile west of the SR 152 intersection at SR 99.

Access to the existing site is provided along Road 14 (Railroad Drive), Road 14 ½, and Road 15 via Avenue 23 ½. Access will be provided along Road 14 ½ via Robertson Boulevard (SR 233) and Avenue 23 ½.

IMPACTS

Intersections

Table E-1 shows intersections that are expected to fall short of desirable operating conditions for various scenarios. Results of the analysis show that the Project will result in a direct project-specific impact at two (2) of the seven (7) study intersections, when comparing the Existing and Existing Plus Project scenarios.

- ✓ Robertson Boulevard (SR 233) / Washington Road
- ✓ Robertson Boulevard (SR 233) / Avenue 23 ½

Results of the analysis also show that the Project will result in a direct project-specific impact at three (3) of the seven (7) study intersections, as shown below, when comparing the Cumulative Year 2040 Without Project and Cumulative Year 2040 Plus Project scenarios.

- ✓ Robertson Boulevard (SR 233) / Washington Road
- ✓ Robertson Boulevard (SR 233) / Avenue 23 ½
- ✓ Robertson Boulevard (SR 223) / Madison Road

Segments

Table E-2 shows roadway segments that are expected to fall short of desirable operating conditions for various scenarios. Results of the analysis show that the Project will not result in a direct project-specific impact at two (2) of the four (4) study roadway segments when comparing the Exiting and Existing Plus Project scenarios.

- ✓ Robertson Boulevard (SR 233)
  - Washington Road to Avenue 23 ½ (Southbound travel lane)
  - Avenue 23 ½ to SR 152 WB Ramps

Results of the analysis also show that the Project will result in a direct project-specific impact at two (2) of the four (4) study roadway segments, as shown below, when comparing the Cumulative Year 2040 Without Project and Cumulative Year 2040 Plus Project scenarios.

- ✓ Robertson Boulevard (SR 233)
  - Washington Road to Avenue 23 ½
  - Avenue 23 ½ to SR 152 WB Ramps (Northbound travel lane)

Table E-1
Intersection Operations

INTERSECTION	CONTROL	TARGET LOS	PEAK HOUR	EXISTING PLUS PROJECT		NEAR-TERM (YEAR 2021) WITHOUT PROJECT		NEAR-TERM (YEAR 2021) PLUS PROJECT		CUMULATIVE YEAR 2040 WITHOUT PROJECT		CUMULATIVE YEAR 2040 PLUS PROJECT	
				DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS
1. Robertson Boulevard (SR 233) / Washington Road	One Way Stop	C	AM	15.3	C	13.3	B	16.5	C	23.9	C	**37.6**	**E**
			PM	**29.5**	**D**	23.8	C	**39.5**	**E**	**283.1**	**F ++**	**300.0+**	**F ++**
2. Robertson Boulevard (SR 233) / Avenue 23 1/2	One Way Stop	C	AM	**41.0**	**E**	10.1	B	**55.6**	**F**	11.7	B	**54.3**	**F**
			PM	**300.0+**	**F ++**	11.6	B	**300.0+**	**F ++**	14.8	B	**300.0+**	**F ++**
3. Robertson Boulevard (SR 233) / Madison Road	One Way Stop	C	AM	13.4	B	9.8	A	13.7	B	11.0	B	16.0	C
			PM	20.3	C	11.4	B	21.6	C	14.2	B	**28.1**	**D**
4. Road 13 / SR 152	Two Way Stop	C	AM	13.4	B	14.1	B	14.1	B	**29.7**	**D**	**29.7**	**D**
			PM	18.6	C	20.7	C	20.7	C	**61.0**	**E**	**61.0**	**F**
5. Robertson Boulevard (SR 233) / SR 152 WB Ramps	One Way Stop	C	AM	11.4	B	9.6	A	11.5	B	10.5	B	12.7	B
			PM	14.1	B	10.3	B	14.4	B	12.0	B	16.9	C
6. Robertson Boulevard (SR 233) / SR 152 EB Ramps	One Way Stop	C	AM	10.5	B	9.5	A	10.6	B	10.1	B	11.3	B
			PM	14.0	B	10.4	B	14.6	B	11.9	B	17.6	C
7. Road 16 / SR 152	Two Way Stop	C	AM	22.7	C	**26.6**	**D**	**26.6**	**D**	**65.9**	**F**	**65.9**	**F**
			PM	32.8	D*	**41.8**	**E**	**41.8**	**E**	**155.2**	**F**	**155.2**	**F**

DELAY is measured in seconds

LOS = Level of Service / **BOLD** denotes LOS standard has been exceeded

For one-way and two-way stop controlled intersections, delay results show the delay for the

+ Delay exceeds 300 seconds.

++ Meets peak hour signal warrant.

* The existing LOS is 'D' or worse. The minimum LOS reflects existing conditoins.

Table E-2
Segment Operations

STREET SEGMENT	SEGMENT DESCRIPTION	DIRECTION	PEAK HOUR	EXISTING PLUS PROJECT		NEAR-TERM (YEAR 2021) WITHOUT PROJECT		NEAR-TERM (YEAR 2021) PLUS PROJECT		CUMULATIVE YEAR 2040 WITHOUT PROJECT		CUMULATIVE YEAR 2040 PLUS PROJECT	
				VOLUME	LOS	VOLUME	LOS	VOLUME	LOS	VOLUME	LOS	VOLUME	LOS
State Route 152													
Road 13 to Robertson Boulevard (SR 233)	4 Lanes Divided	EB	AM	297	C	325	C	325	C	569	C	569	C
			PM	563	C	615	C	615	C	1,079	C	1,079	C
	4 Lanes Divided	WB	AM	559	C	606	C	606	C	1,063	C	1,063	C
			PM	448	C	490	C	490	C	858	C	858	C
Robertson Boulevard (SR 233) to Road 16	4 Lanes Divided	EB	AM	318	C	347	C	347	C	492	C	492	C
			PM	532	C	581	C	581	C	822	C	822	C
	4 Lanes Divided	WB	AM	528	C	577	C	577	C	816	C	816	C
			PM	463	C	506	C	506	C	716	C	716	C
Robertson Boulevard (SR 233)													
Washington Road to Avenue 23 1/2	2 Lanes Undivided	NB	AM	286	D*	224	D*	305	D*	393	D*	474	D*
			PM	451	D*	384	D*	483	D*	673	D*	**772**	**E**
	2 Lanes Undivided	SB	AM	**279**	**D**	**202**	**D**	**296**	**D**	**354**	**D**	**448**	**D**
			PM	431	D*	358	D*	462	D*	628	D*	**732**	**E**
Avenue 23 1/2 to SR 152 WB Ramps	2 Lanes Undivided	NB	AM	**334**	**D**	98	C	**342**	**D**	178	C	**422**	**D**
			PM	**456**	**D**	**207**	**D**	**474**	**D**	**362**	**D**	**630**	**D**
	2 Lanes Undivided	SB	AM	**347**	**D**	149	C	**359**	**D**	**261**	**D**	**471**	**D**
			PM	**419**	**D**	176	C	**434**	**D**	**308**	**D**	**567**	**D**

LOS = Level of Service / **BOLD** denotes LOS standard has been exceeded

* The existing LOS is 'D' or worse. The minimum LOS reflects existing conditions.

MITIGATION

As discussed above, the potentially significant impacts resulting from the Project relate to the generation of unacceptable LOS at various intersections and road segments for the Existing Plus Project, Near-Term Plus Project, and Cumulative Year 2040 Plus Project scenarios. Described below are improvements at study area intersections and segments for various scenarios that would result in acceptable levels of service. In order to mitigate the Project's impacts, it is recommended that the Project contribute traffic impact fees, as determined by Madera County. The payment of these fair-share fees would be used to help fund the applicant's fair-share percentage of the improvements discussed below to mitigate the Project's traffic impacts to less than significant levels.

Existing Plus Project Mitigation Measures

INTERSECTIONS

✓ Robertson Boulevard (SR 233) / Washington Road
Recommended improvements to achieve acceptable levels of service:
- Widen the southbound approach to 1 left turn lane, 2 through lanes, and 1 right turn lane (adding 1 right turn lane)

The improvements identified above for the Existing Plus Project scenario are sufficient to meet Caltrans' acceptable LOS standard of 'C'.

✓ Robertson Boulevard (SR 233) / Avenue 23 ½
Recommended improvements to achieve acceptable levels of service:
- Install Traffic Signal

The improvements identified above for the Existing Plus Project scenario are sufficient to meet Caltrans' acceptable LOS standard of 'C'.

ROADWAY SEGMENTS

✓ Robertson Boulevard (SR 233) between Washington Road and Avenue 23 ½
Recommended improvements to achieve acceptable levels of service:
- Widen the southbound travel lane from 1 to 2 lanes (adding 1 travel lane)

✓ Robertson Boulevard (SR 233) between Avenue 23 ½ and SR 152 WB Ramps
Recommended improvements to achieve acceptable levels of service:
- Widen the northbound travel lane from 1 to 2 lanes (adding 1 travel lane)
- Widen the southbound travel lane from 1 to 2 lanes (adding 1 travel lane)

The improvements identified above for the Existing Plus Project scenario are sufficient to meet Caltrans' acceptable LOS standard of 'C'.

Near-Term Plus Project Mitigation Measures

INTERSECTIONS

✓ Robertson Boulevard (SR 233) / Washington Road
Recommended improvements to achieve acceptable levels of service:
- Widen the southbound approach to 1 left turn lane, 2 through lanes, and 1 right turn lane (adding 1 right turn lane)

The improvements identified above for the Near-Term Plus Project scenario are sufficient to meet Caltrans' acceptable LOS standard of 'C' for the AM peak hour. The improvements identified above will achieve LOS 'D' for the PM peak hour. It should be noted that the intersection does not meet the peak hour signal warrant for the Near-Term Plus Project scenario.

✓ Robertson Boulevard (SR 233) / Avenue 23 ½
Recommended improvements to achieve acceptable levels of service:
- Install Traffic Signal

The improvements identified above for the Near-Term Plus Project scenario are sufficient to meet Caltrans' acceptable LOS standard of 'C'.

✓ Road 16 / SR 152
No improvements recommended

Improvements were not identified for the Near-Term Plus Project scenario since the intersection is not anticipated to meet peak hour signal warrants at that time. Installation of a traffic signal at this location would alleviate the level of service deficiency. It should be noted that Project traffic does not impact this intersection. Caltrans is planning to construct an interchange at this location in the future.

ROADWAY SEGMENTS

✓ Robertson Boulevard (SR 233) between Washington Road and Avenue 23 ½
Recommended improvements to achieve acceptable levels of service:
- Widen the southbound travel lane from 1 to 2 lanes (adding 1 travel lane)

✓ Robertson Boulevard (SR 233) between Avenue 23 ½ and SR 152 WB Ramps
Recommended improvements to achieve acceptable levels of service:
- Widen the northbound travel lane from 1 to 2 lanes (adding 1 travel lane)
- Widen the southbound travel lane from 1 to 2 lanes (adding 1 travel lane)

The improvements identified above for the Near-Term Plus Project scenario are sufficient to meet Caltrans' acceptable LOS standard of 'C'.

Cumulative Year 2040 Plus Project Mitigation Measures

INTERSECTIONS

✓ Robertson Boulevard (SR 233) / Washington Road
Recommended improvements to achieve acceptable levels of service:
- Install Traffic Signal
- Widen the southbound approach to 1 left turn lane, 2 through lanes, and 1 right turn lane (adding 1 right turn lane)

The improvements identified above for the Cumulative Year 2040 Plus Project scenario are sufficient to meet Caltrans' acceptable LOS standard of 'C'.

✓ Robertson Boulevard (SR 233) / Avenue 23 ½
Recommended improvements to achieve acceptable levels of service:
- Install Traffic Signal

The improvements identified above for the Cumulative Year 2040 Plus Project scenario are sufficient to meet Caltrans' acceptable LOS standard of 'C'.

✓ Robertson Boulevard (SR 233) / Madison Road
No improvements recommended

Improvements were not identified for the Cumulative Year 2040 Plus Project scenario since the intersection is not anticipated to meet peak hour signal warrants at that time. Installation of a traffic signal at this location would alleviate the level of service deficiency.

✓ Road 13 / SR 152
No improvements recommended

Improvements were not identified for the Cumulative Year 2040 Plus Project scenario since the intersection is not anticipated to meet peak hour signal warrants at that time. Installation of a traffic signal at this location would alleviate the level of service deficiency. It should be noted that Project traffic does not impact this intersection.

✓ Road 16 / SR 152
No improvements recommended

Improvements were not identified for the Cumulative Year 2040 Plus Project scenario since the intersection is not anticipated to meet peak hour signal warrants at that time. Installation of a traffic signal at this location would alleviate the level of service deficiency. It should be noted that Project traffic does not impact this intersection.

Caltrans is planning to construct an interchange at this location in the future. The level of service at this location, considering the project Cumulative 2040 Plus Project volumes, is

provided below in Table E-3.

ROADWAY SEGMENTS

- ✓ Robertson Boulevard (SR 233) between Washington Road and Avenue 23 ½
  Recommended improvements to achieve acceptable levels of service:
  - Widen the northbound travel lane from 1 to 2 lanes (adding 1 travel lane)
  - Widen the southbound travel lane from 1 to 2 lanes (adding 1 travel lane)

- ✓ Robertson Boulevard (SR 233) between Avenue 23 ½ and SR 152 WB Ramps
  Recommended improvements to achieve acceptable levels of service:
  - Widen the northbound travel lane from 1 to 2 lanes (adding 1 travel lane)
  - Widen the southbound travel lane from 1 to 2 lanes (adding 1 travel lane)

The improvements identified above for the Cumulative Year 2040 Plus Project scenario are sufficient to meet Caltrans' acceptable LOS standard of 'C'.

Post-Mitigation Level of Significance

The level of service resulting from the potential improvements identified above is shown in Tables E-3 and E-4.

Equitable Fair-Share Responsibility

The proposed Project will be required to contribute a fair-share towards the costs of improvements that are identified for the Cumulative Year 2040 scenario. The intent of determining the equitable responsibility for the improvements identified above for the Cumulative Year 2040 scenario, is to provide a starting point for early discussions between the applicant and the County to address traffic mitigation equitability and to calculate the equitable share for mitigating traffic impacts. The formulas used to calculate the equitable share responsibility to Caltrans facilities is as follows:

Equitable Share = (Project Trips)/(Future Year Plus Project Traffic – Existing Traffic)

Table E-5 shows the Project's equitable fair share responsibility on a percentage basis for improvements to Caltrans facilities as described above. The equitable fair share responsibility shown in Table E-5 is the result of LOS enhancements related to capacity.

Table E-3
Intersection Operations with Mitigation

INTERSECTION	TARGET LOS	PEAK HOUR	EXISTING PLUS PROJECT		NEAR-TERM (YEAR 2020) PLUS PROJECT		CUMULATIVE YEAR 2040 PLUS PROJECT	
			DELAY	LOS	DELAY	LOS	DELAY	LOS
1. Robertson Boulevard (SR 233) / Washington Road	C	AM	14.7	B	15.8	C	8.9	A
		PM	24.6	C	**31.2**	**D**	10.7	B
2. Robertson Boulevard (SR 233) / Avenue 23 1/2	C	AM	7.8	A	8.3	A	7.2	A
		PM	16.4	B	18.4	B	13.1	B
3. Robertson Boulevard (SR 233) / Madison Road	C	AM					16.0	C
		PM					**28.1**	**D**
4. Road 13 / SR 152	C	AM					**29.7**	**D**
		PM					**61.0**	**F**
7. Road 16 / SR 152	C	AM			**26.2**	**D**	**65.9**	**F**
		PM			**41.8**	**E**	**155.2**	**F**
Road 16 / SR 152 WB Ramps	C	AM					9.1	A
		PM					9.2	A
Road 16 / SR 152 EB Ramps	C	AM					9.0	A
		PM					8.9	A

DELAY is measured in seconds

LOS = Level of Service / **BOLD** denotes LOS standard has been exceeded

Table E-4
Segment Operations with Mitigation

STREET SEGMENT	DIRECTION	PEAK HOUR	EXISTING PLUS PROJECT		NEAR-TERM (YEAR 2020) PLUS PROJECT		CUMULATIVE YEAR 2040 PLUS PROJECT	
			VOLUME	LOS	VOLUME	LOS	VOLUME	LOS
Robertson Boulevard (SR 233)								
Washington Road to Avenue 23 1/2	NB	AM					474	C
		PM					772	C
	SB	AM	279	C	296	C	448	C
		PM	431	C	462	C	732	C
Avenue 23 1/2 to SR 152 WB Ramps	NB	AM	337	C	342	C	422	C
		PM	456	C	474	C	630	C
	SB	AM	347	C	359	C	471	C
		PM	419	C	434	C	567	C

LOS = Level of Service / **BOLD** denotes LOS standard has been exceeded

Table E-6
Cumulative Year 2040 Equitable Fair-Share Responsibility

INTERSECTION	PEAK HOUR	EXISTING	PROJECT TRIPS	CUMULATIVE YEAR 2040 PLUS PROJECT	FAIR SHARE PERCENTAGE
Robertson Boulevard (SR 233) / Washington Road	AM	508	175	1,149	27.3%
	PM	873	203	1,877	20.2%
Robertson Boulevard (SR 233) / Avenue 23 ½	AM	236	649	1,102	74.9%
	PM	363	751	1,447	69.3%
ROADWAY SEGMENTS					
Robertson Boulevard (SR 233)					
Washington Road to Avenue 23 1/2	NB AM	205	81	474	30.1%
	NB PM	351	99	772	23.5%
	SB AM	185	94	448	35.7%
	SB PM	328	104	732	25.7%
Avenue 23 1/2 and SR 152 WB Ramps	NB AM	90	244	422	73.5%
	NB PM	189	268	630	60.8%
	SB AM	136	210	471	62.7%
	SB PM	145	259	567	61.4%

This Traffic Impact Study (TIS) has been prepared for the purpose of analyzing traffic conditions related to the proposed Fagundes Brothers General Plan Amendment (Project) located in the Madera County. The Project is located along State Route (SR) 152 at Road 14 ½.

1.0 Introduction

1.1 Description of the Region/Project

The Project is located in Madera County, approximately four miles west of the State Route (SR) 152 and SR 99 interchange. Figures 1-1 and 1-2 show the location of the Project along with major roadways and highways in the Project area. The Project seeks to change the land use designations at 14181 State Route (SR) 152 from Agricultural Resignation and Very Low Density Residential to Community Commercial. The amendment will change the region's zoning from Agricultural, Rural-5 Acre and Residential, Rural, Single Family to Commercial, Rural, General. The land is located along SR 152 approximately one mile west of the SR 152 intersection at SR 99.

1.1.1 *Project Access*

Access to the existing site is provided along Road 14 (Railroad Drive), Road 14 ½, and Road 15 via Avenue 23 ½. Access will be provided along Road 14 ½ via Robertson Boulevard (SR 233) and Avenue 23 ½.

1.1.2 *Study Area*

The following intersections and segments included in this TIS were determined in consultation with Madera County and the California Department of Transportation (Caltrans) and include:

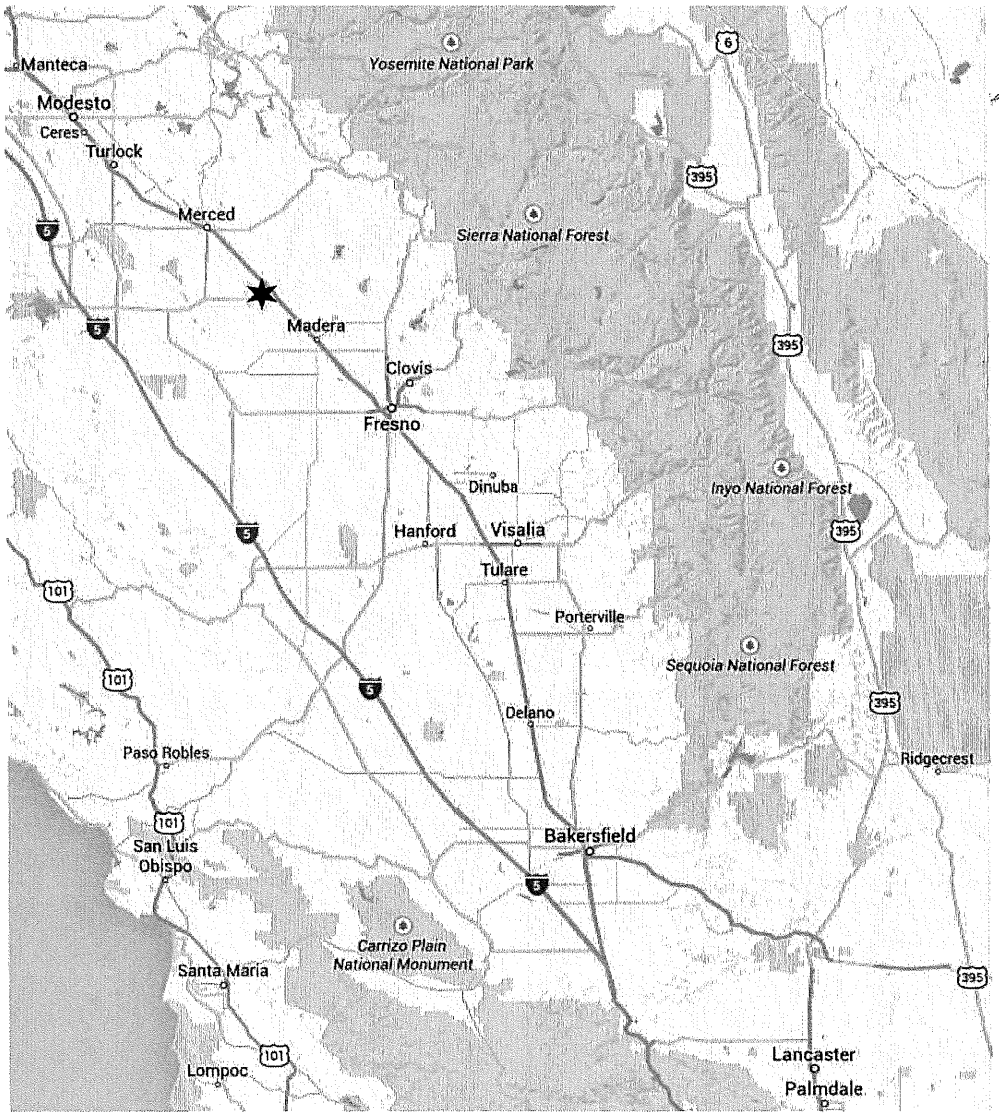
Intersections

- ✓ Robertson Boulevard (SR 233) / Washington Road
- ✓ Robertson Boulevard (SR 233) / Avenue 23 ½
- ✓ Robertson Boulevard (SR 223) / Madison Road
- ✓ Road 13 / SR 152
- ✓ Robertson Boulevard (SR 223) / SR 152 WB Ramps
- ✓ Robertson Boulevard (SR 223) / SR 152 EB Ramps
- ✓ Road 16 / SR 152

Segments

- ✓ SR 152
  - Road 13 to Robertson Boulevard (SR 233)

Fagundes Brothers General Plan Amendment **Figure 1-1**
Regional Location

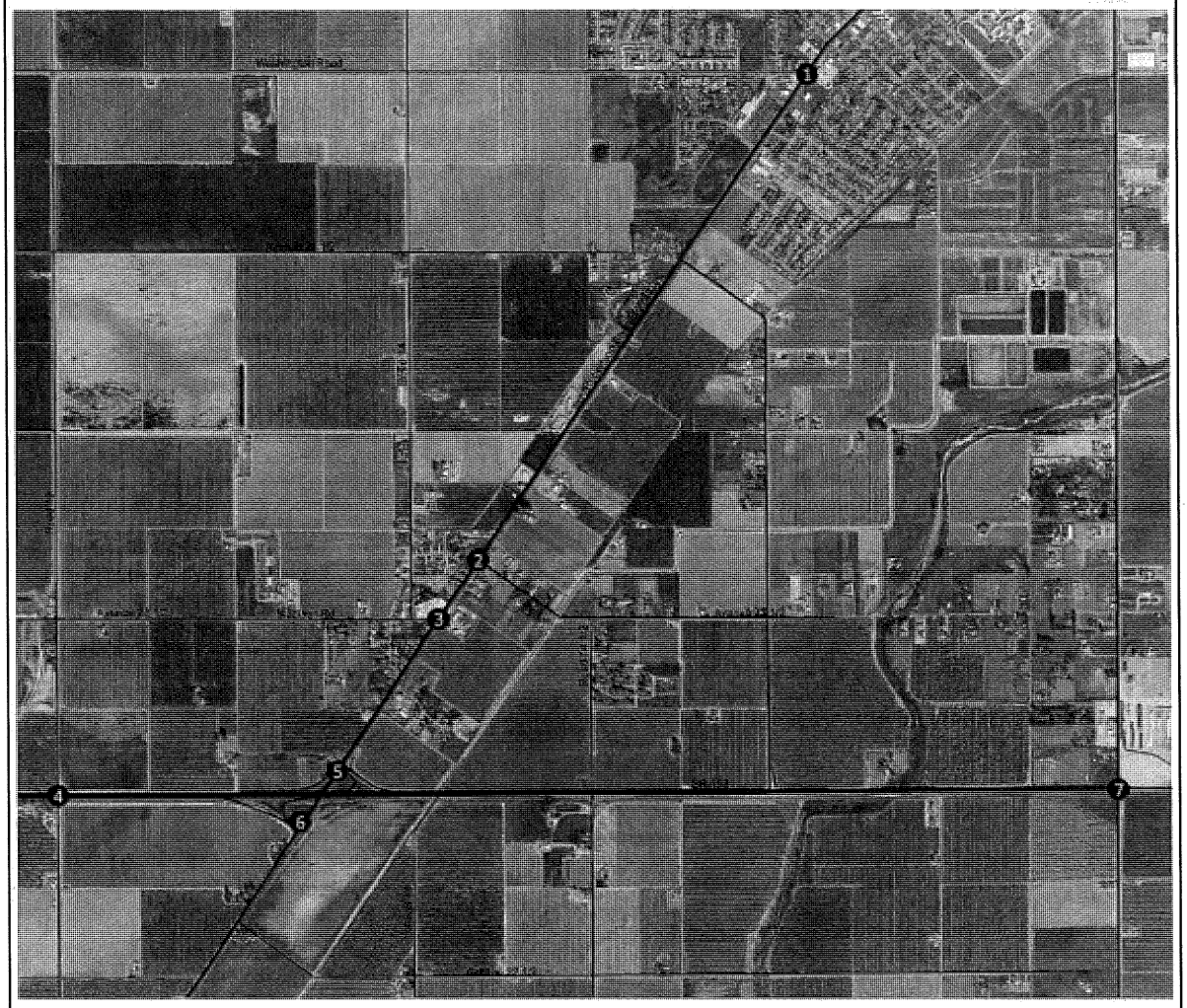


LEGEND

★ Project Location

VRPA TECHNOLOGIES, INC.

Fagundes Brothers General Plan Amendment Figure 1-2
Study Location



LEGEND

Project Location | # Study Intersections | Study Segments

VRPA TECHNOLOGIES, INC.

- Robertson Boulevard (SR 233) to Road 16

✓ Robertson Boulevard (SR 233)
- Washington Road to Avenue 23 ½
- Avenue 23 ½ to SR 152 WB Ramps

1.1.3 *Study Scenarios*

The TIS completed for the proposed Project includes level of service (LOS) analysis for the following traffic scenarios:

✓ Existing Conditions
✓ Existing Plus Project
✓ Near-Term (Opening Year 2020) Without Project
✓ Near-Term (Opening Year 2020) Plus Project
✓ Cumulative Year 2040 Without Project
✓ Cumulative Year 2040 Plus Project

1.2 Methodology

When preparing a TIS, guidelines set by affected agencies are followed. In analyzing street and intersection capacities the Level of Service (LOS) methodologies are applied. LOS standards are applied by transportation agencies to quantitatively assess a street and highway system's performance. In addition, safety concerns are analyzed to determine the need for appropriate mitigation resulting from increased traffic near sensitive uses, the need for dedicated ingress and egress access lanes to the project, and other evaluations such as the need for signalized intersections or other improvements.

1.2.1 *Intersection Analysis*

Intersection LOS analysis was conducted using the Synchro 9 software program. Synchro 9 supports the Highway Capacity Manual (HCM) 2010 and 2000 methodologies and is an acceptable program by County of Madera staff for assessment of traffic impacts. Levels of Service can be determined for both signalized and unsignalized intersections. The existing study intersections are currently unsignalized.

Tables 1-1 and 1-2 indicates the ranges in the amounts of average delay for a vehicle at signalized and unsignalized intersections for the various levels of service ranging from LOS "A" to "F".

The signalized LOS standards applied to calculate intersection LOS are in accordance with the current edition of the Highway Capacity Manual (HCM). Intersection turning movement counts and roadway geometrics used to develop LOS calculations were obtained from field review findings and count data provided from the traffic count sources identified in Section 2.1.

Table 1-1
Signalized Intersections
Level of Service Definitions
(Highway Capacity Manual)

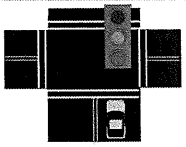
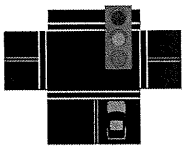
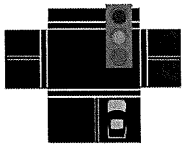
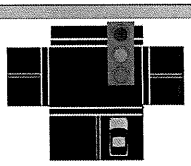
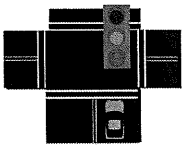
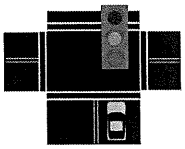
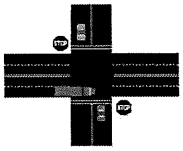
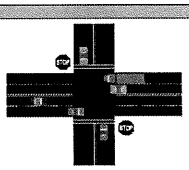
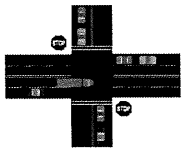
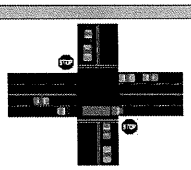
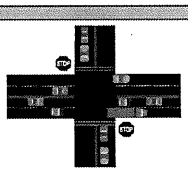
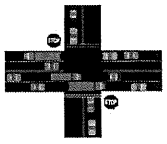
LEVEL OF SERVICE	DEFINITION		AVERAGE TOTAL DELAY (sec/veh)
A	Describes operations with very low delay. This level of service occurs when there is no conflicting traffic for a minor street.		≤ 10.0
B	Describes operations with moderately low delay. This level generally occurs with a small amount of conflicting traffic causing higher levels of average delay.		> 10.0 - 20.0
C	Describes operations with average delays. These higher delays may result from a moderate amount of minor street traffic. Queues begin to get longer.		> 20.0 - 35.0
D	Describes a crowded operation, with below average delays. At level D, the influence of congestion becomes more noticeable. Longer delays may result from shorter gaps on the mainline and an increase of minor street traffic. The queues of vehicles are increasing.		> 35.0 - 55.0
E	Describes operations at or near capacity. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor gaps for the minor street to cross and large queues.		> 55.0 - 80.0
F	Describes operations that are at the failure point. This level, considered to be unacceptable to most drivers, often occurs with over- saturation, that is, when arrival flow rates exceed the capacity of the intersection. Insufficient gaps of suitable size exist to allow minor traffic to cross the intersection safely.		> 80.0

Table 1-2
Unsignalized Intersections
Level of Service Definitions
(Highway Capacity Manual)

LEVEL OF SERVICE	DEFINITION	AVERAGE TOTAL DELAY (sec/veh)
A	No delay for stop-controlled approaches. 	0 - 10.0
B	Describes operations with minor delay. 	> 10.0 - 15.0
C	Describes operations with moderate delays. 	> 15.0 - 25.0
D	Describes operations with some delays. 	> 25.0 - 35.0
E	Describes operations with high delays and long queues. 	> 35.0 - 50.0
F	Describes operations with extreme congestion, with very high delays and long queues unacceptable to most drivers. 	> 50.0

When an unsignalized intersection does not meet acceptable LOS standards, the investigation of the need for a traffic signal shall be evaluated. The California Manual on Uniform Traffic Control Devices for Streets and Highways (California MUTCD) dated November 7, 2014 introduces standards for determining the need for traffic signals. The California MUTCD indicates that the satisfaction of one or more traffic signal warrants does not in itself require the installation of a traffic signal. In addition to the warrant analysis, an engineering study of the current or expected traffic conditions should be conducted to determine whether the installation of a traffic signal is justified. The California MUTCD Peak Hour Warrant (Warrant 3) was used to determine if a traffic signal is warranted at unsignalized intersections that fall below current LOS standards.

1.2.2 *Roadway Segment Analysis*

According to the HCM, LOS is categorized by two parameters of traffic: uninterrupted and interrupted flow. Uninterrupted flow facilities do not have fixed elements such as traffic signals that cause interruptions in traffic flow. Interrupted flow facilities do have fixed elements that cause an interruption in the flow of traffic, such as stop signs and signalized intersections along arterial roads. A roadway segment is defined as a stretch of roadway generally located between signalized or controlled intersections.

Segment LOS is important in order to understand whether the capacity of a roadway can accommodate future traffic volumes. Table 1-3 provides a definition of segment LOS. The performance criteria used for evaluating volumes and capacities on the road and highway system for this study were estimated using the Modified HCM-Based LOS Tables (Florida Tables) which are widely accepted throughout the central valley, including Madera County. The tables consider the capacity of individual road and highway segments based on numerous roadway variables (design speed, passing opportunities, signalized intersections per mile, number of lanes, saturation flow, etc.). These variables were identified and applied to reflect segment LOS conditions. Additional information is included in Appendix A. Street segment capacity was determined using information shown in Table 1-4 which comes from the Modified Arterial Level of Service Tables included in Appendix A.

Table 1-3
Roadway Segment
Level of Service Definitions
(Highway Capacity Manual)

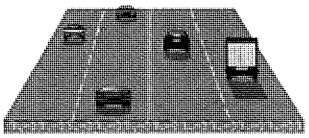
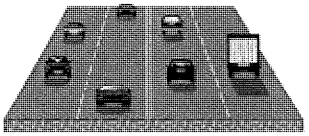
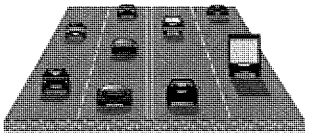
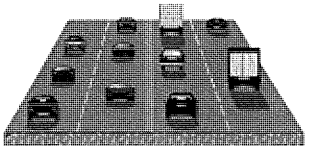
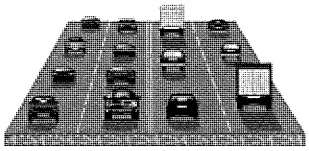
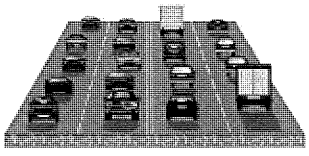
LEVEL OF SERVICE	DEFINITION	
A	Represents free flow. Individual vehicles are virtually unaffected by the presence of others in the traffic stream.	
B	Is in the range of stable flow, but the presence of other vehicles in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver.	
C	Is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual vehicles becomes significantly affected by interactions with other vehicles in the traffic stream.	
D	Is a crowded segment of roadway with a large number of vehicles restricting mobility and a stable flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience.	
E	Represents operating conditions at or near the level capacity. All speeds are reduced to a low, but relatively uniform value. Small increases in flow will cause breakdowns in traffic movement.	
F	Is used to define forced or breakdown flow (stop-and-go gridlock). This condition exists when the amount of traffic approaches a point where the amount of traffic exceeds the amount that can travel to a destination. Operations within the queues are characterized by stop and go waves, and they are extremely unstable.	

Table 1-4
Peak Hour Directional Volumes - Urban

Level of Service					
Lanes	Divided	B	C	D	E
State Arterials					
1	Undivided	*	200	690	930
2	Divided	50	1,350	1,790	1,870
3	Divided	80	2,040	2,690	2,820

*Cannot be achieved using table input value defaults.

1.3 Policies to Maintain Level of Service

An important goal is to maintain acceptable levels of service along the highway, street, and road network. To accomplish this, Madera County and Caltrans adopt minimum levels of service in an attempt to control congestion that may result as new development occurs.

Madera County's General Plan identifies a minimum LOS standard of D on the County roadway system (both segments and intersections). At unsignalized intersections where a substandard level of service exists, traffic signals would only be recommended if warrants for traffic signals are satisfied. The satisfaction of a traffic signal warrant doesn't, in and of itself, require the installation of a traffic signal. Safety and/or the overall operation of the intersection should be the basis of the installation of a traffic signal. Other improvements, such as the installation of dedicated left/right turning movements, should also be considered for the purpose of alleviating substandard levels of service at an intersection.

Caltrans identifies a minimum LOS C, except where the existing LOS is D or below, according to information specified in the Caltrans, "A Guide For Traffic Impact Studies". Based on guidance from Caltrans, the LOS for operating State highway facilities is based on Measures of Effectiveness (MOE) identified in the Highway Capacity Manual (HCM). Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities; however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than this target LOS, the existing MOE should be maintained.

1.4 Agency Responsibilities and Regional Transportation Planning

Transportation planning and transportation system operations and management in the Project area is the responsibility of two public agencies: Madera County and Caltrans. Each of the agencies has specific responsibilities and jurisdictional limits, which are defined below.

1.4.1 *Madera County*

The Transportation and Circulation Element of the Madera County General Plan guides the continued development and improvement of the circulation system to support existing and planned development. The Circulation Element addresses the circulation improvements needed to provide adequate capacity for future land uses. The Element establishes a hierarchy of transportation routes with typical development standards described for each roadway category. The County also includes additional standards, plans and programs that apply to the evaluation of transportation impacts of the Project. These standards cover the primary aspects of the transportation system.

1.4.2 *California Department of Transportation*

Caltrans is responsible for planning, designing, building, operating, and maintaining California's State highway system, including rail and mass transit. Within the Project study area, Caltrans is responsible for SR 152 and SR 233.

2.0 Existing Conditions

2.1 Existing Traffic Counts and Roadway Geometrics

The first step toward assessing Project traffic impacts is to assess existing traffic conditions. Existing AM and PM peak hour turning movements were collected at each study intersection by National Data and Surveying Services. Intersection turning movement counts were conducted for the peak hour periods of 7:00-9:00 AM and 4:00-6:00 PM for all study intersections on Wednesday, July 18, 2018. Traffic count data worksheets are provided in Appendix B.

2.2 Existing Functional Roadway Classification System

Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the type of service they are intended to provide. Fundamental to this process is the recognition that individual streets and highways do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads.

The current hierarchical system of roadways consists of the following classifications:

- ✓ **Freeways** – Limited-access facilities designed for high speed regional mobility. Freeways may include up to eight lanes (four lanes in each direction).

- ✓ **Highways** – are high-speed facilities with access limited primarily to intersections with freeways, expressways, and arterials. In rural areas, they may have some direct access to parcels. Highways mainly serve long-distance trips with lower demand than freeways.

    - **State Route 152** – currently exists as a four-lane highway with a posted speed limit of 65 miles per hour (mph) through the study area. SR 152 does not have street side parking, designated bike lanes, or sidewalks in the study area.

- ✓ **Arterial** – Streets which provide the principle network for traffic flow in the community, connecting areas of major activity to each other and to state highways and important County roads. Arterials will generally include up to four lanes (two in each direction), although total widths of six lanes may be appropriate in some locations. To reduce traffic interruptions and improve safety, direct access via driveways is generally not permitted.

    - **Robertson Boulevard (State Route 233)** – is currently a two-lane highway with a posted speed limit of 30 and 55 mph through the study area.
    - **Road 13** – is a two-lane undivided roadway without bike lanes in the vicinity of the Project site.
    - **Road 15** – is a two-lane undivided roadway without bike lanes in the vicinity of the proposed Project site.

- **Road 16** – is a two-lane undivided roadway without bike lanes in the vicinity of the proposed Project site.
- **Madison Road** – is a two-lane undivided roadway without bike lanes in the vicinity of the proposed Project site.

✓ **Collectors** – Streets which provide access and movement between residential, commercial, and industrial areas. The primary function of collector streets is to collect and distribute traffic between local streets and the arterial roadway system. Collectors will generally include up to four lanes (two in each direction). To reduce traffic interruptions and improve safety, direct access via driveways is generally not permitted.

- **Avenue 23 1/2** – is a two-lane undivided roadway without bike lanes in the vicinity of the proposed Project site.

✓ **Local Streets** – Roadways which provide access to individual homes and businesses. Local streets have one lane in each direction. Local streets are shown on the Circulation Map for informational purposes only; the General Plan does not define the desired alignments of local streets.

2.3 Affected Streets and Highways

Street and highway intersections and segments near and adjacent to the Project site were analyzed to determine levels of service utilizing HCM-based methodologies described previously. The study intersections and street and highway segments included in this TIS are listed below. Counts were taken on Wednesday, July 18, 2018.

Intersections

✓ Robertson Boulevard (SR 233) / Washington Road
✓ Robertson Boulevard (SR 233) / Avenue 23 ½
✓ Robertson Boulevard (SR 223) / Madison Road
✓ Road 13 / SR 152
✓ Robertson Boulevard (SR 223) / SR 152 WB Ramps
✓ Robertson Boulevard (SR 223) / SR 152 EB Ramps
✓ Road 16 / SR 152

Segments

✓ SR 152
- Road 13 to Robertson Boulevard (SR 233)
- Robertson Boulevard (SR 233) to Road 16

✓ Robertson Boulevard (SR 233)
- Washington Road to Avenue 23 ½

- Avenue 23 ½ to SR 152 WB Ramps

The existing lane geometry at study area intersections is shown in Figure 2-1. The existing study intersections are currently unsignalized. Figures 2-2 and 2-3 show existing traffic volumes for the AM and PM peak hours in the study area.

2.4 Level of Service

2.4.1 *Intersection Capacity Analysis*

All intersection LOS analyses were estimated using Synchro 9 Software. Various roadway geometrics, traffic volumes, and properties (peak hour factors, storage pocket length, etc) were input into the Synchro 9 Software program in order to accurately determine the travel delay and LOS for each Study scenario. The intersection LOS and delays reported represent the 2010 HCM outputs. Synchro assumptions, listed below, show the various Synchro inputs and methodologies used in the analysis.

✓ **Lane Geometry**
- Storage lengths for turn lanes for existing intersections were either measured in the field or obtained from aerial photos and rounded to the nearest 25 feet

✓ **Traffic Conditions**
- Peak hour factors (PHF) for each intersection approach was obtained from existing traffic counts and will be utilized for Existing Conditions, Existing Plus Project, and Near-term (Opening Year) Plus Project conditions. For all future scenarios, a PHF of 0.92 was applied
- Heavy vehicle percentages based on existing traffic counts and Caltrans traffic count data available on their website (SR 152-16% / SR 233-10%) was applied to study intersections
- Roadway link speed limits were observed in the field and input into the Synchro network to determine roadway link speeds

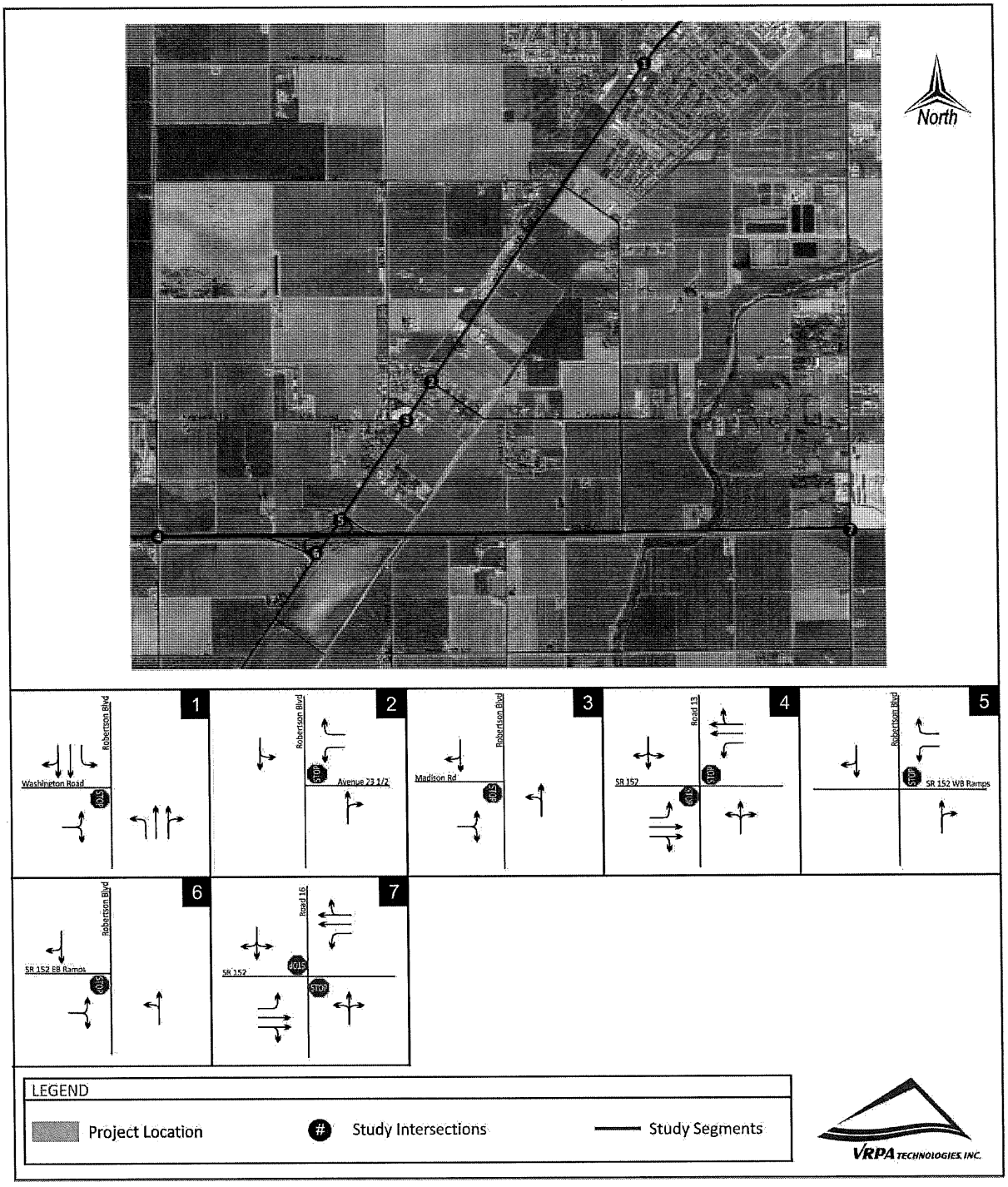
Results of the analysis show that the Road 16 and SR 152 intersection currently exceeds Caltrans' minimum level of service criteria during the PM peak hour. Table 2-1 shows the intersection LOS for the existing conditions. Synchro 9 (HCM 2010) Worksheets are provided in Appendix C.

2.4.2 *Roadway Segment Capacity Analysis*

Results of the segment analysis along the existing street and highway system are reflected in Table 2-2. The performance criteria used for evaluating volumes and capacities on the road and highway system for this study were estimated using the Modified Arterial Level of Service Tables included in Table 1-4 and Appendix A. Results of the analysis show that a majority of the roadway segments are currently operating at acceptable levels of service. The northbound (AM/PM) and southbound (PM) travel lanes along Robertson Boulevard (SR 233) between Washington Road and Avenue 23 ½ currently exceeds Caltrans' minimum level of service criteria.

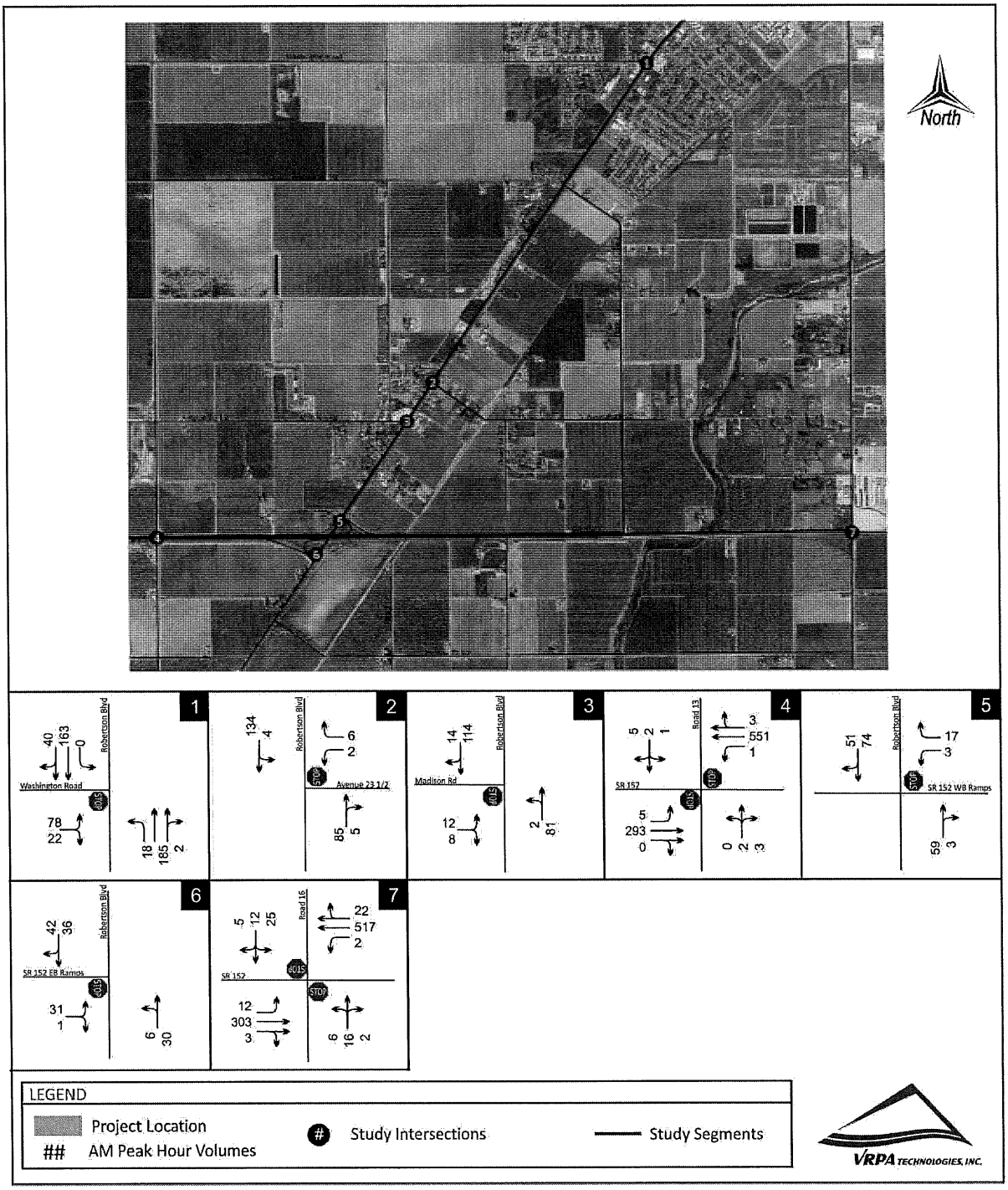
Fagundes Brothers General Plan Amendment
Existing Lane Geometry

Figure 2-1



Fagundes Brothers General Plan Amendment
Existing AM Peak Hour Volumes

Figure 2-2



Fagundes Brothers General Plan Amendment
Existing PM Peak Hour Volumes

Figure 2-3

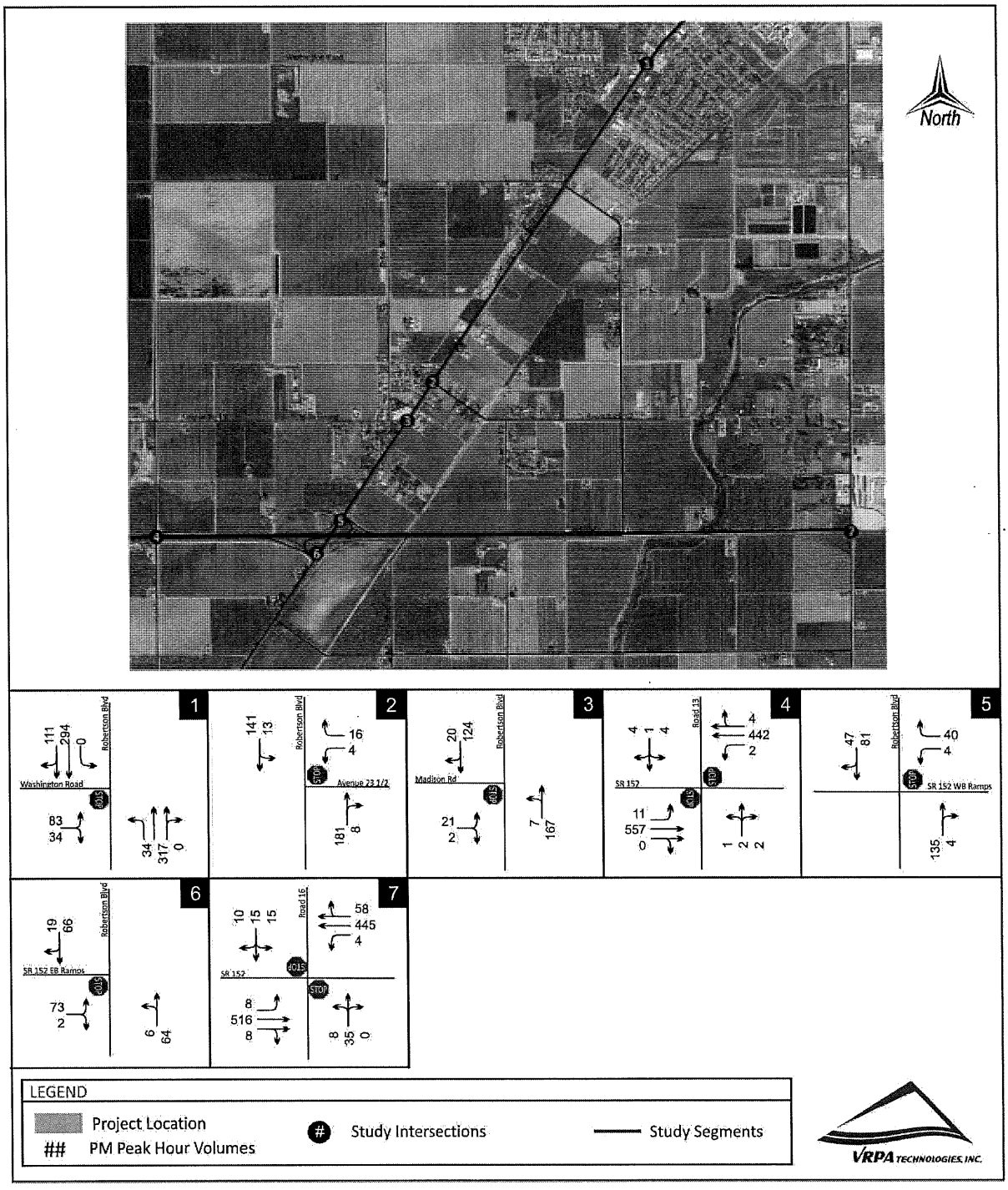


Table 2-1
Existing Intersection Operations

INTERSECTION	CONTROL	TARGET LOS	PEAK HOUR	EXISTING	
				DELAY	LOS
1. Robertson Boulevard (SR 233) / Washington Road	One Way Stop	C	AM	12.5	B
			PM	19.9	C
2. Robertson Boulevard (SR 233) / Avenue 23 1/2	One Way Stop	C	AM	9.9	A
			PM	11.3	B
3. Robertson Boulevard (SR 233) / Madison Road	One Way Stop	C	AM	9.6	A
			PM	11.1	B
4. Road 13 / SR 152	Two Way Stop	C	AM	13.4	B
			PM	18.6	C
5. Robertson Boulevard (SR 233) / SR 152 WB Ramps	One Way Stop	C	AM	9.5	A
			PM	10.1	B
6. Robertson Boulevard (SR 233) / SR 152 EB Ramps	One Way Stop	C	AM	9.4	A
			PM	10.2	B
7. Road 16 / SR 152	Two Way Stop	C	AM	22.7	C
			PM	**32.8**	**D***

DELAY is measured in seconds

LOS = Level of Service / **BOLD** denotes LOS standard has been exceeded

For one-way and two-way stop controlled intersections, delay results show the delay for the worst movement.

* The existing LOS is 'D' or worse. The minimum LOS shall reflect existing conditoins for future study scenarios.

Table 2-2
Existing Segment Operations

STREET SEGMENT	SEGMENT DESCRIPTION	DIRECTION	PEAK HOUR	EXISTING	
				VOLUME	LOS
State Route 152					
Road 13 to Robertson Boulevard (SR 233)	4 Lanes Divided	EB	AM	297	C
			PM	563	C
	4 Lanes Divided	WB	AM	555	C
			PM	448	C
Robertson Boulevard (SR 233) to Road 16	4 Lanes Divided	EB	AM	318	C
			PM	529	C
	4 Lanes Divided	WB	AM	528	C
			PM	463	C
Robertson Boulevard (SR 233)					
Washington Road to Avenue 23 1/2	2 Lanes Undivided	NB	AM	**205**	**D***
			PM	**351**	**D***
	2 Lanes Undivided	SB	AM	185	C
			PM	**328**	**D***
Avenue 23 1/2 to SR 152 WB Ramps	2 Lanes Undivided	NB	AM	90	C
			PM	189	C
	2 Lanes Undivided	SB	AM	136	C
			PM	145	C

LOS = Level of Service / **BOLD** denotes LOS standard has been exceeded

* The existing LOS is 'D' or worse. The minimum LOS shall reflect existing conditions for future study scenarios.

2.5 Queuing Analysis

Table 2-3 provides a queue length summary for left and right turn lanes at the study intersections for the Existing scenario. Queuing analysis was completed using Section 400 of Caltrans' Highway Design Manual. The vehicular queue presented in Table 2-3 represents the approximate queue lengths for the respective lane movements. A minimum queue length of 25ft was assumed for all turning movements unless the turning movement volume was zero (0).

Table 2-3
Existing Queuing Operations

INTERSECTION	EXISTING QUEUE STORAGE LENGTH (ft)		EXISTING CONDITIONS	
			AM Queue	PM Queue
1. Robertson Boulevard (SR 233) / Washington Road	NB Left	50	25	40
	SB Left	50	0	0
2. Robertson Boulevard (SR 233) / Avenue 23 1/2	WB Left	75	25	25
4. Road 13 / SR 152	EB Left	325	25	25
	WB Left	300	25	25
5. Robertson Boulevard (SR 233) / SR 152 WB Ramps	WB Left	100	25	25
7. Road 16 / SR 152	EB Left	300	25	25
	WB Left	300	25	25

Queue is measured in feet / **BOLD** denotes exceedance

3.0 Traffic Impacts

This chapter provides an assessment of the traffic the Project is expected to generate and the impact of that traffic on the surrounding street system.

3.1 Trip Generation

To assess the impacts that the proposed Project may have on the surrounding street segments and intersections, the first step is to determine Project trip generation. The trip generation was based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition. The 38-acre site will consist of a 12,000 sf Truck Stop, a 4,000 sf Fast Food with Drive Thru, a 6,000 sf Restaurant, 65,079 sf of Retail, and 128,241 sf of Warehousing. The proposed Project's estimated Daily, AM peak hour, and PM peak hour trips are shown in Table 3-1. Considering the trip generation process described above, the proposed Project is estimated to generate 9,445 daily trips, 550 trips during the AM peak hour, and 635 trips during the PM peak hour.

Table 3-1
Project Trip Generation

LAND USE	Quantity	DAILY TRIP ENDS (ADT)		AM PEAK HOUR					PM PEAK HOUR				
		RATE	VOLUME	RATE	IN:OUT SPLIT	VOLUME IN	VOLUME OUT	VOLUME TOTAL	RATE	IN:OUT SPLIT	VOLUME IN	VOLUME OUT	VOLUME TOTAL
Truck Stop (950)	12.000 k.s.f	455.53	5,466	26.49	50:50	159	159	318	22.73	53:47	145	128	273
		Auto Trips[1]	*3,826*			*119*	*129*	*248*			*103*	*88*	*191*
		Truck Trips[2]	*1,640*			*40*	*30*	*70*			*42*	*40*	*82*
Fast Food with Drive Thru Restaurant (934)	4.000 k.s.f	470.95	1,884	40.19	51:49	82	79	161	32.67	52:48	68	63	131
High-Turnover (Sit-Down) Restaurant (932)	6.000 k.s.f	112.18	673	9.94	55:45	33	27	60	9.77	62:38	37	22	59
Shopping Center (820)	65.079 k.s.f	37.75	2,457	0.94	62:38	38	23	61	3.81	48:52	119	129	248
Warehousing (150)	128.241 k.s.f	1.74	223	0.17	77:23	17	5	22	0.19	27:73	7	17	24
		Auto Trips	*178*			*14*	*4*	*18*			*6*	*14*	*19*
		Truck Trips[3]	*45*			*3*	*1*	*4*			*1*	*3*	*5*
Subtotal Trip Generation			**10,703**			**329**	**293**	**622**			**376**	**359**	**735**
		Subtotal Auto Trips	*9,019*			*286*	*262*	*548*			*333*	*316*	*648*
		Subtotal Truck Trips	*1,684*			*43*	*31*	*74*			*43*	*43*	*87*
Internal Trip Reduction (12% AM / 14% PM)[4]			**1,258**			**37**	**35**	**72**			**52**	**48**	**100**
		Internal Auto Trips	*1,061*			*33*	*31*	*64*			*46*	*42*	*91*
		Internal Truck Trips	*197*			*5*	*4*	*8*			*6*	*6*	*8*
TOTAL TRIP GENERATION			**9,445**			**292**	**258**	**550**			**324**	**311**	**635**
		Total Auto Trips	*7,958*			*253*	*231*	*484*			*287*	*274*	*560*
		Total Truck Trips	*1,488*			*38*	*28*	*66*			*38*	*38*	*75*

1 Passenger Vehicle percentages were obtained from a survey of a Love's Travel Stop in Ripon California. Based on the survey, 75%/81% of the inbound/outbound traffic in the a.m. peak hour and 71%/69% of the inbound/outbound traffic in the p.m. peak hour were passenger vehicles.

2 Truck percentages were obtained from a survey of a Love's Travel Stop in Ripon California. Based on the survey, 25%/19% of the inbound/outbound traffic in the a.m. peak hour and 29%/31% of the inbound/outbound traffic in the p.m. peak hour were trucks.

3 Truck percentages were obtained from City of Fontana Truck Trip Generation Study

4 Internal trip percentage was estimated based on the ITE Trip Generation Handbook (3rd Edition).

3.2 Trip Distribution

Project trip distribution is shown in Figures 3-1a and 3-1b and is based upon a select zone run prepared by the Madera County Transportation Commission (MCTC), engineering judgement, prevailing traffic patterns in the study area, complementary land uses, major routes, and population centers.

3.3 Project Traffic

Project traffic as shown in Table 3-1 was distributed to the roadway system using the trip distribution percentages shown in Figures 3-1a and 3-1b. A graphical representation of the resulting AM and PM peak hour Project trips is shown in Figures 3-2 and 3-3. It should be noted that Figures 3-2 and 3-3 include a PCE of 2.5:1 for all Project truck trips entering and exiting the facility.

3.4 Existing Plus Project Traffic Conditions

An Existing Plus Project Scenario was analyzed to include existing traffic plus traffic generated by the Project. The resulting traffic is shown in Figures 3-4 and 3-5.

3.5 Near-Term Traffic Conditions

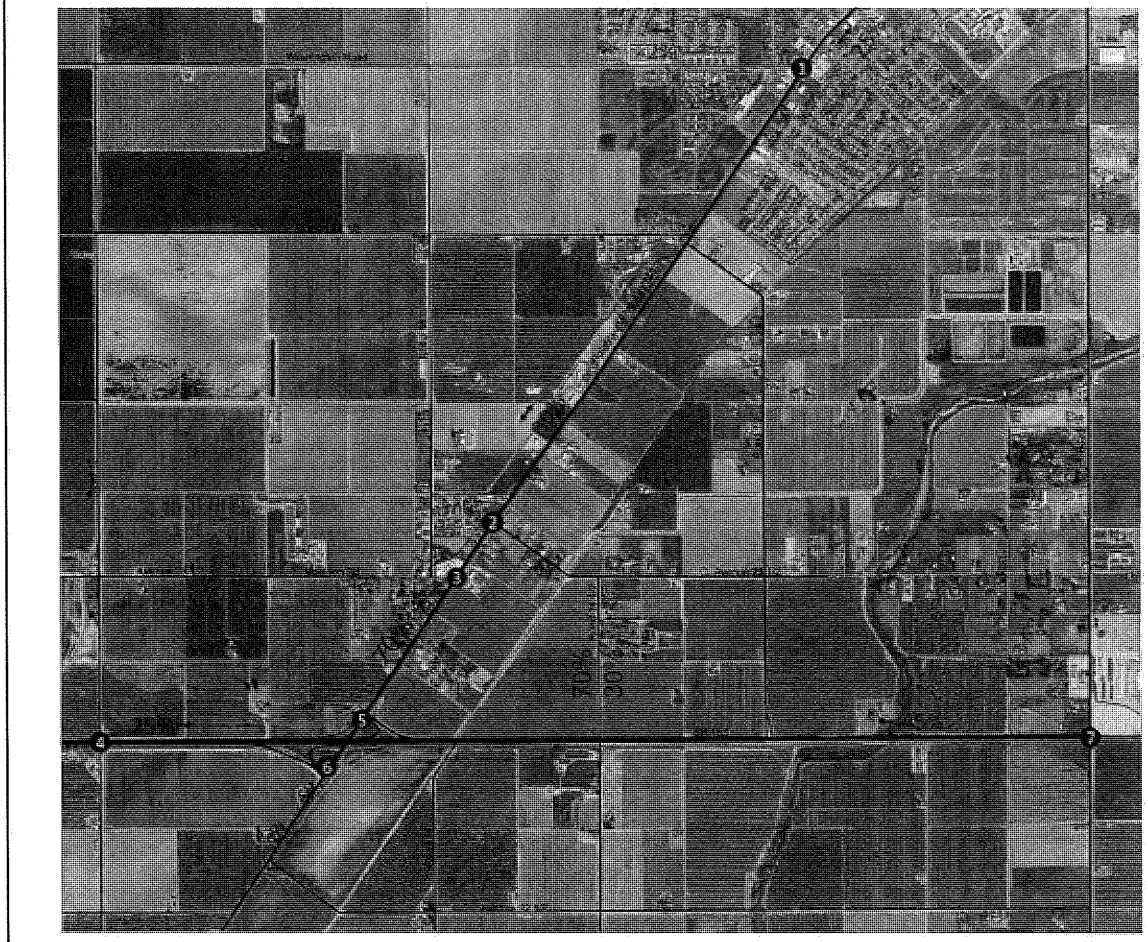
Traffic conditions with and without the Project in the Year 2021 (Opening Day) were estimated by applying a growth rate of 3% per year to the existing traffic volumes. Traffic volumes provided in the MCTC base year (2018) and future year model yielded a growth rate of approximately 1% in the study area. In contrast, the Transportation Concept Reports (TCR) for SR 152 and SR 233 yielded a growth rate between 3% and 4%. As a result, a growth rate of 3% per year was utilized to assess Near-Term and Cumulative Year 2040 conditions.

Madera County and City of Chowchilla planning staff were contacted to determine if any approved/pending projects existed in the study area. It was determined that the proposed Project is the only planned development in the study area.

The resulting traffic for the Near-Term scenario is shown in Figures 3-6, 3-7, 3-8, and 3-9.

Fagundes Brothers General Plan Amendment
AM Peak Hour Trip Distribution

Figure 3-1a



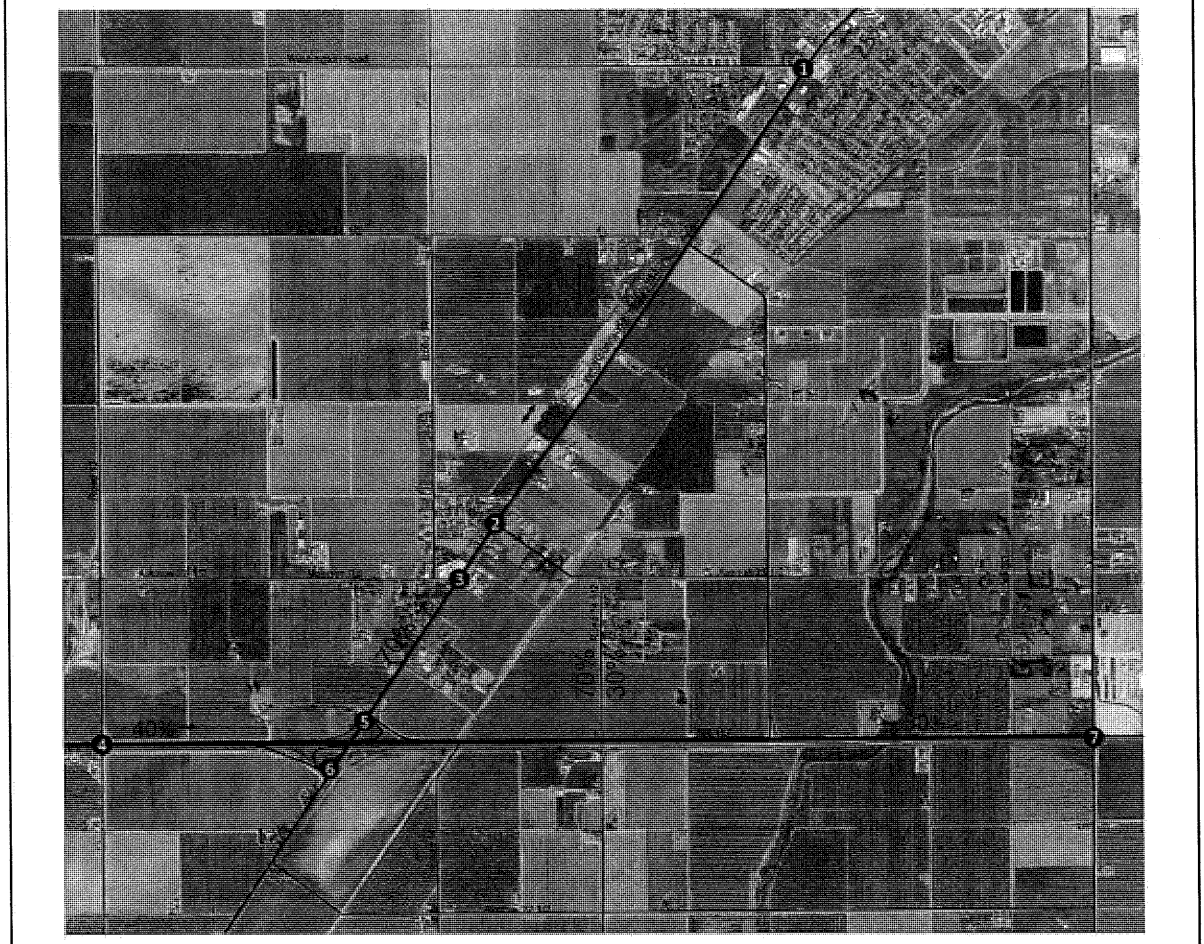
LEGEND

Project Location	XX% Primary Trip Distribution	Study Segments
# Study Intersections	XX% Diverted Link Trip Distribution	

VRPA TECHNOLOGIES, INC.

Fagundes Brothers General Plan Amendment
PM Peak Hour Trip Distribution

Figure 3-1b



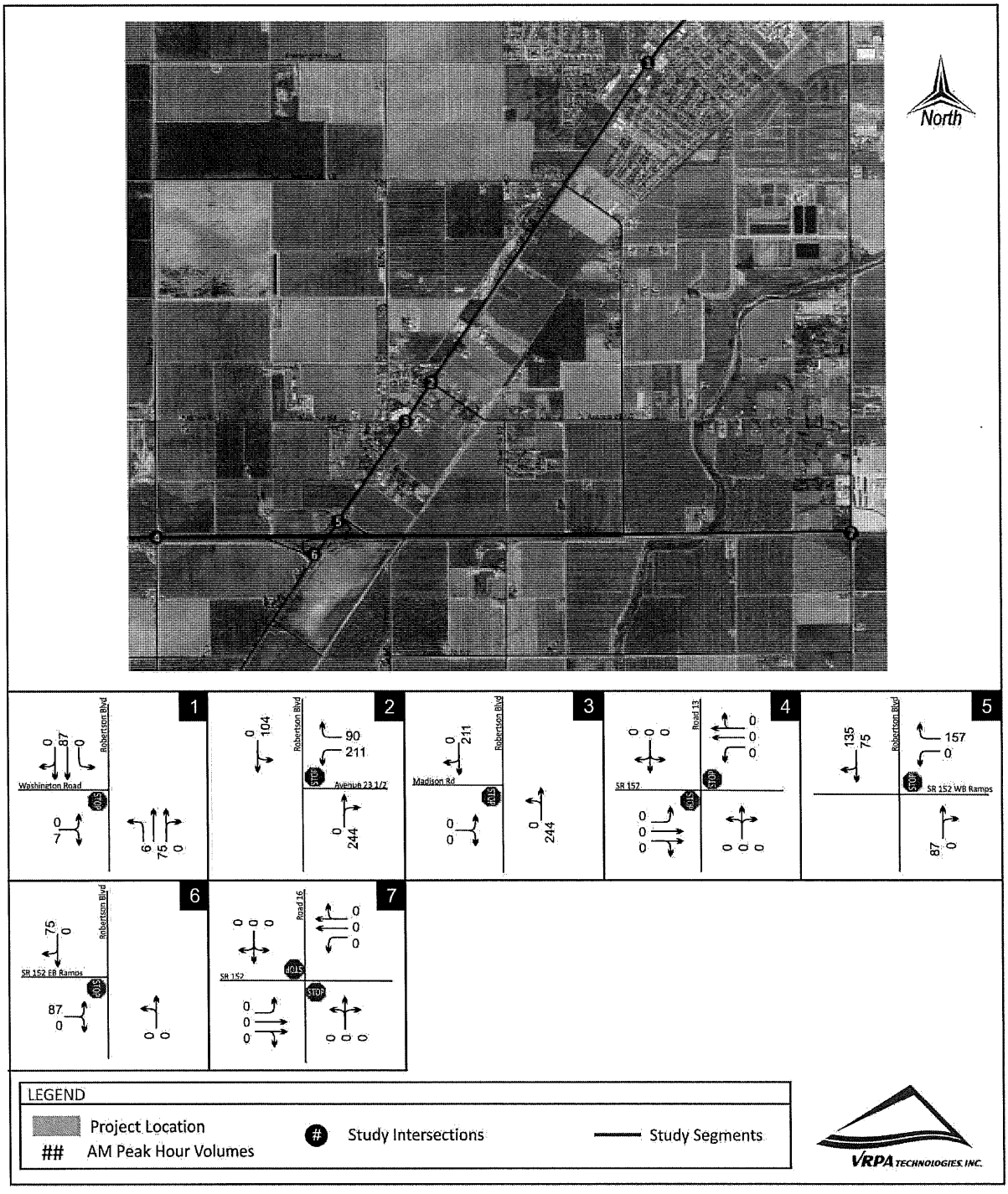
LEGEND

Project Location	XX% Primary Trip Distribution	Study Segments
# Study Intersections	XX% Diverted Link Trip Distribution	

VRPA TECHNOLOGIES, INC.

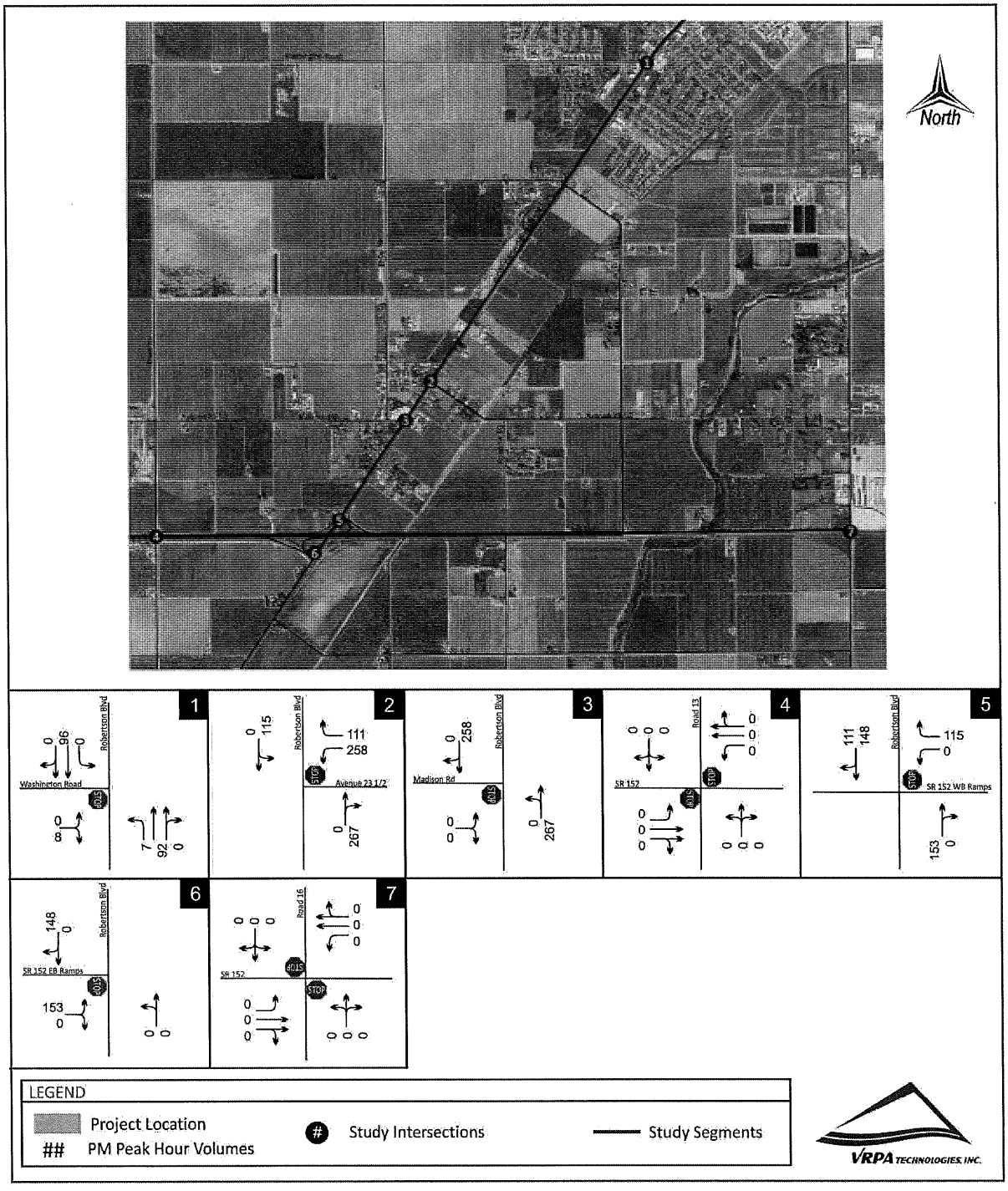
Fagundes Brothers General Plan Amendment
Project AM Peak Hour Volumes

Figure 3-2



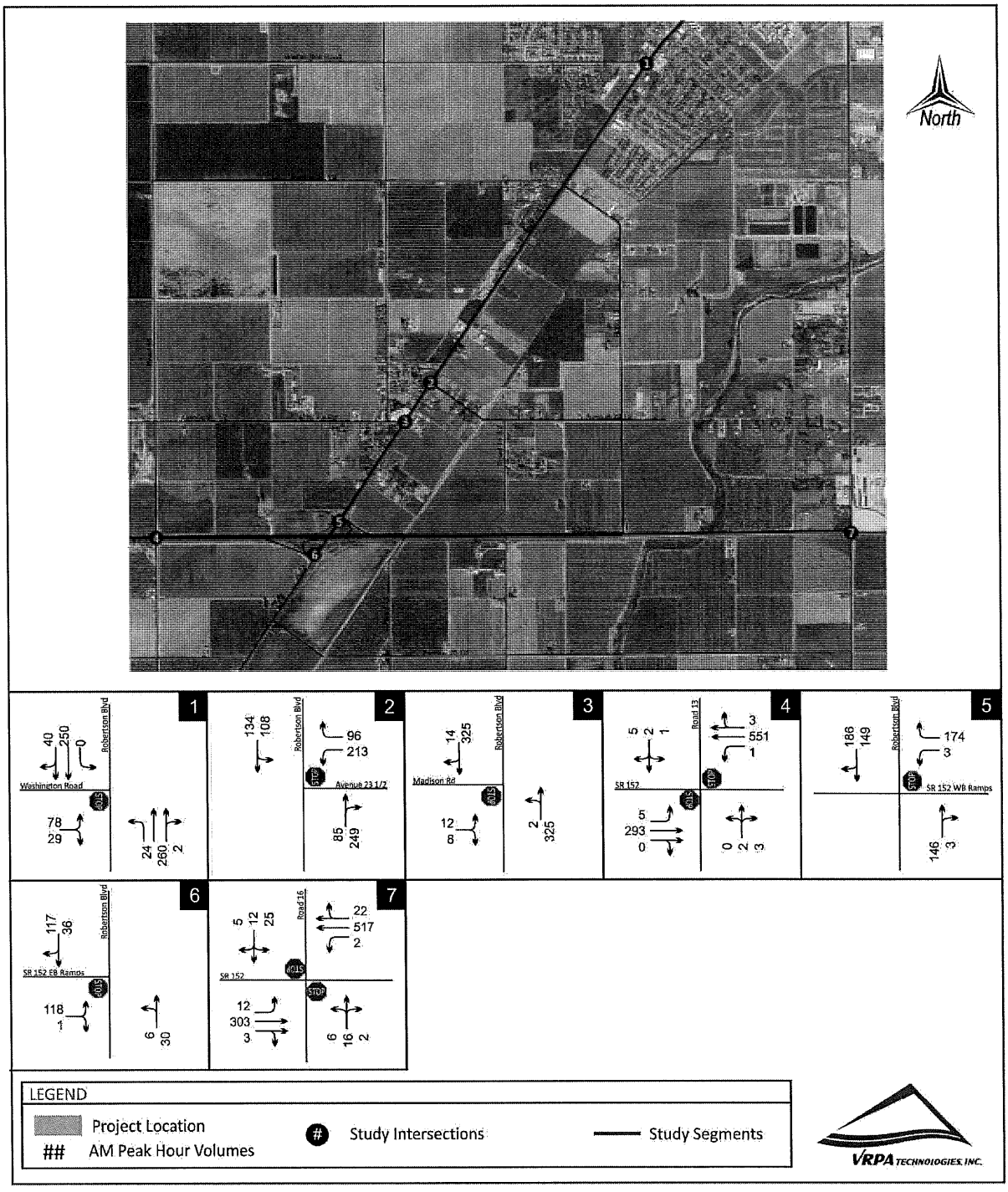
Fagundes Brothers General Plan Amendment
Project PM Peak Hour Volumes

Figure 3-3



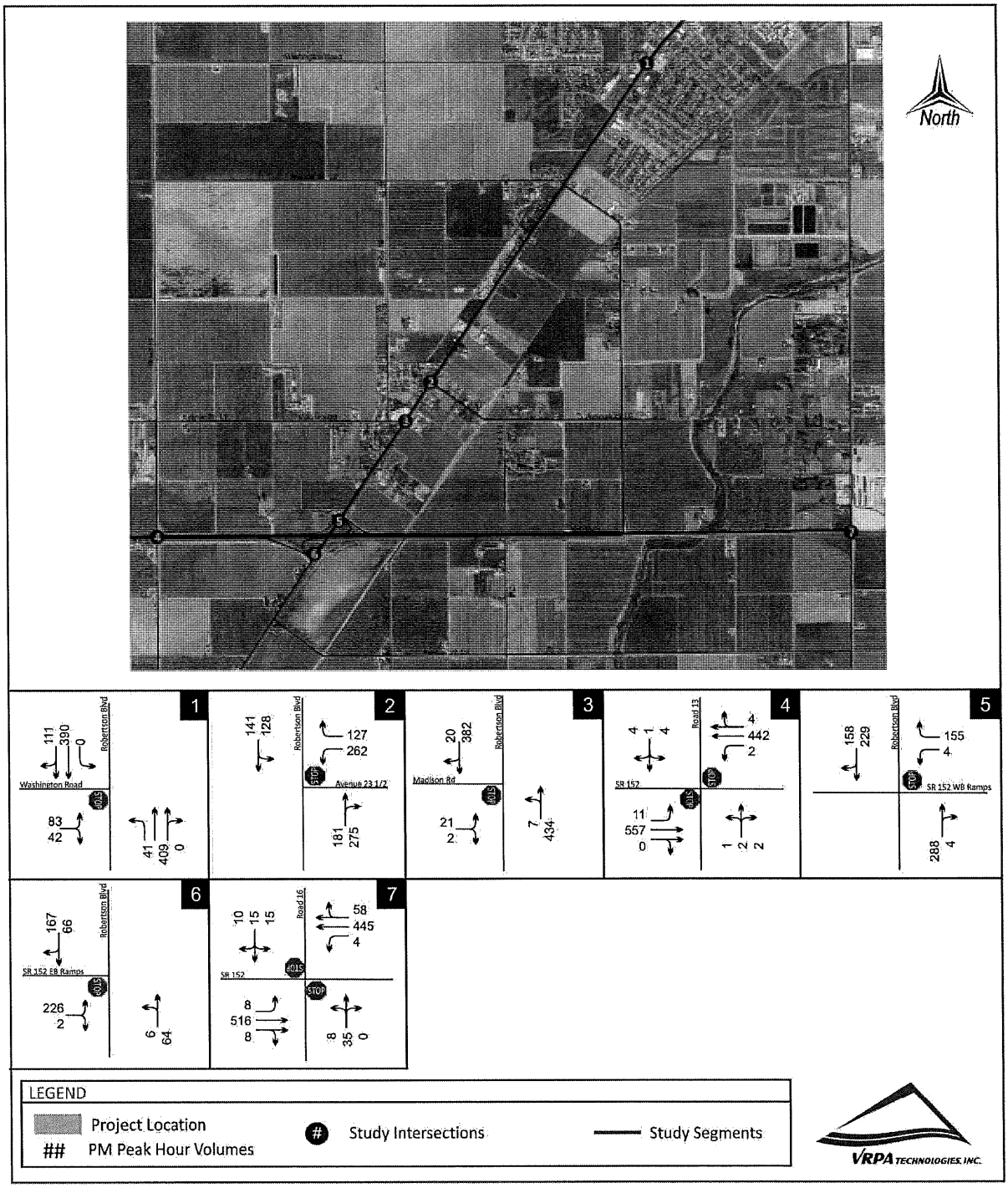
Fagundes Brothers General Plan Amendment
Existing Plus Project AM Peak Hour Volumes

Figure 3-4



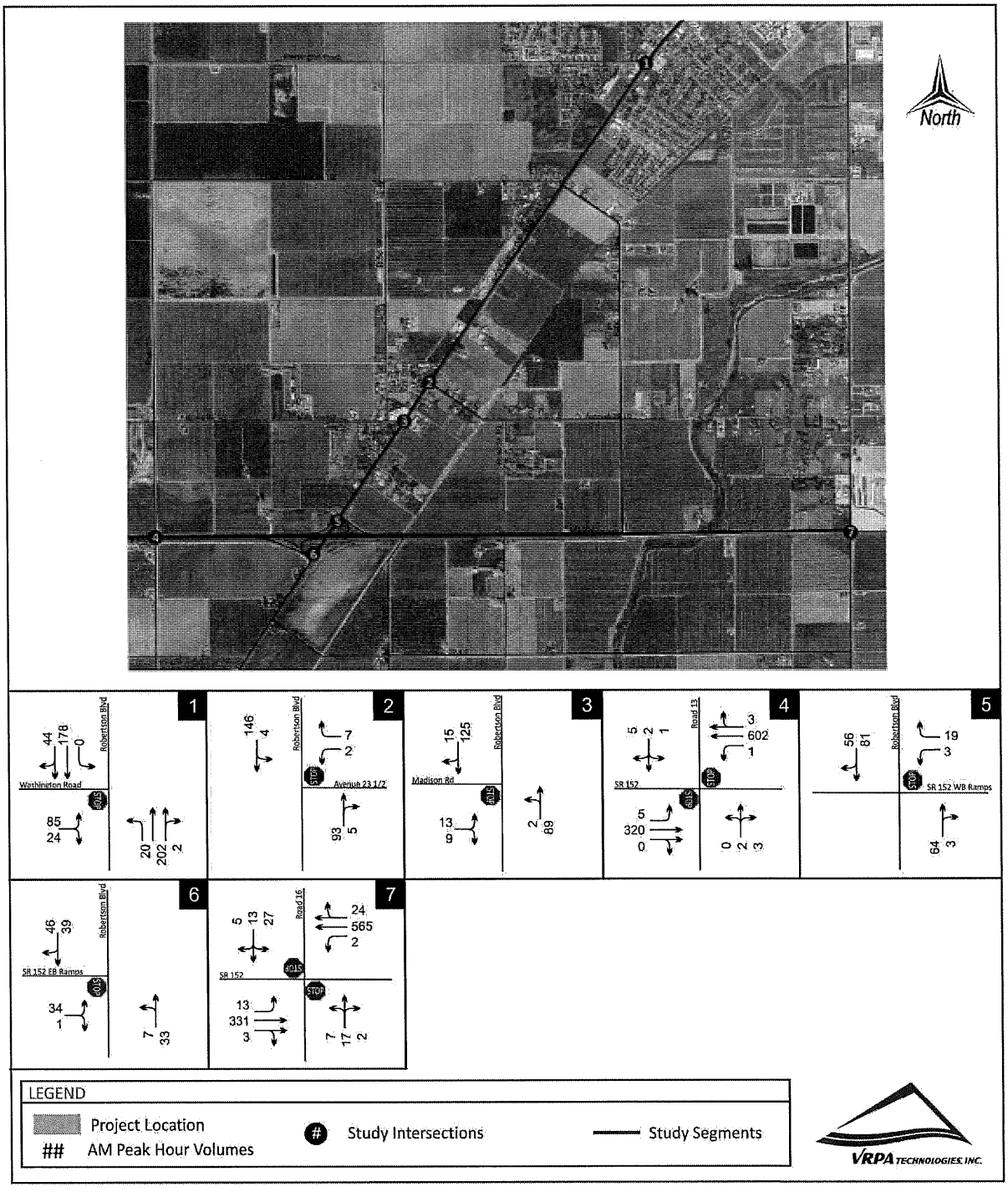
Fagundes Brothers General Plan Amendment
Existing Plus Project PM Peak Hour Volumes

Figure 3-5



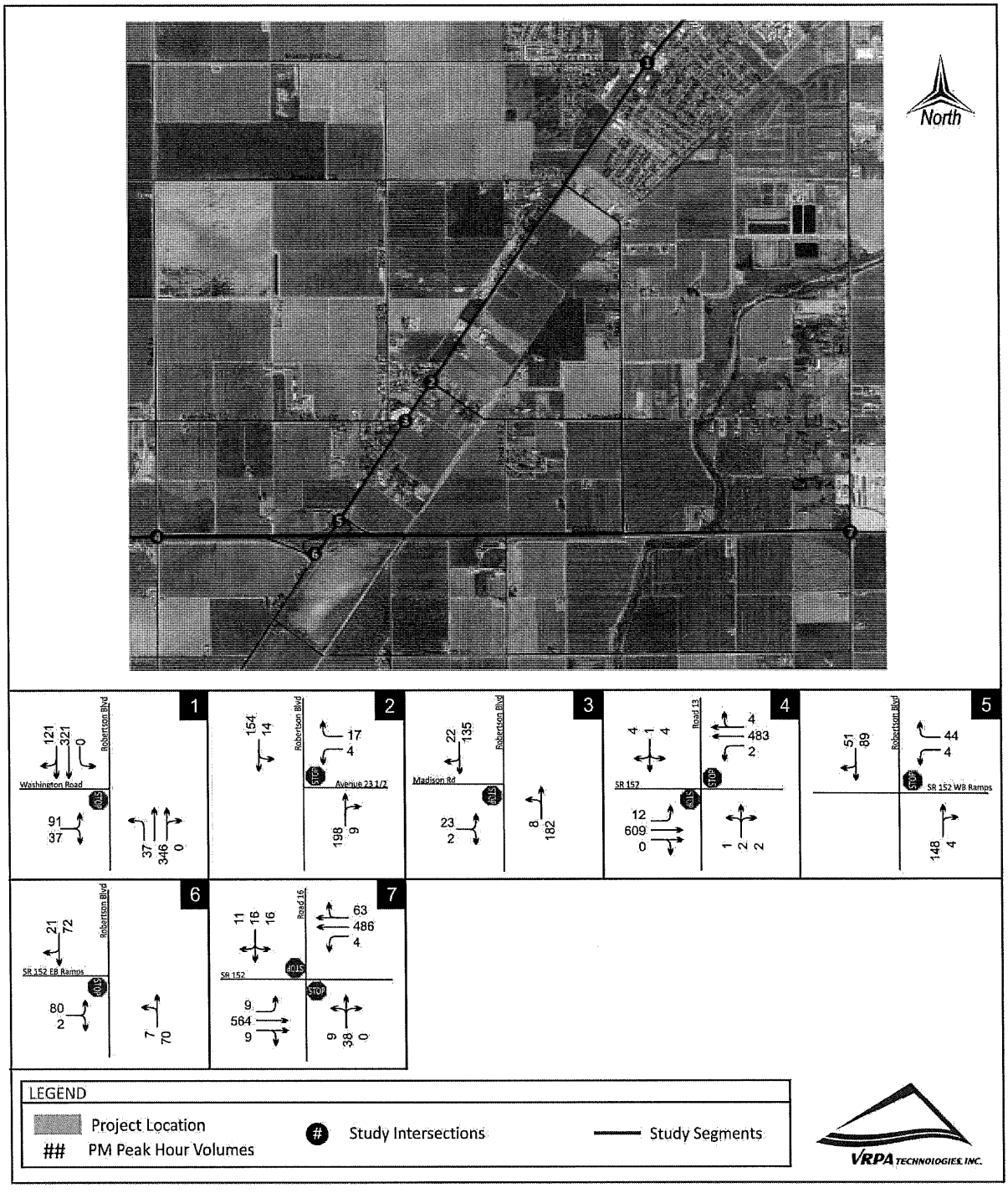
Fagundes Brothers General Plan Amendment
Near-Term Without Project AM Peak Hour Volumes

Figure 3-6



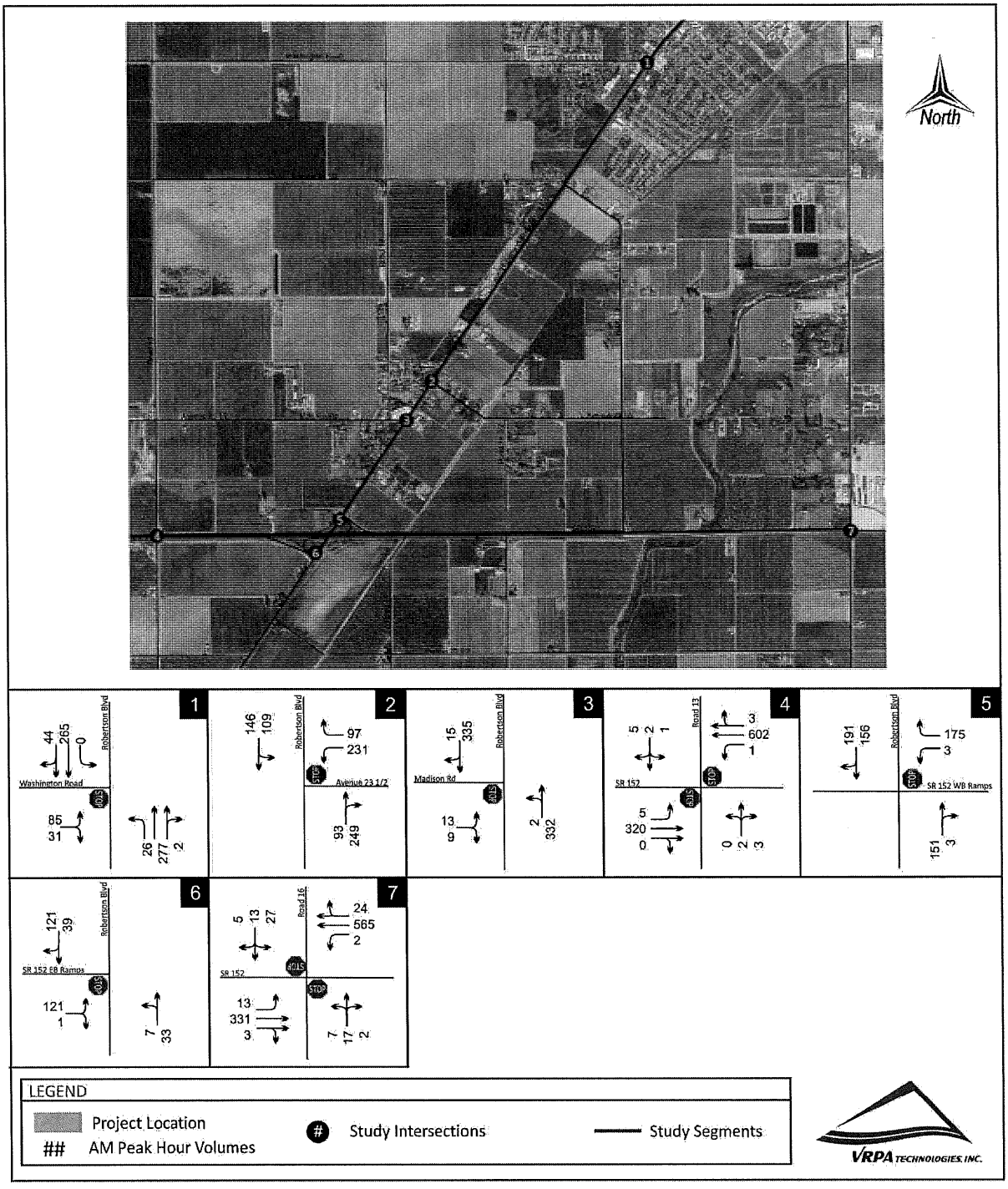
Fagundes Brothers General Plan Amendment
Near-Term Without Project PM Peak Hour Volumes

Figure 3-7



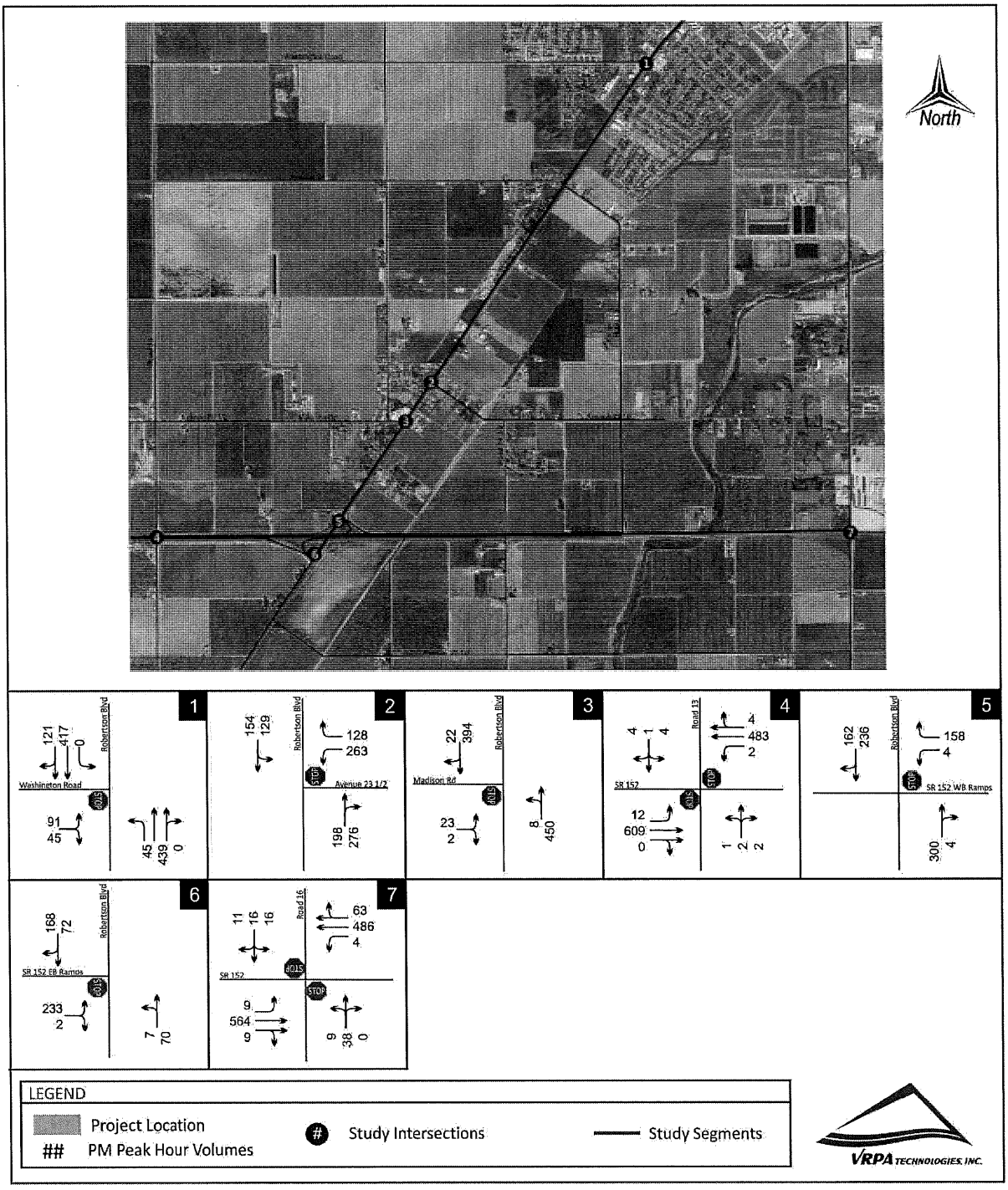
Fagundes Brothers General Plan Amendment
Near-Term Plus Project AM Peak Hour Volumes

Figure 3-8



Fagundes Brothers General Plan Amendment
Near-Term Plus Project PM Peak Hour Volumes

Figure 3-9



3.6 Cumulative Year 2040 Without Project Traffic Conditions

The impacts of the Project were analyzed considering future traffic conditions in the year 2040. The levels of traffic expected in 2040 relate to the cumulative effect of traffic increases resulting from the implementation of the General Plans of local agencies, including the City of Chowchilla and Madera County. Traffic volumes provided in the MCTC base year (2018) and future year model yielded a growth rate of approximately 1% in the study area. In contrast, the Transportation Concept Reports (TCR) for SR 152 and SR 233 yielded a growth rate between 3% and 4%. As a result, a growth rate of 3% per year was utilized to assess Cumulative Year 2040 conditions. The resulting traffic is shown in Figures 3-10 and 3-11.

3.7 Cumulative Year 2040 Plus Project Traffic Conditions

The addition of Project trips, as shown in Figures 3-2 and 3-3 (Section 3.3), were added to Cumulative Year 2040 Without Project traffic volumes. This leads to the results shown in Figures 3-12 and 3-13.

3.8 Impacts

3.8.1 *Intersection Capacity Analysis*

Table 3-2 shows intersections that are expected to fall short of desirable operating conditions for various scenarios. Potential mitigation measures are discussed in Chapter 4 of this report. Results of the analysis show that the Project will result in a direct project-specific impact at two (2) of the seven (7) study intersections, when comparing the Existing and Existing Plus Project scenarios.

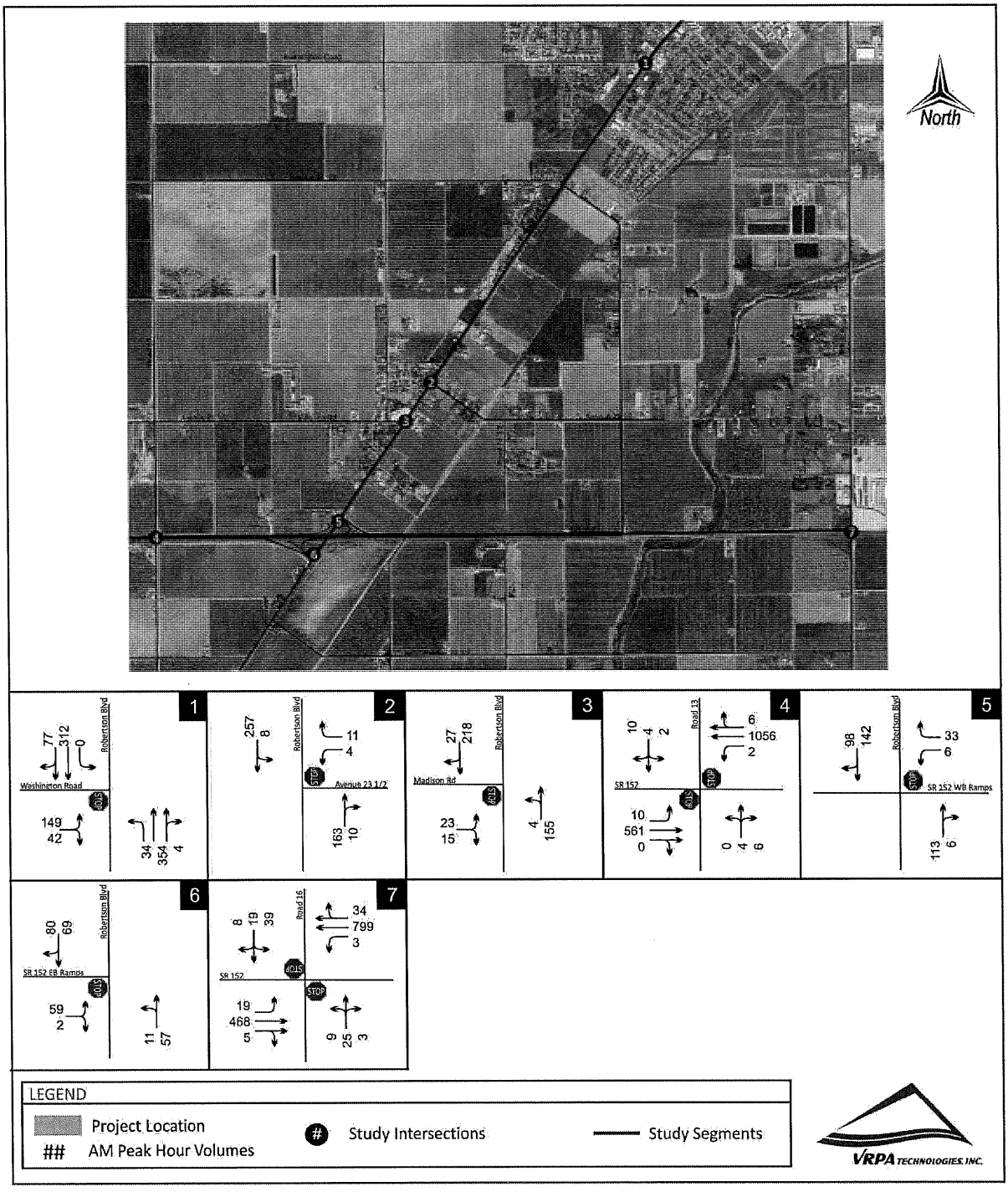
- ✓ Robertson Boulevard (SR 233) / Washington Road
- ✓ Robertson Boulevard (SR 233) / Avenue 23 ½

Results of the analysis also show that the Project will result in a direct project-specific impact at three (3) of the seven (7) study intersections, as shown below, when comparing the Cumulative Year 2040 Without Project and Cumulative Year 2040 Plus Project scenarios.

- ✓ Robertson Boulevard (SR 233) / Washington Road
- ✓ Robertson Boulevard (SR 233) / Avenue 23 ½
- ✓ Robertson Boulevard (SR 223) / Madison Road

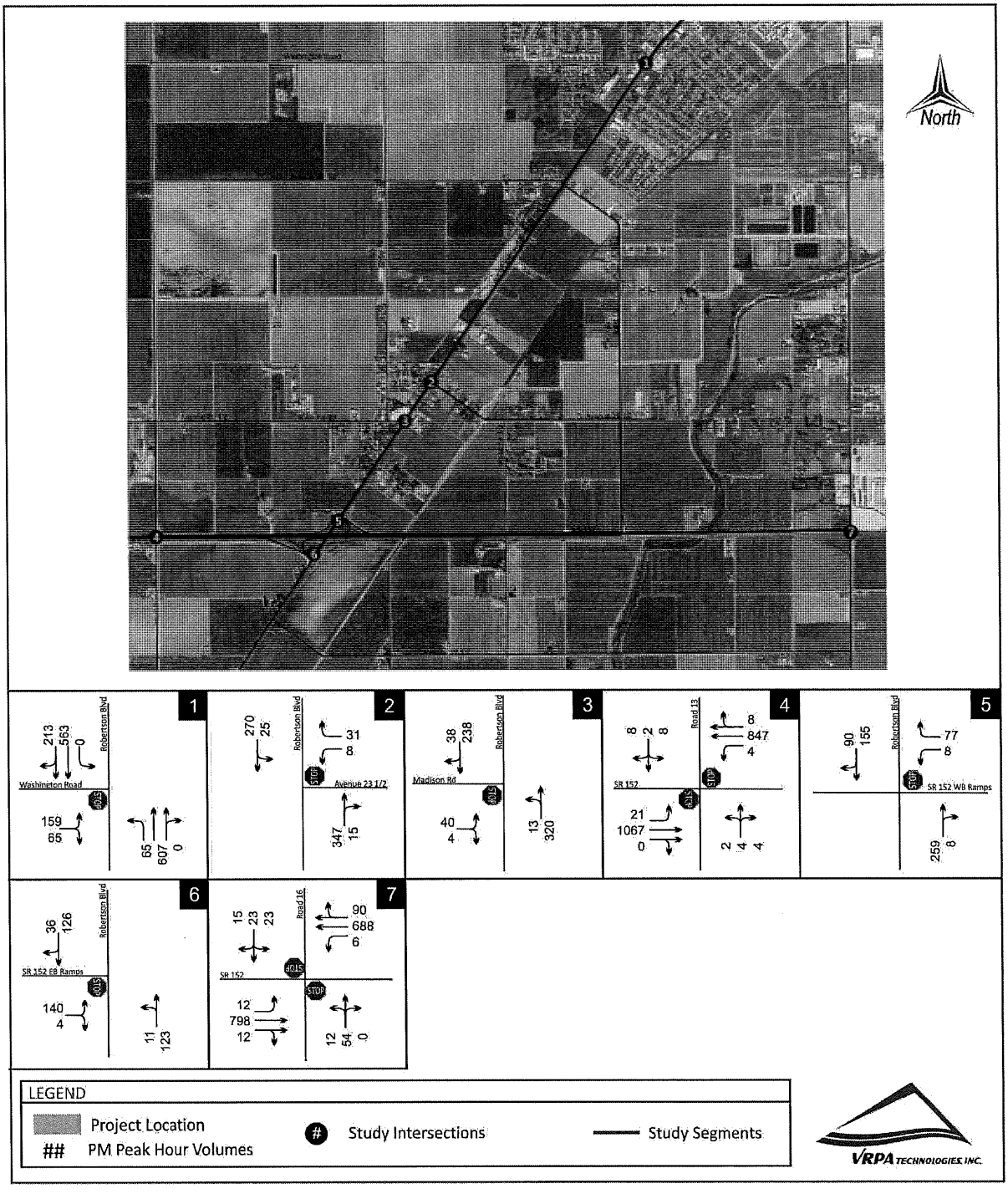
Fagundes Brothers General Plan Amendment
Cumulative Year 2040 Without Project AM Peak Hour Volumes

Figure 3-10



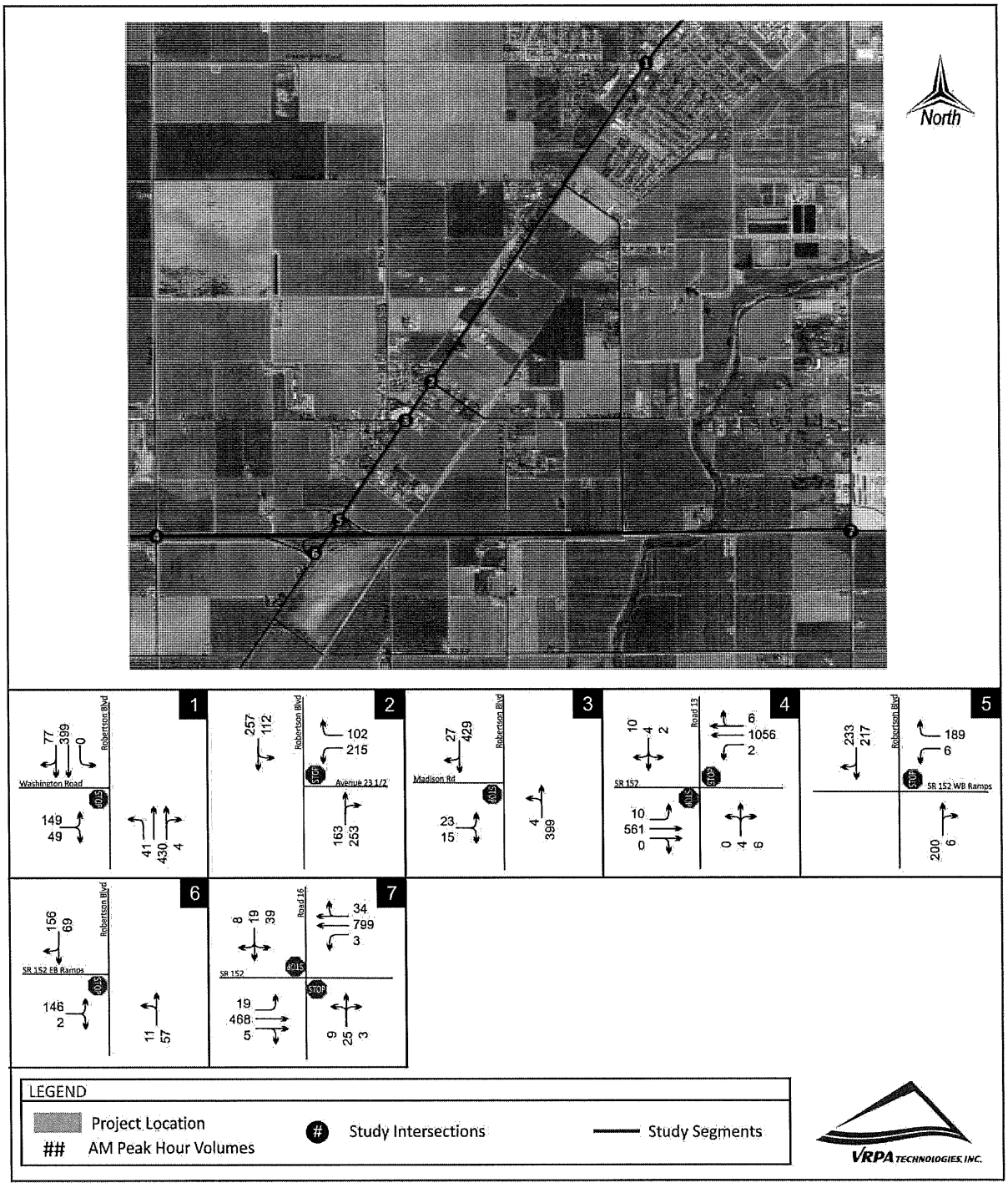
Fagundes Brothers General Plan Amendment
Cumulative Year 2040 Without Project PM Peak Hour Volumes

Figure 3-11



Fagundes Brothers General Plan Amendment
Cumulative Year 2040 Plus Project AM Peak Hour Volumes

Figure 3-12



Fagundes Brothers General Plan Amendment
Cumulative Year 2040 Plus Project PM Peak Hour Volumes

Figure 3-13

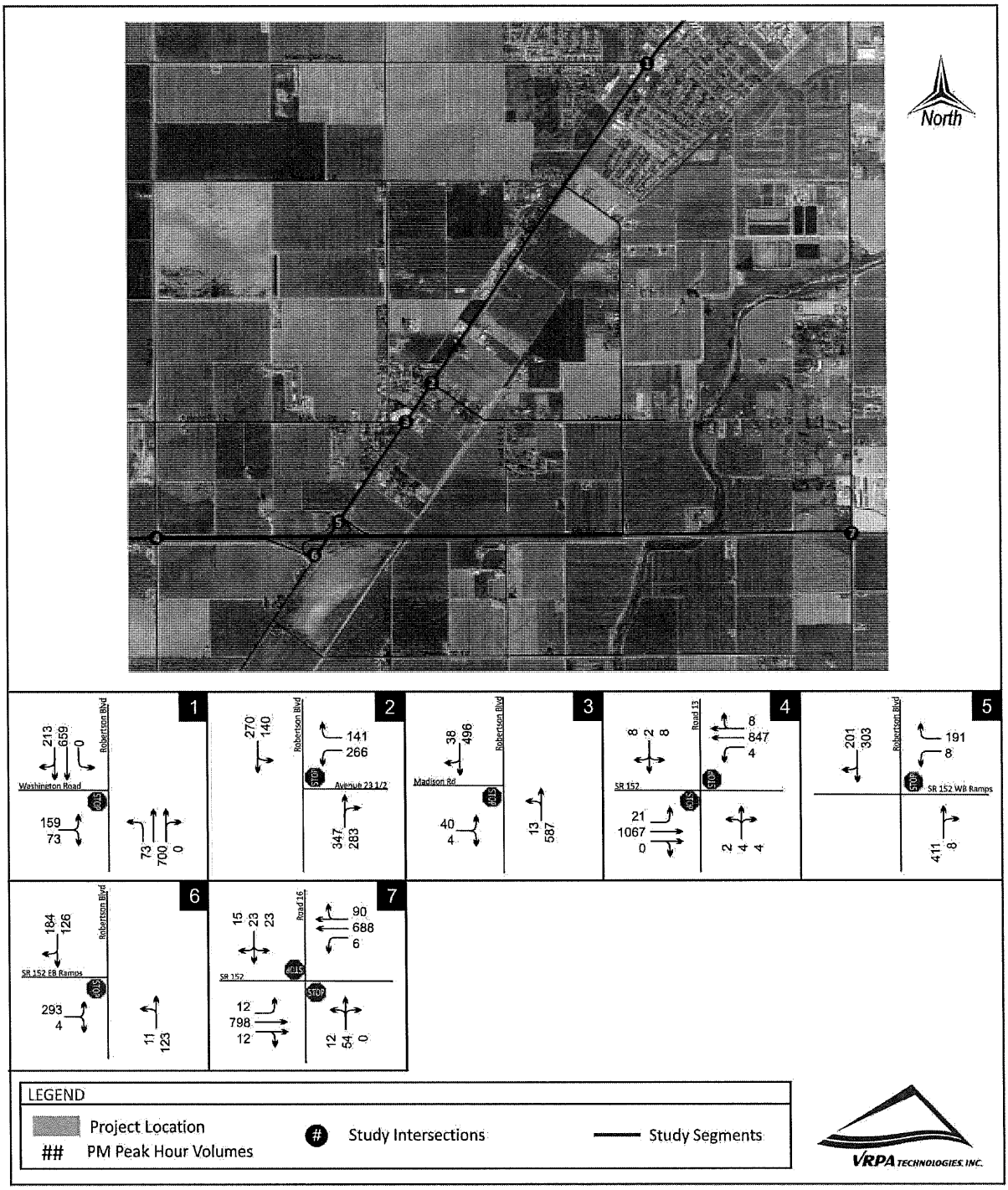


Table 3-2
Intersection Operations

INTERSECTION	CONTROL	TARGET LOS	PEAK HOUR	EXISTING PLUS PROJECT		NEAR-TERM (YEAR 2021) WITHOUT PROJECT		NEAR-TERM (YEAR 2021) PLUS PROJECT		CUMULATIVE YEAR 2040 WITHOUT PROJECT		CUMULATIVE YEAR 2040 PLUS PROJECT	
				DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS
1. Robertson Boulevard (SR 233) / Washington Road	One Way Stop	C	AM	15.3	C	13.3	B	16.5	C	23.9	C	**37.6**	**E**
			PM	**29.5**	**D**	23.8	C	**39.5**	**E**	**283.1**	**F ++**	**300.0+**	**F ++**
2. Robertson Boulevard (SR 233) / Avenue 23 1/2	One Way Stop	C	AM	**41.0**	**E**	10.1	B	**55.6**	**F**	11.7	B	**54.3**	**F**
			PM	**300.0+**	**F ++**	11.6	B	**300.0+**	**F ++**	14.8	B	**300.0+**	**F ++**
3. Robertson Boulevard (SR 233) / Madison Road	One Way Stop	C	AM	13.4	B	9.8	A	13.7	B	11.0	B	16.0	C
			PM	20.3	C	11.4	B	21.6	C	14.2	B	**28.1**	**D**
4. Road 13 / SR 152	Two Way Stop	C	AM	13.4	B	14.1	B	14.1	B	**29.7**	**D**	**29.7**	**D**
			PM	18.6	C	20.7	C	20.7	C	**61.0**	**E**	**61.0**	**F**
5. Robertson Boulevard (SR 233) / SR 152 WB Ramps	One Way Stop	C	AM	11.4	B	9.6	A	11.5	B	10.5	B	12.7	B
			PM	14.1	B	10.3	B	14.4	B	12.0	B	16.9	C
6. Robertson Boulevard (SR 233) / SR 152 EB Ramps	One Way Stop	C	AM	10.5	B	9.5	A	10.6	B	10.1	B	11.3	B
			PM	14.0	B	10.4	B	14.6	B	11.9	B	17.6	C
7. Road 16 / SR 152	Two Way Stop	C	AM	22.7	C	**26.6**	**D**	**26.6**	**D**	**65.9**	**F**	**65.9**	**F**
			PM	32.8	D*	**41.8**	**E**	**41.8**	**E**	**155.2**	**F**	**155.2**	**F**

DELAY is measured in seconds

LOS = Level of Service / **BOLD** denotes LOS standard has been exceeded

For one-way and two-way stop controlled intersections, delay results show the delay for the

+ Delay exceeds 300 seconds.

++ Meets peak hour signal warrant.

* The existing LOS is 'D' or worse. The minimum LOS reflects existing conditoins.

3.8.2 *Roadway Segment Capacity Analysis*

Table 3-3 shows roadway segments that are expected to fall short of desirable operating conditions for various scenarios. Potential mitigation measures are discussed in Chapter 4 of this report. Results of the analysis show that the Project will not result in a direct project-specific impact at two (2) of the four (4) study roadway segments when comparing the Exiting and Existing Plus Project scenarios.

- ✓ Robertson Boulevard (SR 233)
  - Washington Road to Avenue 23 ½ (Southbound travel lane)
  - Avenue 23 ½ to SR 152 WB Ramps

Results of the analysis also show that the Project will result in a direct project-specific impact at two (2) of the four (4) study roadway segments, as shown below, when comparing the Cumulative Year 2040 Without Project and Cumulative Year 2040 Plus Project scenarios.

- ✓ Robertson Boulevard (SR 233)
  - Washington Road to Avenue 23 ½
  - Avenue 23 ½ to SR 152 WB Ramps (Northbound travel lane)

Table 3-3
Segment Operations

STREET SEGMENT	SEGMENT DESCRIPTION	DIRECTION	PEAK HOUR	EXISTING PLUS PROJECT		NEAR-TERM (YEAR 2021) WITHOUT PROJECT		NEAR-TERM (YEAR 2021) PLUS PROJECT		CUMULATIVE YEAR 2040 WITHOUT PROJECT		CUMULATIVE YEAR 2040 PLUS PROJECT	
				VOLUME	LOS	VOLUME	LOS	VOLUME	LOS	VOLUME	LOS	VOLUME	LOS
State Route 152													
Road 13 to Robertson Boulevard (SR 233)	4 Lanes Divided	EB	AM	297	C	325	C	325	C	569	C	569	C
			PM	563	C	615	C	615	C	1,079	C	1,079	C
	4 Lanes Divided	WB	AM	559	C	606	C	606	C	1,063	C	1,063	C
			PM	448	C	490	C	490	C	858	C	858	C
Robertson Boulevard (SR 233) to Road 16	4 Lanes Divided	EB	AM	318	C	347	C	347	C	492	C	492	C
			PM	532	C	581	C	581	C	822	C	822	C
	4 Lanes Divided	WB	AM	528	C	577	C	577	C	816	C	816	C
			PM	463	C	506	C	506	C	716	C	716	C
Robertson Boulevard (SR 233)													
Washington Road to Avenue 23 1/2	2 Lanes Undivided	NB	AM	286	D*	224	D*	305	D*	393	D*	474	D*
			PM	451	D*	384	D*	483	D*	673	D*	**772**	**E**
	2 Lanes Undivided	SB	AM	**279**	**D**	**202**	**D**	**296**	**D**	**354**	**D**	**448**	**D**
			PM	431	D*	358	D*	462	D*	628	D*	**732**	**E**
Avenue 23 1/2 to SR 152 WB Ramps	2 Lanes Undivided	NB	AM	**334**	**D**	98	C	**342**	**D**	178	C	**422**	**D**
			PM	**456**	**D**	**207**	**D**	**474**	**D**	**362**	**D**	**630**	**D**
	2 Lanes Undivided	SB	AM	**347**	**D**	149	C	**359**	**D**	**261**	**D**	**471**	**D**
			PM	**419**	**D**	176	C	**434**	**D**	**308**	**D**	**567**	**D**

LOS = Level of Service / **BOLD** denotes LOS standard has been exceeded
* The existing LOS is 'D' or worse. The minimum LOS reflects existing conditions.

3.9 Queuing Analysis

Table 3-4 provides a queue length summary for left and right turn lanes at the study intersections for the study scenarios identified previously. The queuing analyses is based upon methodology presented in Chapter 400 of Caltrans' HDM. The queue results shown in Table 3-4 represent the approximate queue lengths for the respective lane movements. A minimum queue length of 25ft was assumed for all turning movements unless the turning movement volume was zero (0).

Table 3-4
Queuing Operations

INTERSECTION	EXISTING QUEUE STORAGE LENGTH (ft)		EXISTING PLUS PROJECT		NEAR-TERM (YEAR 2021) WITHOUT PROJECT		NEAR-TERM (YEAR 2021) PLUS PROJECT		CUMULATIVE YEAR 2040 WITHOUT PROJECT		CUMULATIVE YEAR 2040 PLUS PROJECT	
			AM Queue	PM Queue	AM Queue	PM Queue	AM Queue	PM Queue	AM Queue	PM Queue	AM Queue	PM Queue
1. Robertson Boulevard (SR 233) / Washington Road	NB Left	50	28	48	25	43	30	**53**	40	**76**	48	**85**
	SB Left	50	0	0	0	0	0	0	0	0	0	0
2. Robertson Boulevard (SR 233) / Avenue 23 1/2	WB Left	75	**249**	**306**	25	25	**270**	**307**	25	25	**251**	**310**
4. Road 13 / SR 152	EB Left	325	25	25	25	25	25	25	25	25	25	25
	WB Left	300	25	25	25	25	25	25	25	25	25	25
5. Robertson Boulevard (SR 233) / SR 152 WB Ramps	WB Left	100	25	25	25	25	25	25	25	25	25	25
7. Road 16 / SR 152	EB Left	300	25	25	25	25	25	25	25	25	25	25
	WB Left	300	25	25	25	25	25	25	25	25	25	25

Queue is measured in feet / **BOLD** denotes exceedance

4.0 Mitigation

As discussed in Section 3.0 Impacts, the potentially significant impacts resulting from the Project relate to the generation of unacceptable LOS at various intersections and road segments for the Existing Plus Project, Near-Term Plus Project, and Cumulative Year 2040 Plus Project scenarios. Described below are improvements at study area intersections and segments for various scenarios that would result in acceptable levels of service. In order to mitigate the Project's impacts, it is recommended that the Project contribute traffic impact fees, as determined by Madera County. The payment of these fair-share fees would be used to help fund the applicant's fair-share percentage of the improvements discussed below to mitigate the Project's traffic impacts to less than significant levels.

The following improvements are recommended to alleviate project-specific impacts. The existing road network can be mitigated to ease many of the impacts of the Project and projected future traffic through the year 2040.

4.1 Existing Plus Project Mitigation Measures

4.1.1 *Intersections*

✓ Robertson Boulevard (SR 233) / Washington Road
Recommended improvements to achieve acceptable levels of service:
- Widen the southbound approach to 1 left turn lane, 2 through lanes, and 1 right turn lane (adding 1 right turn lane)

The improvements identified above for the Existing Plus Project scenario are sufficient to meet Caltrans' acceptable LOS standard of 'C'.

✓ Robertson Boulevard (SR 233) / Avenue 23 ½
Recommended improvements to achieve acceptable levels of service:
- Install Traffic Signal

The improvements identified above for the Existing Plus Project scenario are sufficient to meet Caltrans' acceptable LOS standard of 'C'.

4.1.2 *Roadway Segments*

✓ Robertson Boulevard (SR 233) between Washington Road and Avenue 23 ½
Recommended improvements to achieve acceptable levels of service:
- Widen the southbound travel lane from 1 to 2 lanes (adding 1 travel lane)

✓ Robertson Boulevard (SR 233) between Avenue 23 ½ and SR 152 WB Ramps
Recommended improvements to achieve acceptable levels of service:

- Widen the northbound travel lane from 1 to 2 lanes (adding 1 travel lane)
- Widen the southbound travel lane from 1 to 2 lanes (adding 1 travel lane)

The improvements identified above for the Existing Plus Project scenario are sufficient to meet Caltrans' acceptable LOS standard of 'C'.

4.2 Near-Term Plus Project Mitigation Measures

4.1.1 *Intersections*

✓ Robertson Boulevard (SR 233) / Washington Road
Recommended improvements to achieve acceptable levels of service:
- Widen the southbound approach to 1 left turn lane, 2 through lanes, and 1 right turn lane (adding 1 right turn lane)

The improvements identified above for the Near-Term Plus Project scenario are sufficient to meet Caltrans' acceptable LOS standard of 'C' for the AM peak hour. The improvements identified above will achieve LOS 'D' for the PM peak hour. It should be noted that the intersection does not meet the peak hour signal warrant for the Near-Term Plus Project scenario.

✓ Robertson Boulevard (SR 233) / Avenue 23 ½
Recommended improvements to achieve acceptable levels of service:
- Install Traffic Signal

The improvements identified above for the Near-Term Plus Project scenario are sufficient to meet Caltrans' acceptable LOS standard of 'C'.

✓ Road 16 / SR 152
No improvements recommended

Improvements were not identified for the Near-Term Plus Project scenario since the intersection is not anticipated to meet peak hour signal warrants at that time. Installation of a traffic signal at this location would alleviate the level of service deficiency. It should be noted that Project traffic does not impact this intersection. Caltrans is planning to construct an interchange at this location in the future.

4.1.2 *Roadway Segments*

✓ Robertson Boulevard (SR 233) between Washington Road and Avenue 23 ½
Recommended improvements to achieve acceptable levels of service:
- Widen the southbound travel lane from 1 to 2 lanes (adding 1 travel lane)

✓ Robertson Boulevard (SR 233) between Avenue 23 ½ and SR 152 WB Ramps
Recommended improvements to achieve acceptable levels of service:

- Widen the northbound travel lane from 1 to 2 lanes (adding 1 travel lane)
- Widen the southbound travel lane from 1 to 2 lanes (adding 1 travel lane)

The improvements identified above for the Near-Term Plus Project scenario are sufficient to meet Caltrans' acceptable LOS standard of 'C'.

4.3 Cumulative Year 2040 Plus Project Mitigation Measures

4.3.1 *Intersections*

✓ Robertson Boulevard (SR 233) / Washington Road
Recommended improvements to achieve acceptable levels of service:
- Install Traffic Signal
- Widen the southbound approach to 1 left turn lane, 2 through lanes, and 1 right turn lane (adding 1 right turn lane)

The improvements identified above for the Cumulative Year 2040 Plus Project scenario are sufficient to meet Caltrans' acceptable LOS standard of 'C'.

✓ Robertson Boulevard (SR 233) / Avenue 23 ½
Recommended improvements to achieve acceptable levels of service:
- Install Traffic Signal

The improvements identified above for the Cumulative Year 2040 Plus Project scenario are sufficient to meet Caltrans' acceptable LOS standard of 'C'.

✓ Robertson Boulevard (SR 233) / Madison Road
No improvements recommended

Improvements were not identified for the Cumulative Year 2040 Plus Project scenario since the intersection is not anticipated to meet peak hour signal warrants at that time. Installation of a traffic signal at this location would alleviate the level of service deficiency.

✓ Road 13 / SR 152
No improvements recommended

Improvements were not identified for the Cumulative Year 2040 Plus Project scenario since the intersection is not anticipated to meet peak hour signal warrants at that time. Installation of a traffic signal at this location would alleviate the level of service deficiency. It should be noted that Project traffic does not impact this intersection.

✓ Road 16 / SR 152
No improvements recommended

Improvements were not identified for the Cumulative Year 2040 Plus Project scenario since the

intersection is not anticipated to meet peak hour signal warrants at that time. Installation of a traffic signal at this location would alleviate the level of service deficiency. It should be noted that Project traffic does not impact this intersection.

Caltrans is planning to construct an interchange at this location in the future. The level of service at this location, considering the project Cumulative 2040 Plus Project volumes, is provided below in Table 4-1.

4.3.2 *Roadway Segments*

✓ Robertson Boulevard (SR 233) between Washington Road and Avenue 23 ½
Recommended improvements to achieve acceptable levels of service:
- Widen the northbound travel lane from 1 to 2 lanes (adding 1 travel lane)
- Widen the southbound travel lane from 1 to 2 lanes (adding 1 travel lane)

✓ Robertson Boulevard (SR 233) between Avenue 23 ½ and SR 152 WB Ramps
Recommended improvements to achieve acceptable levels of service:
- Widen the northbound travel lane from 1 to 2 lanes (adding 1 travel lane)
- Widen the southbound travel lane from 1 to 2 lanes (adding 1 travel lane)

The improvements identified above for the Cumulative Year 2040 Plus Project scenario are sufficient to meet Caltrans' acceptable LOS standard of 'C'.

Post-Mitigation Level of Significance

The level of service resulting from the potential improvements identified above is shown in Table 4-1 for study area intersections and Table 4-2 for study segments.

In addition to the proposed improvements identified above, Table 4-3 identifies left turn and right pocket lengths required for the Cumulative Year 2040 scenario. The determination of the recommended storage length was determined by the queuing analysis.

4.4 Equitable Fair-Share Responsibility

The proposed Project will be required to contribute a fair-share towards the costs of improvements that are identified for the Cumulative Year 2040 scenario. The intent of determining the equitable responsibility for the improvements identified above for the Cumulative Year 2040 scenario, is to provide a starting point for early discussions between the applicant and the County to address traffic mitigation equitability and to calculate the equitable share for mitigating traffic impacts. The formulas used to calculate the equitable share responsibility to Caltrans facilities is as follows:

Equitable Share = (Project Trips)/(Future Year Plus Project Traffic – Existing Traffic)

Table 4-4 shows the Project's equitable fair share responsibility on a percentage basis for improvements to Caltrans facilities as described above. The equitable fair share responsibility shown in Table 4-4 is the result of LOS enhancements related to capacity.

Table 4-1
Intersection Operations with Mitigation

INTERSECTION	TARGET LOS	PEAK HOUR	EXISTING PLUS PROJECT		NEAR-TERM (YEAR 2020) PLUS PROJECT		CUMULATIVE YEAR 2040 PLUS PROJECT	
			DELAY	LOS	DELAY	LOS	DELAY	LOS
1. Robertson Boulevard (SR 233) / Washington Road	C	AM	14.7	B	15.8	C	8.9	A
		PM	24.6	C	**31.2**	**D**	10.7	B
2. Robertson Boulevard (SR 233) / Avenue 23 1/2	C	AM	7.8	A	8.3	A	7.2	A
		PM	16.4	B	18.4	B	13.1	B
3. Robertson Boulevard (SR 233) / Madison Road	C	AM					16.0	C
		PM					**28.1**	**D**
4. Road 13 / SR 152	C	AM					**29.7**	**D**
		PM					**61.0**	**F**
7. Road 16 / SR 152	C	AM			**26.2**	**D**	**65.9**	**F**
		PM			**41.8**	**E**	**155.2**	**F**
Road 16 / SR 152 WB Ramps	C	AM					9.1	A
		PM					9.2	A
Road 16 / SR 152 EB Ramps	C	AM					9.0	A
		PM					8.9	A

DELAY is measured in seconds

LOS = Level of Service / **BOLD** denotes LOS standard has been exceeded

Table 4-2
Segment Operations with Mitigation

STREET SEGMENT	DIRECTION	PEAK HOUR	EXISTING PLUS PROJECT		NEAR-TERM (YEAR 2020) PLUS PROJECT		CUMULATIVE YEAR 2040 PLUS PROJECT	
			VOLUME	LOS	VOLUME	LOS	VOLUME	LOS
Robertson Boulevard (SR 233)								
Washington Road to Avenue 23 1/2	NB	AM					474	C
		PM					772	C
	SB	AM	279	C	296	C	448	C
		PM	431	C	462	C	732	C
Avenue 23 1/2 to SR 152 WB Ramps	NB	AM	337	C	342	C	422	C
		PM	456	C	474	C	630	C
	SB	AM	347	C	359	C	471	C
		PM	419	C	434	C	567	C

LOS = Level of Service / **BOLD** denotes LOS standard has been exceeded

Table 4-3
Left Turn and Right Turn Storage Requirements

INTERSECTION	EXISTING QUEUE STORAGE LENGTH (ft)		CUMULATIVE YEAR 2040 PLUS PROJECT RECOMMENDED STORAGE LENGTH (ft)
1. Robertson Boulevard (SR 233) / Washington Road	NB Left	50	100
	SB Left	50	50
2. Robertson Boulevard (SR 233) / Avenue 23 1/2	WB Left	75	300
4. Road 13 / SR 152	EB Left	325	325
	WB Left	300	300
5. Robertson Boulevard (SR 233) / SR 152 WB Ramps	WB Left	100	100
7. Road 16 / SR 152	EB Left	300	300
	WB Left	300	300

Table 4-4
Cumulative Year 2040 Equitable Fair-Share Responsibility

INTERSECTION	PEAK HOUR	EXISTING	PROJECT TRIPS	CUMULATIVE YEAR 2040 PLUS PROJECT	FAIR SHARE PERCENTAGE
Robertson Boulevard (SR 233) / Washington Road	AM	508	175	1,149	27.3%
	PM	873	203	1,877	20.2%
Robertson Boulevard (SR 233) / Avenue 23 ½	AM	236	649	1,102	74.9%
	PM	363	751	1,447	69.3%
ROADWAY SEGMENTS					
Robertson Boulevard (SR 233)					
Washington Road to Avenue 23 1/2	NB AM	205	81	474	30.1%
	NB PM	351	99	772	23.5%
	SB AM	185	94	448	35.7%
	SB PM	328	104	732	25.7%
Avenue 23 1/2 and SR 152 WB Ramps	NB AM	90	244	422	73.5%
	NB PM	189	268	630	60.8%
	SB AM	136	210	471	62.7%
	SB PM	145	259	567	61.4%

EXHIBIT K

Environmental Checklist Form

Title of Proposal: PRJ Bbs #2018-006, Fagundes

Date Checklist Submitted: 11/9/2018

Agency Requiring Checklist: Community & Economic Development Department – Planning Division

Agency Contact: Jamie Bax, Senior Planner **Phone:** (559) 675-7821

Description of Initial Study/Requirement

The Initial Study is a public document used by the decision-making lead agency to determine whether a project may have significant effects on the environment. In the case of the proposed project, the Madera County Planning Department, acting as lead agency, will use the initial study to determine whether the project has a significant effect on the environment. In accordance with CEQA, Guidelines (Section 15063[a]), an environmental impact report (EIR) must be prepared if there is substantial evidence (such as results of the Initial Study) that a project may have significant effect on the environment. This is true regardless of whether the overall effect of the project would be adverse or beneficial. A negative declaration (ND) or mitigated negative declaration (MND) may be prepared if the lead agency determines that the project would have no potentially significant impacts or that revisions to the project, or measures agreed to by the applicant, mitigate the potentially significant impacts to a less-than-significant level.
The initial study considers and evaluates all aspects of the project which are necessary to support the proposal. The complete project description includes the site plan, operational statement, and other supporting materials which are available in the project file at the office of the Madera County Planning Department.

Description of Project:

The request is for a General Plan Amendment from AR and VLDR to CC and a Rezone from AR-5 and RRS to CRG.

Project Location:

The property is located on the northwest and northeast corners of the intersection of Highway 152 and Road 14 1/2 (14181 Highway 152 and no situs) Chowchilla.

Applicant Name and Address:

Fagundes Brothers
PO Box 2717
Merced, CA 95344

General Plan Designation:

AR – Agriculture Residential
VLDR- Very Low Density Residential

Zoning Designation:

RRS – Residential Rural Single Family
AR-5 – Agricultural Rural – 5 Acres

Surrounding Land Uses and Setting:

Rural Residential
Commercial
Agricultural

Other Public Agencies whose approval is required:

None

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

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

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

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

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

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

☐
Prior EIR or ND/MND Number

_____ _____

Signature Date

I. AESTHETICS -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐

Discussion:

(a) No Impact
According to the Caltrans Map of Designated Scenic Routes, there are no official state-designated scenic routes or eligible state scenic routes in the area.
(b) No Impact
No scenic resources are located on the project site, no impacts have been identified as a result of this project.
(c) No Impact
The proposed project is consistent with surrounding commercial lands which includes highway serving commercial businesses.
(d) Less than Significant Impact with Mitigation Incorporated
The proposed project will not create a substantial new amount of light as an individual project, but will contribute to the amount of light in the area as a whole. The impact of this new light source will be less than significant with the mitigation measure of shielding light and directing it away from neighboring properties. Lights used during constructing will also be mitigated as to not cause a significant impact to surrounding properties and habitats.

General Information:

A nighttime sky in which stars are readily visible is often considered a valuable scenic/visual resource. In urban areas, views of the nighttime sky are being diminished by "light pollution." Light pollution, as defined by the International dark-Sky Association, is any adverse effect of artificial light, including sky glow, glare, light trespass, light clutter, decreased visibility at night, and energy waste. Two elements of light pollution may affect city residents: sky glow and light trespass. Sky glow is a result of light fixtures that emit a portion of their light directly upward into the sky where light scatters, creating an orange-yellow glow above a city or town. This light can interfere with views of the nighttime sky and can diminish the number of stars that are visible. Light trespass occurs when poorly shielded or poorly aimed fixtures cast light into unwanted areas, such as neighboring property and homes.

Light pollution is a problem most typically associated with urban areas. Lighting is necessary for nighttime viewing and for security purposes. However, excessive lighting or inappropriately designed lighting fixtures can disturb nearby sensitive land uses through indirect illumination. Land uses which are considered "sensitive" to this unwanted light include residences, hospitals, and care homes.

Daytime sources of glare include reflections off of light-colored surfaces, windows, and metal details on cars traveling on nearby roadways. The amount of glare depends on the intensity and direction of sunlight, which is more acute at sunrise and subset because the angle of the sun is lower during these times.

III. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

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

Discussion:

(a) Less than Significant Impact
The property does contain Farmland of Statewide Importance; however, only the first approximately 500 feet of frontage property along SR 152 is proposed to be converted to commercial use. The rest of the property, consisting of approximately 105 acres will remain in agricultural use.

(b) No Impact
The property is not subject to a Williamson Act Contract.

(c) No Impact
The property is not located in an area near forest land.

(d) No Impact
The project site is not located in area impacted by forest land.

(e) Less than Significant Impact
See a.

General Information

The California Land Conservation Act of 1965--commonly referred to as the Williamson Act--enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value.

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

PRIME FARMLAND (P): Farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

FARMLAND OF STATEWIDE IMPORTANCE (S): Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

UNIQUE FARMLAND (U): Farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.

FARMLAND OF LOCAL IMPORTANCE (L): Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

GRAZING LAND (G): Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres.

URBAN AND BUILT-UP LAND (D): Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

OTHER LAND (X): Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐

d)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Discussion:

(a) Less than Significant Impact
The project is a general plan amendment and rezone for approximately 38 acres to commercial use along the SR 152/Robertson Blvd corridor. A Traffic Impact Study was prepared addressing additional traffic trips to the area. While the number of trips will be increased, the contribution to the overall amount of traffic and impacts to air quality as a whole will be less than significant.

(b) Less than Significant Impact
See a.

(c) Less than Significant Impact
See a.

(d) Less than Significant Impact
See a.

(e) Less than Significant Impact
See a.

General Information

Global Climate Change

Climate change is a shift in the "average weather" that a given region experiences. This is measured by changes in temperature, wind patterns, precipitation, and storms. Global climate is the change in the climate of the earth as a whole. It can occur naturally, as in the case of an ice age, or occur as a result of anthropogenic activities. The extent to which anthropogenic activities influence climate change has been the subject of extensive scientific inquiry in the past several decades. The Intergovernmental Panel on Climate Change (IPCC), recognized as the leading research body on the subject, issued its Fourth Assessment Report in February 2007, which asserted that there is "very high confidence" (by IPCC definition a 9 in 10 chance of being correct) that human activities have resulted in a net warming of the planet since 1750.

CEQA requires an agency to engage in forecasting "to the extent that an activity could reasonably be expected under the circumstances. An agency cannot be expected to predict the future course of governmental regulation or exactly what information scientific advances may ultimately reveal" (CEQA Guidelines Section 15144, Office of Planning and Research commentary, citing the California Supreme Court decision in Laurel Heights Improvement Association v. Regents of the University of California [1988] 47 Cal. 3d 376).

Recent concerns over global warming have created a greater interest in greenhouse gases (GHG) and their contribution to global climate change (GCC). However at this time there are no generally accepted thresholds of significance for determining the impact of GHG emissions from an individual project on GCC. Thus, permitting agencies are in the position of developing policy and guidance to ascertain and mitigate to the extent feasible the effects of GHG, for CEQA purposes, without the normal degree of accepted guidance by case law.

IV. BIOLOGICAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) 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?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

Discussion:

(a) Less than Significant Impact
The project site has historically been planted in almonds. There are no sensitive habitats on the site, nor will there be any high likelihood of sensitive species being impacted as a result of this project.
(b) No Impact
No riparian habitats exist on the site.
(c) No Impact
See b.
(d) Less than Significant Impact
See a.
(e) Less than Significant Impact
See a.
(f) Less than Significant Impact
See a.

General Information

Special Status Species include:

- Plants and animals that are legally protected or proposed for protection under the California Endangered Species Act (CESA) or Federal Endangered Species Act (FESA);
- Plants and animals defined as endangered or rare under the California Environmental Quality Act (CEQA) §15380;
- Animals designated as species of special concern by the U.S. Fish and Wildlife Service

(USFWS) or California Department of Fish and Game (CDFG);

- Animals listed as "fully protected" in the Fish and Game Code of California (§3511, §4700, §5050 and §5515); and
- Plants listed in the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California.

A review of both the County's and Department of Fish and Game's databases for special status species have identified the following species:

Species	Federal Listing	State Listing	Dept. of Fish and Game Listing	CNPS Listing
Swainson's hawk	None	Threatened		
Tricolored blackbird	None	Candidate Endan-gered	SSC	
Yellow-headed blackbird	None	None	SSC	
hoary bat	None	None		
Hoover's cryptan-tha	None	None		1A
Heartscale	None	None		1B.2
Lesser saltscale	None	None		1B.1
Subtle orache	None	None		1B.2
Northern California black walnut	None	None		1B.1
Golden goodmania	None	None		4.2
Recurved larkspur	None	None		1B.2

List 1A: Plants presumed extinct

List 1B: Plants Rare, Threatened, or Endangered in California and elsewhere.

List 2: Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere

List 3 Plants which more information is needed – a review list

List 4: Plants of Limited Distributed - a watch list

Ranking

0.1 – Seriously threatened in California (high degree/immediacy of threat)

0.2 – Fairly threatened in California (moderate degree/immediacy of threat)

0.3 – Not very threatened in California (low degree/immediacy of threats or no current threats known)

Effective January 1, 2007, Senate Bill 1535 took effect that has changed de minimis findings procedures. The Senate Bill takes the de minimis findings capabilities out of the Lead Agency hands and puts the process into the hands of the California Department of Fish and Wildlife (formally the California Department of Fish and Game). A Notice of Determination filing fee is due each time a NOD is filed at the jurisdictions Clerk's Office. The authority comes under Senate Bill 1535 (SB 1535) and Department of Fish and Wildlife Code 711.4. Each year the fee is evaluated and has the potential of increasing. For the most up-to-date fees, please refer to http://www.dfg.ca.gov/habcon/ceqa/ceqa_changes.html.

The Valley elderberry longhorn beetle was listed as a threatened species in 1980. Use of the elderberry bush by the beetle, a wood borer, is rarely apparent. Frequently, the only exterior evidence of the elderberry's use by the beetle is an exit hole created by the larva just prior to the pupal stage. According to the USFWWS, the Valley Elderberry Longhorn Beetle habitat is primarily in communities of clustered Elderberry plants located within riparian habitat. The USFWS stated that VELB habitat does not include every Elderberry plant in the Central Valley, such as isolated, individual plants, plants with stems that are less than one inch in basal diameter or plants located in upland habitat.

V. CULTURAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Discussion:

(a) Less than Significant Impact
The site has historically been used for almonds. The soil has previously been disturbed making an impact to historical resources less than significant.

(b) Less than Significant Impact
No sites of archeological or historical significance are known to exist on or in the vicinity of the subject property. The majority of the project site has been disturbed by previous agricultural activities.

(c) Less than Significant Impact
No known unique geological features in the vicinity of the project site exist. There are no known fossil bearing sediments on the project site. See a & b.

(d) Less than Significant Impact with Mitigation Incorporated
No known human remains exist on the project site. If human remains are discovered as a result of the construction of additional dwellings, the Coroner's office shall be contacted immediately.

General Information

Public Resource Code 5021.1(b) defines a historic resource as "any object building, structure, site, area or place which is historically significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California." These resources are of such import, that it is codified in CEQA (PRC Section 21000) which prohibits actions that "disrupt, or adversely affect a prehistoric or historic archaeological site or a property of historical or cultural significance to a community or ethnic or social groups; or a paleontological site except as part of a scientific study."

Archaeological importance is generally, although not exclusively, a measure of the archaeological research value of a site which meets one or more of the following criteria:

- Is associated with an event or person of recognized significance in California or American history or of recognized scientific importance in prehistory.
- Can provide information which is both of demonstrable public interest and useful in addressing scientifically consequential and reasonable archaeological research questions.
- Has a special or particular quality such as oldest, best example, largest, or last surviving example of its kind.
- Is at least 100 years old and possesses substantial stratigraphic integrity (i.e. it is essentially undisturbed and intact).
- Involves important research questions that historic research has shown can be answered only with archaeological methods.

Reference CEQA Guidelines §15064.5 for definitions.

Most of the archaeological survey work in the County has taken place in the foothills and mountains. This does not mean, however, that no sites exist in the western part of the County, but rather that this area has not been as thoroughly studied. There are slightly more than 2,000 recorded archaeological sites in the County, most of which are located in the foothills and mountains. Recorded prehistoric artifacts include village sites, camp sites,

bedrock milling stations, pictographs, petroglyphs, rock rings, sacred sites, and resource gathering areas. Madera County also contains a significant number of potentially historic sites, including homesteads and ranches, mining and logging sites and associated features (such as small camps, railroad beds, logging chutes, and trash dumps.

VI. GEOLOGY AND SOILS -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Discussion:

(a-i) No Impact
The project represents no specific threat or hazard from seismic ground shaking, and all new construction will comply with current local and state building codes. Other geologic hazards, such as landslides, lateral spreading, subsidence, and liquifaction have not been known to occur within Madera County.
(a-ii) No Impact
See a-i.
(a-iii) No Impact
See a-i.
(a-iv) No Impact
See a-i.
(b) Less than Significant Impact
The project will impact the soil through grading and construction; however, the impact will be less than significant due to the site being predominantly flat. In addition, prior to issuing building permits, the applicant is to provide grading/drainage and erosion control plans to the Department of Public Works for review and approval.
(c) No Impact
See a-i.
(d) No Impact
See a-i

(e) No Impact
The project site is located in an area where many individual septic tanks exist. The soil in this area is capable of supporting such systems.

General Information

Madera County is divided into two major physiographic and geologic provinces: the Sierra Nevada Range and the Central Valley. The Sierra Nevada physiographic province in the northeastern portion of the county is underlain by metamorphic and igneous rock. It consists mainly of homogenous types of granitic rocks, with several islands of older metamorphic rock. The central and western parts of the county are part of the Central Valley province, underlain by marine and non-marine sedimentary rocks.

The foothill area of the county is essentially a transition zone, containing old alluvial soils that have been dissected by the west-flowing rivers and streams which carry runoff from the Sierra Nevada's.

Seismicity varies greatly between the two major geologic provinces represented in Madera County. The Central valley is an area of relatively low tectonic activity bordered by mountain ranges on either side. The Sierra Nevada's, partly within Madera County, are the result of movement of tectonic plates which resulted in the creation of the mountain range. The Coast Ranges on the west side of the Central Valley are also a result of these forces, and continued movement of the Pacific and North American tectonic plates continues to elevate the ranges. Most of the seismic hazards in Madera County result from movement along faults associated with the creation of these ranges.

There are no active or potentially active faults of major historic significance within Madera County. The County does not lie within any Alquist Priolo Special Studies Zone for surface faulting or fault creep.

However, there are two significant faults within the larger region that have been and will continue to be, the principle sources of potential seismic activity within Madera County.

San Andreas Fault: The San Andreas Fault lies approximately 45 miles west of the county line. The fault has a long history of activity and is thus a concern in determining activity in the area.

Owens Valley Fault Group: The Owens Valley Fault Group is a complex system containing both active and potentially active faults on the eastern base of the Sierra Nevada Range. This group is located approximately 80 miles east of the County line in Inyo County. This system has historically been the source of seismic activity within the County.

The *Draft Environmental Impact Report* for the state prison project near Fairmead identified faults within a 100 mile radius of the project site. Since Fairmead is centrally located along Highway 99 within the county, this information provides a good indicator of the potential seismic activity which might be felt within the County. Fifteen active faults (including the San Andreas and Owens Valley Fault Group) were identified in the *Preliminary Geotechnical Investigation*. Four of the faults lie along the eastern portion of the Sierra Nevada Range, approximately 75 miles to the northeast of Fairmead. These are the Parker Lake, Hartley Springs, Hilton Creek and Mono Valley Faults. The remaining faults are in the western portion of the San Joaquin Valley, as well as within the Coast Range, approximately 47 miles west of Fairmead. Most of the remaining 11 faults are associated with the San Andreas, Calaveras, Hayward and Rinconada Fault Systems which collectively form the tectonic plate boundary of the Central Valley.

In addition, the Clovis Fault, although not having any historic evidence of activity, is considered to be active within quaternary time (within the past two million years), is considered potentially active. This fault line lies approximately six miles south of the Madera County line in Fresno County. Activity along this fault could potentially generate more seismic activity in Madera County than the San Andreas or Owens Valley fault systems. However, because of the lack of historic activity along the Clovis Fault, there is inadequate evidence for assessing maximum earthquake impacts.

Seismic ground shaking, however, is the primary seismic hazard in Madera County because of the County's seismic setting and its record of historical activity (General Plan Background Element and Program EIR). The project represents no specific threat or hazard from seismic ground shaking, and all new construction will comply with current local and state building codes. Other geologic hazards, such as landslides, lateral spreading, subsidence, and liquefaction have not been known to occur within Madera County.

According to the Madera County General Plan Background Report, groundshaking is the primary seismic hazard in Madera County. The valley portion of Madera County is located on alluvium deposits, which tend to experience greater groundshaking intensities than areas located on hard rock. Therefore, structures located in the valley will tend to suffer greater damage from groundshaking than those located in the foothill and mountain areas.

Liquefaction is a process whereby soil is temporarily transformed to a fluid form during intense and prolonged ground shaking. According to the Madera County General Plan Background Report, although there are areas of Madera County where the water table is at 30 feet or less below the surface, soil types in the area are not conducive to liquefaction because they are either too coarse in texture or too high in clay content; the soil types mitigate against the potential for liquefaction.

VII. GREENHOUSE GAS EMISSIONS - Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Discussion:

(a) Less than Significant Impact
The proposed project will cause cars to leave the roadways and generate additional emissions; however, this project will have a less then significant impact on greenhouse gases when looking at the area as a whole.
(b) Less than Significant Impact
See a.

General Information

Greenhouse Gas (GHG) Emissions: The potential effect of greenhouse gas emission on global climate change is an emerging issue that warrants discussion under CEQA. Unlike the pollutants discussed previously that may have regional and local effects, greenhouse gases have the potential to cause global changes in the environment. In addition, greenhouse gas emissions do not directly produce a localized impact, but may cause an indirect impact if the local climate is adversely changed by its cumulative contribution to a change in global climate. Individual development projects contribute relatively small amounts of greenhouse gases that when added to other greenhouse gas producing activities around the world would result in an increase in these emissions that have led many to conclude is changing the global climate. However, no threshold has been established for what would constitute a cumulatively considerable increase in greenhouse gases for individual development projects. The State of California has taken several actions that help to address potential global climate change impacts.

Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006, outlines goals for local agencies to follow in order to bring Greenhouse Gas (GHG) emissions to 1990 levels (a 25% overall

reduction) by the year 2020. The California Air Resources Board (CARB) holds the responsibility of monitoring and reducing GHG emissions through regulations, market mechanisms and other actions. A Draft Scoping Plan was adopted by CARB in order to provide guidelines and policy for the State to follow in its steps to reduce GHG. According to CARB, the scoping plan's GHG reduction actions include: direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system.

Following the adoption of AB 32, the California State Legislature adopted Senate Bill 375, which became the first major bill in the United States that would aim to limit climate change by linking directly to "smart growth" land use principles and transportation. It adds incentives for projects which intend to be in-fill, mixed use, affordable and self-contained developments. SB 375 includes the creation of a Sustainable Communities Strategy (SCS) through the local Metropolitan Planning Organizations (MPO) in order to create land use patterns which reduce overall emissions and vehicle miles traveled. Incentives include California Environmental Quality Act streamlining and possible exemptions for projects which fulfill specific criteria.

VIII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) 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?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) 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?	☐	☐	☒	☐

Discussion:

(a) Less than Significant Impact

Underground storage tanks for gasoline will be used which are regulated by both the State and County. Plan check review of the underground tank will be required through the Environmental Health Department. With normal operation procedures followed, impacts resulting from the use and transport of

hazardous material will be less than significant.

(b) No Impact

See a.

(c) No Impact

See a.

(d) No Impact

The property is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

(e) No Impact

The project site is not located within an airport land use plan or within two miles of a public airport.

(f) No Impact

The project site is not located within the vicinity of a private airstrip.

(g) No Impact

The project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The project site has adequate access to a through road.

(h) Less than Significant Impact

The project site is not located within an area which may be affected by wildland fires. The area is built up and there is adequate access to existing through roads.

General Information

Any hazardous material because of its quantity, concentration, physical or chemical properties, pose a significant present or potential hazard to human health and safety, or the environment the California legislature adopted Article I, Chapter 6.95 of the Health and Safety Code, Sections 25500 to 25520 that requires any business handling or storing a hazardous material or hazardous waste to establish a Business Plan. The information obtained from the completed Business Plans will be provided to emergency response personnel for a better-prepared emergency response due to a release or threatened release of a hazardous material and/or hazardous waste.

Business owners that handle or store a hazardous material or mixtures containing a hazardous material, which has a quantity at any one time during the year, equal to or greater than:

1) A total of 55 gallons,
2) A total of 500 pounds,
3) 200 cubic feet at standard temperature and pressure of compressed gas,
4) any quantity of Acutely Hazardous Material (AHM).

Assembly Bill AB 2286 requires all business and agencies to report their Hazardous Materials Business Plans to the Certified Unified Program Agency (CUPA) information electronically at http://cers.calepa.ca.gov

IX. HYDROLOGY AND WATER QUALITY – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒
b) 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)?	☐	☐	☒	☐
c) 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?	☐	☐	☐	☒

d)	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?	☐	☐	☐	☒
e)	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?	☐	☐	☒	☐
f)	Otherwise substantially degrade water quality?	☐	☐	☒	☐
g)	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?	☐	☐	☒	☐
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i)	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?	☐	☐	☐	☒
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion:

(a) No Impact
Septic tanks are used on the parcel and in the vicinity. Any new septic tanks or sewage disposal systems will be regulated by the Environmental Health Department.

(b) Less than Significant Impact
If new buildings are constructed the amount of water consumed will be increased for the area; however, the impact would be less than significant. The proposed rezone will eliminate the ability to farm a portion of the property; therefore a substantial amount of water can potentially go unused.

(c) No Impact
The project will result in impacts to the soil with potential grading and construction. All National Pollution Discharge Elimination System (NPDES) storm water regulations and standards shall be met. It is possible that the quality of storm water may be affected by pollutants. The applicant shall mitigate any impacts associated with storm water contamination caused by this project. A Storm Water Pollution Prevention Plan (SWPPP) is required for all projects of 1-acre of more of site disturbance.

(d) No Impact
See c.

(e) Less than Significant Impact
See c.

(f) Less than Significant Impact
See c.

(g) Less than Significant Impact
The project site is not located within a 100-year flood hazard area.

(h) No Impact
See g.

(i) No Impact
The project site is not located in an area which would expose people to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. The project will not be affected by seiche, tsunami, or mudflow.

(j) No Impact
See i.

General Information

Groundwater quality contaminants of concern in the Valley Floor include high salinity (total dissolved solids), nitrate, uranium, arsenic, methane gas, iron, manganese, slime production, and dibromochloropropane with the maximum contaminant level exceeded in some areas. Despite the water quality issues noted above, most of the groundwater in the Valley Floor is of suitable quality for irrigation. Groundwater of suitable quality for public

consumption has been demonstrated to be present in most of the area at specific depths.

Groundwater quality contaminants of concern in the Foothills and Mountains include manganese, iron, high salinity, hydrogen sulfide gas, uranium, nitrate, arsenic, and methylbutylethylene (MTBE) with the maximum concentration level being exceeded in some areas. Despite these problems, there are substantial amounts of good-quality groundwater in each of the areas evaluated in the Foothills and Mountains. Iron and manganese are commonly removed by treatment. Uranium treatment is being conducted on a well by the Bass Lake Water Company.

A seiche is an occasional and sudden oscillation of the water of a lake, bay or estuary producing fluctuations in the water level and caused by wind, earthquakes or changes in barometric pressure. A tsunami is an unusually large sea wave produced by seaquake or undersea volcanic eruption (from the Japanese language, roughly translated as "harbor wave"). According to the California Division of Mines and Geology, there are no active or potentially active faults of major historic significance within Madera County. As this property is not located near any bodies of water, no impacts are identified.

The flood hazard areas of the County of Madera are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare. These flood losses are caused by uses that are inadequately elevated, flood-proofed, or protected from flood damage. The cumulative effect of obstruction in areas of special flood hazards which increase flood height and velocities also contribute to flood loss.

X. LAND USE AND PLANNING – Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) 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?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Discussion:

(a) No Impact

The proposed project does not have the potential to divide an established community.

(b) No Impact

The project includes a General Plan Amendment and Rezone to allow for additional commercial uses in an area directly served by SR 152 and Robertson Blvd.

(c) No Impact

There is no habitat conservation plan or natural community conservation plan located on the project site. The project avoids all sensitive biological resources.

XI. MINERAL RESOURCES – Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒

b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Discussion:

(a) No Impact
The proposed project is not located within an area with the potential for this project to result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
(b) No Impact
See a.

XII.	NOISE – Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a)	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?	☐	☐	☒	☐
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d)	A substantial temporary or periodic increase in ambient levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f)	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?	☐	☐	☐	☒

Discussion:

(a) Less than Significant Impact
The proposed project is a General Plan Amendment, and Rezone to allow General Commercial uses. There is no potential for exposure of persons to or generation of noise levels in excess of standards established in the general plan.
(b) Less than Significant Impact
If approved, the project will allow general commercial uses. Temporary groundborne vibrations from normal construction activities may occur.
(c) Less than Significant Impact
Additional structures may raise the amount of noise generated in the area; however, the impact will be less than significant.
(d) Less than Significant Impact
See c.
(e) No Impact
The project site is not located within an airport land use plan, within two miles of a public airport, or within the vicinity of a private airstrip.
(f) No Impact
See e.

General Discussion

The Noise Element of the Madera County General Plan (Policy 7.A.5) provides that noise which will be created by new non-transportation noise sources shall be mitigated so as not to exceed the Noise Element noise level standards on lands designated for noise-sensitive uses. However, this policy does not apply to noise levels associated with agricultural operations. All the surrounding properties, while include some residential units, are designated and zoned for agricultural uses. This impact is therefore considered less than significant.

Construction noise typically occurs intermittently and varies depending upon the nature or phase of construction (e.g. demolition/land clearing, grading and excavation, erection). The United States Environmental Protection Agency has found that the average noise levels associated with construction activities typically range from approximately 76 dBA to 84 dBA Leq, with intermittent individual equipment noise levels ranging from approximately 75 dBA to more than 88 dBA for brief periods.

Short Term Noise

Noise from localized point sources (such as construction sites) typically decreases by approximately 6 dBA with each doubling of distance from source to receptor. Given the noise attenuation rate and assuming no noise shielding from either natural or human-made features (e.g. trees, buildings, fences), outdoor receptors within approximately 400 feet of construction site could experience maximum noise levels of greater than 70 dBA when onsite construction-related noise levels exceed approximately 89 dBA at the project site boundary. Construction activities that occur during the more noise-sensitive eighteen hours could result in increased levels of annoyance and sleep disruption for occupants of nearby existing residential dwellings. As a result, noise-generating construction activities would be considered to have a potentially significant short-term impact. However with implementation of mitigation measures, this impact would be considered less than significant.

Long Term Noise

Mechanical building equipment (e.g. heating, ventilation and air conditioning systems, and boilers), associated with the proposed structures, could generate noise levels of approximately 90 dBA at 3 feet from the source. However, such mechanical equipment systems are typically shielded from direct public exposure and usually housed on rooftops, within equipment rooms, or within exterior enclosures.

Landscape maintenance equipment, such as leaf blowers and gasoline powered mowers, associated with the proposed operations could result in intermittent noise levels that range from approximately 80 to 100 dBA at 3 feet, respectively. Based on an equipment noise level of 100 dBA, landscape maintenance equipment (assuming a noise attenuation rate of 6 dBA per doubling of distance from the source) may result in exterior noise levels of approximately 75 dBA at 50 feet.

MAXIMUM ALLOWABLE NOISE EXPOSURE FOR
NON-TRANSPORTATION NOISE SOURCES*

		Residential	Commercial	Industrial (L)	Industrial (H)	Agricultural
Residential	AM	50	60	55	60	60
	PM	45	55	50	55	55
Commercial	AM	60	60	60	65	60
	PM	55	55	55	60	55
Industrial (L)	AM	55	60	60	65	60
	PM	50	55	55	60	55
Industrial (H)	AM	60	65	65	70	65
	PM	55	60	60	65	60
Agricultural	AM	60	60	60	65	60
	PM	55	55	55	60	55

*As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers at the property line.

AM = 7:00 AM to 10:00 PM
PM = 10:00 PM to 7:00 AM
L = Light
H = Heavy

Note: Each of the noise levels specified above shall be lowered by 5 dB for pure tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g. caretaker dwellings).

Vibration perception threshold: The minimum ground or structure-borne vibrational motion necessary to cause a normal person to be aware of the vibration by such direct means as, but not limited to, sensation by touch or visual observation of moving objects. The perception threshold shall be presumed to be a motion velocity of one-tenth (0.1) inches per second over the range of one to one hundred Hz.

Reaction of People and Damage to Buildings from Continuous Vibration Levels

Velocity Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.006 to 0.019	Threshold of perception; possibility of intrustion	Damage of any type unlikely
0.08	Vibration readily perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.10	Continuous vibration begins to annoy people	Virtually no risk of architectural damage to normal buildings
0.20	Vibration annoying to people in buildings	Risk of architectural damage to normal dwellings such as plastered walls or ceilings
0.4 to 0.6	Vibration considered unpleasant by people subjected to continuous vibrations vibration	Architectural damage and possibly minor structural damage

Source: Whiffen and Leonard 1971

XIII. POPULATION AND HOUSING -- Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) 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)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion:

(a) Less than Significant Impact
The proposed project will allow general commercial uses. It will not induce substantial population growth.
(b) No Impact
The proposed project is not designed to induce substantial population growth, and will not result in substantial direct or indirect growth inducement. No housing will be displaced as a result of the project. No people will be displaced as a result of the project.
(c) No Impact
See b.

General Information

According to the California Department of Finance, in January of 2012, the County wide population was 152,074 with a total of 49,334 housing units. This works out to an average of 3.33 persons per housing unit. The vacancy rate was 11.84%.

XIV. PUBLIC SERVICES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☒	☐
iv) Parks?	☐	☐	☒	☐
v) Other public facilities?	☐	☐	☒	☐

Discussion:

(a-i) Less than Significant Impact
The proposed project will allow general commercial uses in the area. As with all projects, payment of development impact fees will occur with all new construction to fund public services.
(a-ii) Less than Significant Impact
See a-i.
(a-iii) Less than Significant Impact
See a-i.
(a-iv) Less than Significant Impact
See a-i.
(a-v) Less than Significant Impact
See a-i.

General Information

The proposed project site is within the jurisdiction of the Madera County Fire Department. Crime and emergency response is provided by the Madera County Sherriff's Department. The proposed project will have no impact on local parks and will not create demand for additional parks.

The Madera County Fire Department exists through a contract between Madera County and the CALFIRE (California Department of Forestry and Fire Prevention) and operates six stations for County responses in addition to the state-funded CALFIRE stations for state responsibility areas. Under an "Amador Plan" contract, the County also funds the wintertime staffing of four fire seasonal CALFIRE stations. In addition, there are ten paid-call (volunteer) fire companies that operate from their own stations. The administrative, training, purchasing, warehouse, and other functions of the Department operate through a single management team with County Fire Administration.

A Federal Bureau of Investigations 2009 study suggests that there is on average of 2.7 law enforcement officials per 1,000 population for all reporting counties. The number for cities had an average of 1.7 law enforcement officials per 1,000 population.

Single Family Residences have the potential for adding to school populations. The average per Single Family Residence is:

Grade	Student Generation per Single Family Residence
K – 6	0.425
7 – 8	0.139
9 – 12	0.214

The Madera County General Plan allocates three acres of park available land per 1,000 residents' population.

XV. RECREATION	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion:

(a) No Impact
The project will allow general commercial uses and will not have an impact on recreational uses or increase use of recreational areas in the vicinity of the project site.
(b) No Impact
See a.

General Information

The Madera County General Plan allocates three acres of park available land per 1,000 residents' population.

XVI. TRANSPORTATION/TRAFFIC -- Would the project:

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a)	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 components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b)	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?	☐	☐	☒	☐
c)	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?	☐	☐	☐	☒
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e)	Result in inadequate emergency access?	☐	☐	☐	☒
f)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

Discussion:

(a) Less than Significant Impact with Mitigation Incorporated
A Traffic Impact Study (TIS) has been prepared for the purpose of analyzing traffic conditions related to the proposed project.
Results of the analysis show that the Project will result in a direct project-specific impact at two (2) of the seven (7) study intersections, when comparing the Existing and Existing Plus Project scenarios. Results of the analysis also show that the Project will result in a direct project-specific impact at three (3) of the seven (7) study intersections, as shown below, when comparing the Cumulative Year 2040 Without Project and Cumulative Year 2040 Plus Project scenarios.
Table E-2 shows roadway segments that are expected to fall short of desirable operating conditions for various scenarios. Results of the analysis show that the Project will not result in a direct project-specific impact at two (2) of the four (4) study roadway segments when comparing the Exiting and Existing Plus Project scenarios.
Results of the analysis also show that the Project will result in a direct project-specific impact at two (2) of the four (4) study roadway segments when comparing the Cumulative Year 2040 Without Project and Cumulative Year 2040 Plus Project scenarios.
(b) Less than Significant Impact with Mitigation Incorporated
See a.
(c) No Impact
The proposed project will not result in changes to air traffic.
(d) No Impact
The proposed roadways are consistent with Madera County standards.
(e) No Impact
There is adequate access to the project site.
(f) No Impact
The proposed project will not affect alternative transportation. There are no plans in the immediate

vicinity which will be impacted.

General Information

According to the Institute of Traffic Engineers (7th Edition, pg. 268-9) the trips per day for one single-family residence are 9.57.

Madera County currently uses Level Of Service "D" as the threshold of significance level for roadway and intersection operations. The following charts show the significance of those levels.

Level of Service	Description	Average Control Delay (sec./car)
A	Little or no delay	0 – 10
B	Short traffic delay	>10 – 15
C	Medium traffic delay	> 15 – 25
D	Long traffic delay	> 25 – 35
E	Very long traffic delay	> 35 – 50
F	Excessive traffic delay	> 50

Unsignalized intersections.

Level of Service	Description	Average Control Delay (sec./car)
A	Uncongested operations, all queues clear in single cycle	< 10
B	Very light congestion, an occasional phase is fully utilized	>10 – 20
C	Light congestion; occasional queues on approach	> 20 – 35
D	Significant congestion on critical approaches, but intersection is functional. Vehicles required to wait through more than one cycle during short peaks. No long-standing queues formed.	> 35 – 55
E	Severe congestion with some long-standing queues on critical approaches. Traffic queues may block nearby intersection(s) upstream of critical approach(es)	> 55-80
F	Total breakdown, significant queuing	> 80

Signalized intersections.

Level of service	Freeways	Two-lane rural highway	Multi-lane rural highway	Expressway	Arterial	Collector
A	700	120	470	720	450	300
B	1,100	240	945	840	525	350
C	1,550	395	1,285	960	600	400
D	1,850	675	1,585	1,080	675	450
E	2,000	1,145	1,800	1,200	750	500

Capacity per hour per lane for various highway facilities

Madera County is predicted to experience significant population growth in the coming years (62.27 percent between 2008 and 2030). Accommodating this amount of growth presents a challenge for attaining and maintain air quality standards and for reducing greenhouse gas emissions. The increase in population is expected to be accompanied by a similar increase in vehicle miles traveled (VMT) (61.36 percent between 2008 and 2030).

Horizon Year	Total Population (thousands)	Employment (thousands)	Average Weekday VMT (millions)	Total Lane Miles
2010	175	49	5.4	2,157
2011	180	53	5.5	NA
2017	210	63	6.7	NA
2020	225	68	7.3	2,264
2030	281	85	8.8	2,277

Source: MCTC 2007 RTP

The above table displays the predicted increase in population and travel. The increase in the lane miles of roads that will serve the increase in VMT is estimated at 120 miles or 0.94 percent by 2030. This indicates that roadways in Madera County can be expected to become much more crowded than is currently experienced.

Emissions of CO (Carbon Monoxide) are the primarily mobile-source criteria pollutant of local concern. Local mobile-source CO emissions near roadway intersections are a direct function of traffic volume, speed and delay. Carbon monoxide transport is extremely limited; it disperses rapidly with distance from the source under normal meteorological conditions. Under certain meteorological conditions, however, CO concentrations close to congested roadway or intersection may reach unhealthy levels, affecting local sensitive receptors (residents, school children, hospital patients, the elderly, etc.). As a result, the SJVAPCP recommends analysis of CO emissions of at a local rather than regional level. Local CO concentrations at intersections projected to operate at level of service (LOS) D or better do not typically exceed national or state ambient air quality standards. In addition, non-signalized intersections located within areas having relatively low background concentrations do not typically have sufficient traffic volumes to warrant analysis of local CO concentrations.

XVII. UTILITIES AND SERVICE SYSTEMS – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) 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?	☐	☐	☒	☐
c) 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?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐

e)	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?	☐	☐	☒	☐
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion:

(a) Less than Significant Impact
Onsite Wastewater Treatment Systems (OWTS) that is projected to have daily waste water flow equal or greater then 8, 000 gallons per day will require a Regional Water Quality Control Board approval prior to an Environmental Health Division approval.
(b) Less than Significant Impact
See a.
(c) Less than Significant Impact
The project would be required to design the detention/retention facilities to withstand the 100 year storms, and are required to mitigate for the difference in pre and post development run-off.

All National Pollution Discharge Elimination System (NPDES) storm water regulations and standards shall be met. It is possible that the quality of storm water may be affected by pollutants. The applicant shall mitigate any impacts associated with storm water contamination caused by this project. A Storm Water Pollution Prevention Plan (SWPPP) is required for all projects 1-acre or more of site disturbance.
(d) Less than Significant Impact
Water is supplied by an on-site individual well. The property has historically been planted in almonds. The portion to be converted to commercial use will use a substantially less amount of water than current conditions.
(e) Less than Significant Impact
See a.
(f) Less than Significant Impact
Madera County is served by the landfill in Fairmead which complies with federal, state, and local statutes.
(g) Less than Significant Impact
See f.

General Discussion

Madera County has 34 County Service Areas and Maintenance Districts that together operate 30 small water systems and 16 sewer systems. Fourteen of these special districts are located in the Valley Floor, and the remaining 20 special districts are in the Foothills and Mountains. MD-1 Hidden Lakes, Bass Lake (SA-2B and SA-2C) and SA-16 Sumner Hill have surface water treatment plants, with the remaining special districts relying solely on groundwater.

The major wastewater treatment plants in the County are operated in the incorporated cities of Madera and Chowchilla and the community of Oakhurst. These wastewater systems have been recently or are planned to be upgraded, increasing opportunities for use of recycled water. The cities of Madera and Chowchilla have adopted or are in the process of developing Urban Water Management Plans. Most of the irrigation and water districts have individual groundwater management plans. All of these agencies engage in some form of groundwater recharge and management.

Groundwater provides almost the entire urban and rural water use and about 75 percent of the agricultural water use in the Valley Floor. The remaining water demand is met with surface water. Almost all of the water use in the Foothills and Mountains is from groundwater with only three small water treatment plants relying on surface

water from the San Joaquin River and its tributaries.

In areas of higher precipitation (Oakhurst, North Fork, and the topographically higher part of the Coarsegold Area), groundwater recharge is adequate for existing uses. However, some problems have been encountered in parts of these areas due to well interference and groundwater quality issues. In areas of lower precipitation (Raymond-Hensley Lake and the lower part of the Coarsegold area), groundwater recharge is more limited, possibly requiring additional water supply from other sources to support future development.

Madera County is served by a solid waste facility (landfill) in Fairmead. There is a transfer station in North Fork. The Fairmead facility also provides for Household Hazardous Materials collections on Saturdays. The unincorporated portion of the County is served by Red Rock Environmental Group. Above the 1000 foot elevation, residents are served by EMADCO services for solid waste pick-up.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Does the project 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?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Discussion:

(a) Less than Significant Impact

The proposed project will allow general commercial uses. The project does not have a high potential to degrade fish and wildlife, or their habitat, or to eliminate major periods of California history or prehistory. The impacts to these resources will be less than significant.

(b) Less than Significant Impact

The amount of water used and an added light source to the area will add to the cumulative amount, but will be individually limited.

(c) Less than Significant Impact

The project will not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly as mitigated.

General Information

CEQA defines three types of impacts or effects:

- Direct impacts are caused by a project and occur at the same time and place (CEQA §15358(a)(1).

- Indirect or secondary impacts are reasonably foreseeable and are caused by a project but occur at a different time or place. They may include growth inducing effects and other effects related to changes in the pattern of land use, population density or growth rate and related effects on air, water and other natural systems, including ecosystems (CEQA §15358(a)(2).

- Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts (CEQA §15355(b)). Impacts from individual projects may be considered minor, but considered retroactively with other projects over a period of time, those impacts could be significant, especially where listed or sensitive species are involved.

Documents/Organizations/Individuals Consulted
In Preparation of this
Initial Study

Madera County General Plan

California Department of Finance

California Integrated Waste Management Board

California Environmental Quality Act Guidelines

United States Environmental Protection Agency

Caltrans website http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm accessed October 31, 2008

California Department of Fish and Game "California Natural Diversity Database" http://www.dfg.ca.gov/biogeodata/cnddb/

Madera County Integrated Regional Water Management Plan.

State of California, Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011 and 2012, with 2010 Benchmark.* Sacramento, California, May 2012

EXHIBIT L

MITIGATED NEGATIVE DECLARATION

MND 2018-27

RE: Fagundes Brothers - Project - BdS - Chowchilla (026-272-011-000)

Location and Description of Project:
The proposed project is located on the northwest and northeast corners of the intersection of Highway 152 and Road 14 1/2 (14181 Highway 152 and no situs) Chowchilla. The project amending the General Plan for 38 acres from AR (Agricultual Residential) and VLDR (Very Low Density residential) to CC (Community Commercial) and a Rezone from AR-5 (Agricultural Rural – 5 Acre) and RRS (Residential Rural Single Family) Districts to CRG (Commercial Rural General) District to allow for General Commercial establishments.

Environmental Impact:

No adverse environmental impact is anticipated from this project. The following mitigation measures are included to avoid any potential impacts.

Basis for Negative Declaration:

SEE ATTACHED

Madera County Environmental Committee

A copy of the negative declaration and all supporting documentation is available for review at the Madera County Planning Department, 200 West 4th Street, Madera, California.

DATED: November 9, 2018
FILED:
PROJECT APPROVED:

MITIGATION MONITORING REPORT

MND # 2018-27

No.	Mitigation Measure	Monitoring Phase	Enforcement Agency	Monitoring Agency	Action Indicating Compliance	Verification of Compliance		
						Initials	Date	Remarks
Aesthetics								
1	All exterior lighting shall be hooded and downwards, away from adjacent properties.	Construction						
Agricultural Resources								
Air Quality								
Biological Resources								
Cultural Resources								
1	If any prehistoric resources or human remains are uncovered during construction, work shall stop immediately and a qualified archeologist shall be contacted to determine further mitigation which may be needed. The County Coroner shall be contacted if human remains are found.	Construction						
Geology and Soils								
Hazards and Hazardous Materials								
Hydrology and Water Quality								
Land Use and Planning								
Mineral Resources								

No.	Mitigation Measure	Monitoring Phase	Enforcement Agency	Monitoring Agency	Action Indicating Compliance	Verification of Compliance		
						Initials	Date	Remarks
Noise								
Population and Housing								
Public Services								
Recreation								
Transportation and Traffic								
1	Construct a southbound left-turn lane and northbound right turn lane at the intersection of SR 233 and Avenue 23½.	Opening Day						
2	A median left-turn lane and widening to four lanes on SR 233 between SR 152 and Avenue 23½, and between Avenue 23½ and Washington Road should be constructed as an opening day mitigation measure. A minimum of 4-foot bike lane will be required between right-turn and through lanes except where posted speed limit is greater than 40mph, a minimum of 6-foot width should be provided. The roadway improvement should be constructed per Caltrans standards.	Opening Day						
3	Access to SR 152 will not be permitted. The current intersections of SR 152/Railroad Drive and SR 152/Road 14½ should be closed when the proposed Project is developed. No traffic signals will be permitted along SR 152.	Opening Day						
4	The proposed Project will be required to contribute a fair-share towards the costs of improvements that are identified in Table E-6 – Cumulative Year 2040 Equitable Fair-Share Responsibility. The Project Proponent will need to prepare a cost estimate for the intersections and roadway segments as identified on pages 6 and 7 under Cumulative Year 2040 Plus Project Mitigation Measures. The fair-share will need to be based on the A.M. peak hour. Please submit the cost estimate to Caltrans for our review and concurrence.	Year 2040						

No.	Mitigation Measure	Monitoring Phase	Enforcement Agency	Monitoring Agency	Action Indicating Compliance	Verification of Compliance		
						Initials	Date	Remarks
5	The TIS indicated that the Project will have project-specific impacts to the intersection of SR 233 and Washington Road (in the City of Chowchilla). The TIS recommended adding a separate right-turn lane to achieve acceptable levels of service. However, due to right-of-way constraints, this mitigation measure is not recommended. Traffic impact studies prepared by others identified the need for intersection control improvements (roundabout or a traffic signals). It is recommended that the Project proponent prepare a cost estimate for the project specific impact and work with the City of Chowchilla in contributing its fair share cost.	Opening Day						
6	Robertson Boulevard (SR 233) / Washington Road Widen the southbound approach to 1 left turn lane, 2 through lanes, and 1 right turn lane (adding 1 right turn lane)	Opening Day						
7	Robertson Boulevard (SR 233) / Avenue 23 ½ install Traffic Signal	Opening Day						
Utilities and Service Systems								