## STANISLAUS COUNTY PLANNING COMMISSION

June 20, 2024

### STAFF REPORT

## GENERAL PLAN AMENDMENT AND REZONE APPLICATION NO. PLN2020-0123 132 INVESTMENTS

REQUEST: TO AMEND THE GENERAL PLAN DESIGNATION OF A 15.66± ACRE PARCEL

FROM AGRICULTURE TO PLANNED DEVELOPMENT AND ZONING DESIGNATION FROM PLANNED DEVELOPMENT (P-D) (23) TO A NEW PLANNED DEVELOPMENT TO ALLOW THE DEVELOPMENT OF A FUELING STATION, CONVENIENCE MARKET, AND TWO SHELL SUITES FOR FUTURE

**RETAIL USES.** 

### **APPLICATION INFORMATION**

Applicant/Property Owner: 132 Investments, LLC (Abdo Almolaiki,

Jimmy Nagi, Faiz Alashmaly, Yasir

Khanshali, and Adam Saba)

Agents: Amin Vohra; and Edmond Jacobs, Jacobs

Architecture

Location: 15101 Maze Boulevard (State Route 132),

between McCracken Road and the County

border, in the Vernalis area

Section, Township, Range: 26-3-6

Supervisorial District: Three (Supervisor Withrow)

Assessor's Parcel: 016-001-001

Referrals: See Exhibit H Environmental Review

Referrals

Area of Parcel(s):  $15.66 \pm acres$ 

Water Supply: Well (new Public Water System)

Sewage Disposal: Private Septic System

General Plan Designation: Agriculture

Community Plan Designation: N/A

Existing Zoning: Planned Development (P-D) (23)

Sphere of Influence:

Williamson Act Contract No.:

N/A

Environmental Review: Mitigated Negative Declaration Present Land Use: Almond orchard and storage.

Surrounding Land Use: Orchards and scattered single family

dwellings to the north, east, and south; and commercial development and a mobile home

park to the west.

### **RECOMMENDATION**

Staff recommends the Planning Commission provide a recommendation of approval to the Board of Supervisors, based on the discussion below and on the whole of the record provided to the County. If the Planning Commission decides to recommend approval of this project, Exhibit A provides an overview of the findings and actions required for project approval.

### **BACKGROUND**

The project site has a General Plan designation of Agriculture and a zoning designation of Planned Development (P-D) (23). P-D 23 was approved on July 15, 1976 (Rezone No. 76-11 Bogetti Brothers) to allow the development of a farm animal zoo, including construction of 16 small animal pen structures. At the time of approval, the Planning Commission found the use to be compatible with the Agriculture designation; as it was comprised of an agriculturally related use and was found to be located appropriately within the designation. On January 4, 1979, the Planning Commission approved a modification to P-D 23 to allow for the conversion of half of the farm animal zoo space into a weekend only outdoor sales area for vendors to sell hand-crafted goods. Although the use of the site as a farm animal zoo and vendor sales area have ceased for some time, the structures remain and have been used for the storage of various items throughout the years.

The project sites northwestern property line aligns with the Stanislaus and San Joaquin County border. The two most westerly structures that were developed for the farm animal zoo and vender sales are located within San Joaquin County on property under the same ownership.

### PROJECT DESCRIPTION

This is a request to amend the General Plan designation of a 15.66± acre parcel from Agriculture to Planned Development (P-D) and zoning designation from P-D (23) to a new P-D to allow for the development of a fueling station, convenience market, and two shell suites for future retail use. The project proposes development of 18-fueling pumps, serving both heavy-duty trucks (6 pumps under a 1,380 square-foot canopy) and passenger vehicles (12 pumps under a 5,130 square-foot canopy), construction of a 8,400 square-foot retail building made up of a convenience market (4,800 square feet) and two shell suites (1,800 square feet each) for future retail use (see Exhibit B - *Maps, Plans, and Elevations*). A total of 111 standard passenger vehicle parking spaces and 20 electric vehicle (EV) charging station spaces are proposed around the market structure and project site perimeter.

The fueling station, passenger vehicle parking spaces, and driveways serving the project site will be paved. An open graveled area, at the north end of the project site, is proposed to accommodate the parking of heavy-duty trucks during use of the on-site businesses and/or amenities. No overnight truck parking is proposed. Additionally, the site will develop a 499-gallon propane tank and dispenser, for retail sales, and 2,000 square-foot area for aboveground fuel tanks. All fuel dispensed on-site will be held in the aboveground fuel tanks, which will be a maximum of ten-feet in height and enclosed by an eight foot tall masonry wall.

The project will be served by an on-site well and private septic facilities. The proposed well will constitute a new public water system and is proposed to be drilled to a depth of approximately 250 feet and to use approximately 1.94-acre feet of water per year for domestic consumption.

The project proposes two driveways, one onto State Route (SR) 132 (Maze Boulevard) and one onto North McCracken Road. Proposed hours of operation are anticipated to be seven days a week from 6:00 a.m. to 10:00 p.m. for the convenience market and 24 hours a day for the fueling stations. The applicant expects two shifts per day with 8-12 employees each shift and a total of three truck deliveries per day for the fueling station and convenience market. Employees and hours of operation for the future retail uses will be identified at a later time.

Landscaping consisting of a mixture of evergreen and shade trees, ornamental grasses, low lying shrubs, and groundcover will be installed along both road frontages, throughout the customer parking areas, around the proposed market building, and around a walking path and open space area that is located west of the market (see Exhibit B-10 – Landscaping Plan, of *Maps, Plans, and Elevations*). The proposed method of storm water capture for the site will be both French drain, located on the northeastern portion of the site, adjacent to the proposed driveway onto North McCracken Road, and within the proposed walking path and open space area, and a storm drain basin abutting the northwest corner of the SR 132 and McCracken intersection. The basins located along the property frontages will be screened by large evergreen hedges and planted with seasonal grasses and cobble within and around the perimeter.

The applicant has proposed to install 51 free-standing light poles, 24 feet in height, throughout the developed area. The sign plan for the new P-D consists of: a 15-foot-tall monument fuel pricing sign, not to exceed 150 square feet in area; a six (6) foot tall monument sign for the convenience market and future retail users, not to exceed 32 square feet of area; fueling canopy brand identification signage; and one wall sign each for the for the three uses within the retail building. The 15-foot-tall monument pricing sign will be located near the SR 132 and North McCracken Road intersection. The location of the six (6) foot tall monument sign will be determined at a later date.

All existing storage structures from the previous farm animal zoo and vendor sales area, including the ones in San Joaquin County, are proposed to be demolished as part of this project. An existing unpaved access road that runs east to west along the SR 132 frontage is proposed to be paved and landscaped, connecting the project site to the adjoining commercial development in San Joaquin County via reciprocal access. The applicant anticipates the site to be developed in one phase, with construction beginning within one year of project approval. If the applicant is unable to secure a reciprocal access easement, the project will develop without the access road, however, the area will still be required to be landscaped.

Approximately 6.6± acres of the 15.66± project site will remain in agricultural production.

### SITE DESCRIPTION

The project site is located at 15101 Maze Boulevard (State Route 132), between McCracken Road the County border, in the Vernalis area. The current parcel size is 15.66± acres with approximately 12.8± acres planted in almonds. The project sites northwestern property line aligns with the Stanislaus County and San Joaquin County border.

As discussed in the *Background* section, the project site is improved with 14 of 16 storage structures developed as part of the farm animal zoo and vendor sales use of the property. This developed area includes an unpaved access road that traverses east to west, connecting the project site to a parcel in San Joaquin County that is under the same ownership. The project site currently receives access to SR 132 via the adjoining parcel in San Joaquin County and has no direct access off North McCracken Road.

The site is surrounded by orchards and scattered single-family dwellings to the north, east, and south; and commercial development and a mobile home park to the west. The commercial development to the west includes, a drive through coffee stand, a convenience market, event center, and produce market.

### <u>ISSUES</u>

The application for this project was submitted to the County on November 30, 2020. Two key issues that have delayed consideration of this project are traffic and water resources. The following is an overview of these two issues:

#### Traffic:

At the request of California Department of Transportation (Caltrans) a traffic impact analysis (TIA) was prepared for the project, which identified the need for the installation of acceleration and deceleration lanes along SR 132 and for a left turn pocket from SR 132 onto the site and onto North McCracken Road. Additionally, the TIA recommended all project driveways and the SR 132 and North McCracken Road intersection be constructed to accommodate Surface Transportation Assistance Act (STAA) truck turning movements. The STAA allows large trucks to operate on the Interstate and certain primarily routes called collectively the National Network. STAA trucks are longer than California legal trucks and, as such, have a larger turning radius then most local roads can accommodate. The mitigation measures incorporated into the project to address traffic impacts are discussed in the *Environmental Review* section of this report. Both Caltrans and the Department of Public Works agreed with the findings of the TIA.

### Water Resources:

The entire development will be served by the construction of a new on-site water well which is required to meet state public water system standards. As defined by the California Health and Safety Code, a public water system is defined as a system serving more than 25 individuals daily for at least 60 days out of the year. New public water systems must obtain concurrence from the State of California Water Resources Control Board and a water supply permit from the Stanislaus County Department of Environmental Resources (DER) – Drinking Water Division. In this case, the project will be installing a new well needing a well permit be obtained from the County.

As proposed to be developed, without full occupancy of the retail building, the well is not anticipated to use more than 1.94-acre feet of water per year. This amount of water usage falls below the County's de minimis threshold of 2-acre feet of water per year. As the project's water usage has been assessed under the California Environmental Quality Act (CEQA) in the context of the larger development project, a well permit meeting the de minimis threshold would be exempt from further CEQA review.

Since full occupancy of the retail building would likely include quick service food businesses, which could increase the water demand, exceeding the de minimis threshold and triggering the need for additional CEQA review, a development standard has been added to the project that requires County re-certification of the well water usage prior to any change in occupancy and/or area usage of the retail building beyond the 4,800 square feet of convenience market usage.

In anticipating of needing to develop a new well meeting public water system standards, the applicant did explore the feasibility of connecting to the public water system serving the adjoining commercial development located in San Joaquin County. While San Joaquin County was willing

to discussion the process of permitting water extraction from San Joaquin County, no commitment to allow connection was obtained and the applicant has chosen to proceed with the option to develop an independent system.

A response to the project's CEQA Initial Study (IS), from DER – Groundwater Division identified a typo related to the acre feet per year classified under the de minimis exemption. The IS identified the exemption at 2.5 acre feet per year and not the allowed 2.0 acre feet per year. As discussed in the *Environmental Review* section of the report, the IS has been amended to correct the typo.

### **GENERAL PLAN CONSISTENCY**

Consistency with the goals, objectives, and policies of the various elements of the General Plan must be evaluated when processing all discretionary project requests. Additionally, in order to approve a rezone, it must be found to be consistent with the General Plan. This project includes a request to amend the General Plan designation from Agriculture to Planned Development.

As stated by the Introduction to the General Plan, General Plan Amendments affect the entire County and any evaluation must give primary concern to the County as a whole; therefore, a fundamental question must be asked in each case: "Will this amendment, if adopted, generally improve the economic, physical and social well-being of the County in general?" Additionally, the County in reviewing General Plan amendments shall consider how the levels of public and private service might be affected; as well as how the proposal would advance the long-term goals of the County. In each case, in order to take affirmative action regarding a General Plan Amendment application, it must be found that the General Plan Amendment will maintain a logical land use pattern without detriment to existing and planned land uses and that the County and other affected government agencies will be able to maintain levels of service consistent with the ability of the government agencies to provide a reasonable level of service. In the case of a proposed amendment to the Land Use diagrams of the Land Use Element, an additional finding that the amendment is consistent with the goals and policies of the General Plan must also be made. Additionally, Goal Two of the Land Use Element aims to ensure compatibility between land uses.

The Land Use Element describes the Planned Development designation as a designation intended for land which, because of demonstrably unique characteristics, may be suitable for a variety of uses without detrimental effects on other property. The Land Use Element also requires that the Agricultural Element's Conversion Criteria (Goal 2, Policy 2.7) be met when converting agricultural land to non-agricultural uses.

Goal 2, Policy 2.7 of the Agricultural Element states that, "Proposed amendments to the General Plan Diagram (map) that would allow the conversion of agricultural land to non-agricultural uses shall be approved only if they are consistent with the County's conversion criteria." Implementation 1, of the Agricultural Element's Policy 2.7 describes the procedures for processing amendments to the General Plan land use designation from "Agriculture" to another designation:

Conversion Consequences: The direct and indirect effects, as well as the cumulative effects, of the proposed conversion of agricultural land shall be fully evaluated.

Conversion Considerations: In evaluating the consequences of a proposed amendment, the following factors shall be considered: plan designation; soil type; adjacent uses; proposed method of sewage treatment; availability of water, transportation, public utilities, fire and police protection, and other public services; proximity to existing airports and

airstrips; impacts on air and water quality, wildlife habitat, endangered species and sensitive lands; and any other factors that may aid the evaluation process.

Conversion Criteria: Proposed amendments to the General Plan Diagram (map) that would allow the conversion of agricultural land to urban uses shall be approved only if the Board of Supervisors makes the following findings:

- a. Overall, the proposal is consistent with the goals and policies of the General Plan.
- b. There is evidence on the record to show a demonstrated need for the proposed project based on population projections, past growth rates, and other pertinent data.
- c. No feasible alternative site exists in areas already designated for the proposed uses.
- d. Approval of the proposal will not constitute a part of, or encourage, piecemeal conversion of a larger agricultural area to non-agricultural uses and will not be growth-inducing (as used in the California Environmental Quality Act).
- e. The proposed project is designed to minimize conflict and will not interfere with agricultural operations on surrounding agricultural lands or adversely affect agricultural water supplies.
- f. Adequate and necessary public services and facilities are available or will be made available as a result of the development.
- g. The design of the proposed project has incorporated all reasonable measures, as determined during the CEQA review process, to mitigate impacts to agricultural lands, fish and wildlife resources, air quality, water quality and quantity, or other natural resources.

This project site is unique in that while it has retained its "Agricultural" General Plan designation, the zoning has permitted the use to extend beyond those uses that would, under today's standards, be allowed under the designation; however, this request is proposing to extend the non-agricultural use of the project site beyond the area that was previously approved for use as a farm animal zoo and vendor sales.

Due to the project site's unique land use history, proximity to non-agricultural development, and location on a major transportation corridor, staff believes that all the necessary findings of the Agricultural Element's conversion criteria can be made and that the proposed project will not contribute to or encourage further conversion of larger agricultural lands to non-agricultural lands and will not be growth inducing due to the design of the project which utilizes roadways and agricultural buffers.

The General Plan's Agricultural Element Agricultural Buffer Guidelines states that new or expanding uses approved by a discretionary land use entitlement in the A-2 zoning district, or on a parcel adjoining the A-2 zoning district, should incorporate a minimum 150-foot-wide agricultural buffer setback, or 300-foot-wide buffer setback for people-intensive outdoor uses, to physically avoid conflicts between agricultural and non-agricultural uses. Public roadways, utilities, drainage facilities, rivers and adjacent riparian areas, landscaping, parking lots, and similar low people-intensive uses are permitted uses within the buffer setback area. Measured from the areas of use not permitted within the buffer setback areas (convenience market and fueling canopies), the

project exceeds the 150-foot required setback to the east and south, along the roadway frontages. The areas to the north and northwest of the project site are located in San Joaquin County and, as such, not subject to the County's buffer policy

The California Department of Conservation (DOC) initially responded to the project's CEQA Early Consultation referral stating that the County should consider feasible alterations or mitigations to the loss of agricultural land. Subsequently, the DOC provided a response to the IS referral, advising the discussion of agricultural conversion and providing the process to establish conservation easements for loss of farmland; however, the response also reflected that their advice was not intended to take a position or provide legal or policy interpretation and it respects the local decision-making process. As discussed above, the site has a history of non-agricultural use and is adjacent to a mix of commercial and residential uses located within San Joaquin County. Stanislaus County has applied its agricultural land conversion criteria and agricultural buffer criteria and determined that the findings required for the proposed change in general plan designation can be found.

### **ZONING ORDINANCE CONSISTENCY**

To approve a rezone, the Planning Commission must find that it is consistent with the General Plan. If approved, the fueling station, convenience market, and future retail uses of the two shell suites will become the only permitted uses of the new P-D zoning district and any expansion or amendment to the uses will be subject to all applicable requirements of the County's Zoning Ordinance. The project site is zoned Planned Development (P-D) (23), which was originally approved to allow for the development of a farm animal zoo, including construction of 16 small animal pen structures, and later modified to allow for vendor sales. While the farm animal use and vendor sales have ceased some time ago, the existing structures have been used for storage of various items throughout the years.

If approved, this project will maintain zoning consistency by adhering to the uses and development standards, including: parking, fencing, landscaping, signage, lighting, building height, and setbacks, incorporated into this project (see Exhibit C – *Development Standards and Mitigation Measures*). If the project is approved, the proposed zoning designation of Planned Development will be consistent with the proposed General Plan designation of Planned Development, as outlined in Exhibit A of this report.

### **ENVIRONMENTAL REVIEW**

Pursuant to the California Environmental Quality Act (CEQA), the proposed project was circulated to interested parties and responsible agencies for review and comment and potentially significant impacts associated with traffic and transportation have been mitigated (see Exhibit H – *Environmental Review Referrals*).

As discussed in the *Issues* section of the report, Caltrans requested that a Traffic Impact Analysis (TIA) be prepared to study any near-term and long-term impacts to SR 132. A TIA was initially performed by KD Anderson & Associates, Inc. on June 4, 2021 and revised on September 27, 2021 to address comments from both the County and Caltrans.

The TIA found that the project would likely generate 675 daily trips, including 205 daily trips for the gas station and convenience store and 470 daily trips for a future quick service restaurant, for passenger vehicles; and an average of 88 daily trips for heavy-duty trucks. The TIA concluded that without mitigation, the proposed project would pose a significant safety impact due to vehicles

turning left from SR 132 onto the project site; as well as vehicles slowing to turn right onto North McCracken Road or into the project sites SR 132 driveway. To mitigate these impacts, the TIA recommended a center turn lane, extending from the McCracken Road intersection the length of the site's frontage on SR 132, and an acceleration/deceleration lane for westbound vehicles ingress and egress to the site. Another mitigation measure was recommended to design project driveways and the northern corners of the SR 132 and McCracken Road intersection to accommodate turning movements of STAA trucks. Other projects requirements suggested by the TIA, but were not intended as mitigation, included preparation of STAA truck turning exhibits and construction of access between the project site and the commercial development in San Joaquin County. Each recommended mitigation measure has been applied to the project and the design will ultimately be subject to Caltrans standards. Both Caltrans and Stanislaus County's Public Works Department has reviewed the TIA and agree with its assumptions and conclusions.

As further discussed in the *Issues* section of this report, the IS has been amended to address a typo in the acre feet per year allowed for a de minimis exemption. Section X – *Hydrology and Water Quality* and Section XIX – *Utilities and Service Systems* have been amended to reflect the correct acre feet per year for the exemption. Additionally, the project description and Section XVII – *Transportation* of the IS have been amended to remove a reference to a requirement for subsequent discretionary land use permitting for future retail uses, as a development standard has been added to the project requiring DER certification of water usage, including any applicable permitting or environment review, without the need for further land use permitting.

As permitted by CEQA Guidelines, amendments to an IS may be made without recirculation provided they are providing clarifying information only. The amendments made to the IS are considered to be clarifying in nature and will not create new significant impacts. Accordingly, the amended IS is not required to be re-circulated (see Exhibit E – *Amended Initial Study, dated June 7, 2024*).

The project is considered to have a less than significant impact with mitigation measures included. Accordingly, a Mitigated Negative Declaration has been prepared for adoption, prior to action on the project (see Exhibit G – *Mitigated Negative Declaration*). The mitigation measures have been incorporated into the project as development standards (see Exhibit C – *Development Standards and Mitigation Measures*).

\*\*\*\*\*

**Note:** Pursuant to California Fish and Game Code Section 711.4, all project applicants subject to the California Environmental Quality Act (CEQA) shall pay a filing fee for each project; therefore, the applicant will further be required to pay **\$2,973.75** for the California Department of Fish and Wildlife (formerly the Department of Fish and Game) and the Clerk-Recorder filing fees. The attached Conditions of Approval ensure that this will occur.

Contact Person: Jeremy Ballard, Senior Planner, (209) 525-6330

### Attachments:

Exhibit A - Findings and Actions Required for Project Approval

Exhibit B - Maps, Plans, and Elevations

Exhibit C - Development Standards and Mitigation Measures

Exhibit D - Development Schedule

Exhibit E - Amended Initial Study, dated June 7, 2024 Exhibit F - Mitigation Monitoring and Reporting Program

Exhibit G - Mitigated Negative Declaration Exhibit H - Environmental Review Referrals

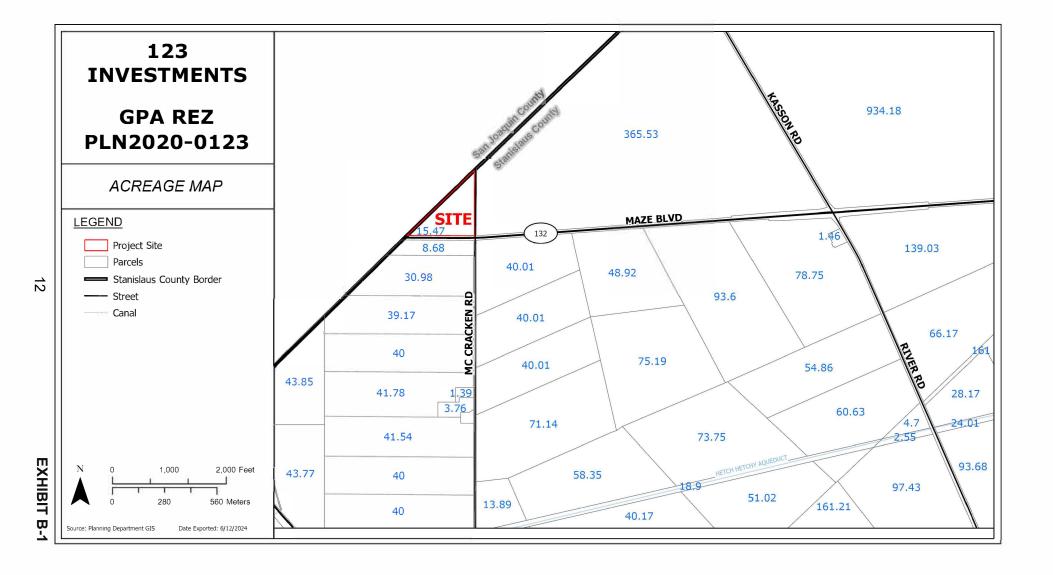
Exhibit I – Levine Act Disclosures

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### Findings and Actions Required for Project Approval

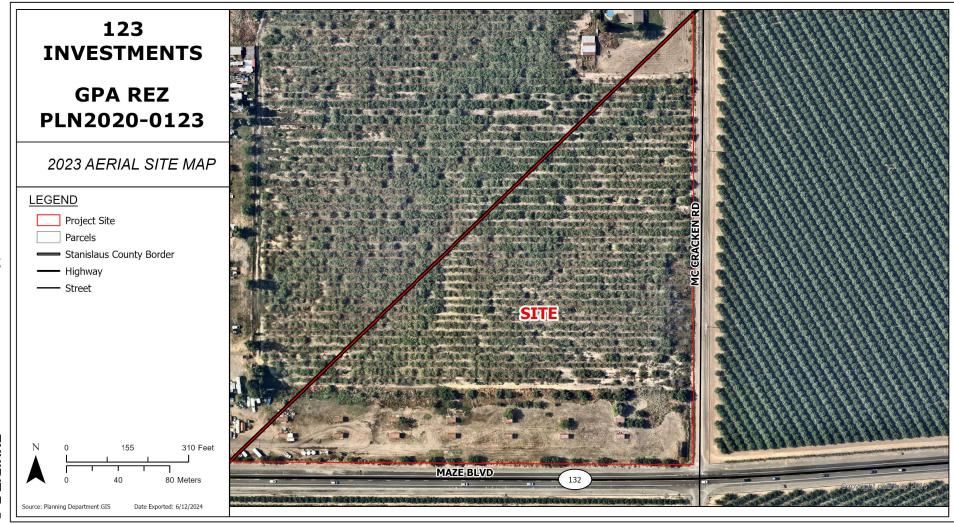
- 1. Adopt the Mitigated Negative Declaration pursuant to CEQA Guidelines Section 15074(b), by finding that on the basis of the whole record, including the Amended Initial Study and any comments received, that there is no substantial evidence the project will have a significant effect on the environment and that the Mitigated Negative Declaration reflects Stanislaus County's independent judgment and analysis.
- Order the filing of a Notice of Determination with the Stanislaus County Clerk-Recorder's Office pursuant to Public Resources Code Section 21152 and CEQA Guidelines Section 15075.
- 3. Find, based on the discussion in this report, and the whole of the record that:
  - a. The General Plan Amendment will maintain a logical land use pattern without detriment to existing and planned land uses.
  - b. The County and other affected governmental agencies will be able to maintain levels of service consistent with the ability of the governmental agencies to provide a reasonable level of service.
  - c. The amendment is consistent with the General Plan goals and policies.
  - d. The project will increase activities in and around the project area, and increase demands for roads and services, thereby requiring dedication and improvements.
- 4. Find that the proposed Planned Development zoning is consistent with the proposed Planned Development General Plan designation.
- 5. Approve General Plan Amendment and Rezone Application No. PLN2020-0123 132 Investments, subject to the attached Development Standards, Mitigation Measures, and Development Schedule.
- 6. Introduce, waive the reading, and adopt an ordinance for the approved Rezone Application No. PLN2020-0123 132 Investments.

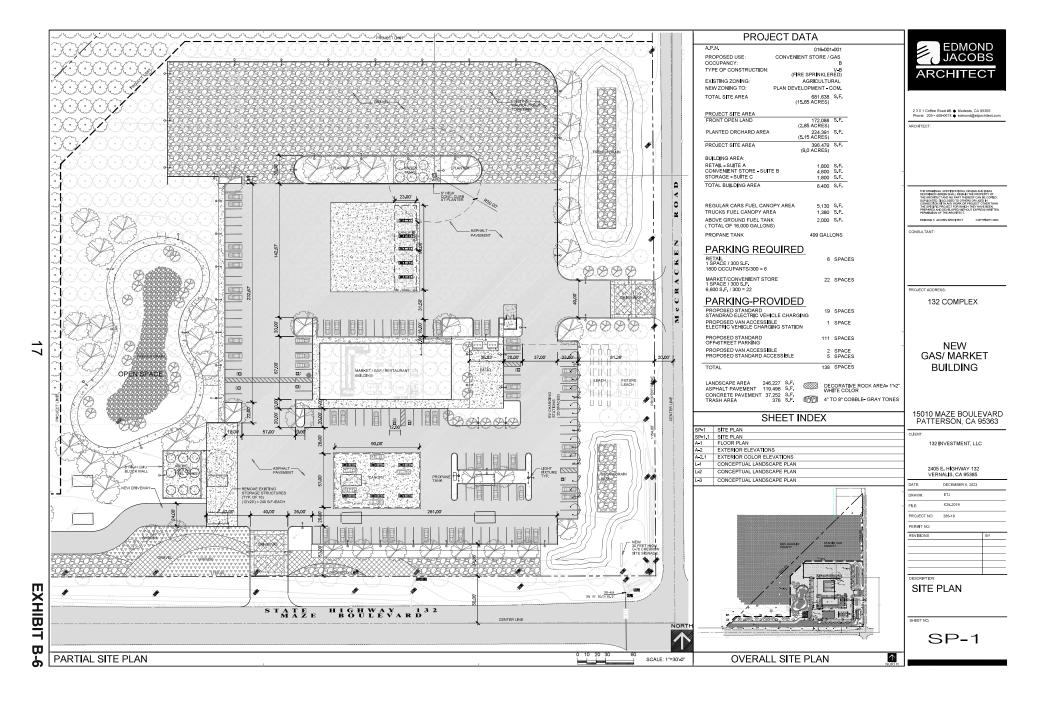
10 EXHIBIT A

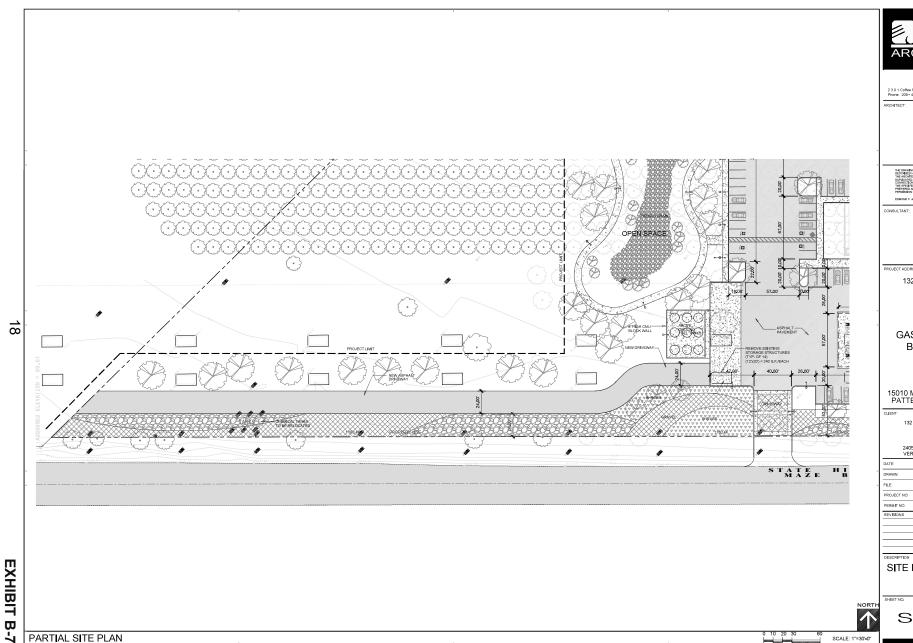














2 3 0 1 Coffee Road #B ♦ Modesto, CA 95355 Phone: 209 - 408-0674 ♦ edmond@etjarchitect.com

ARCHITECT:

PROJECT ADDRESS:

132 COMPLEX

NEW GAS/ MARKET **BUILDING** 

15010 MAZE BOULEVARD PATTERSON, CA 95363

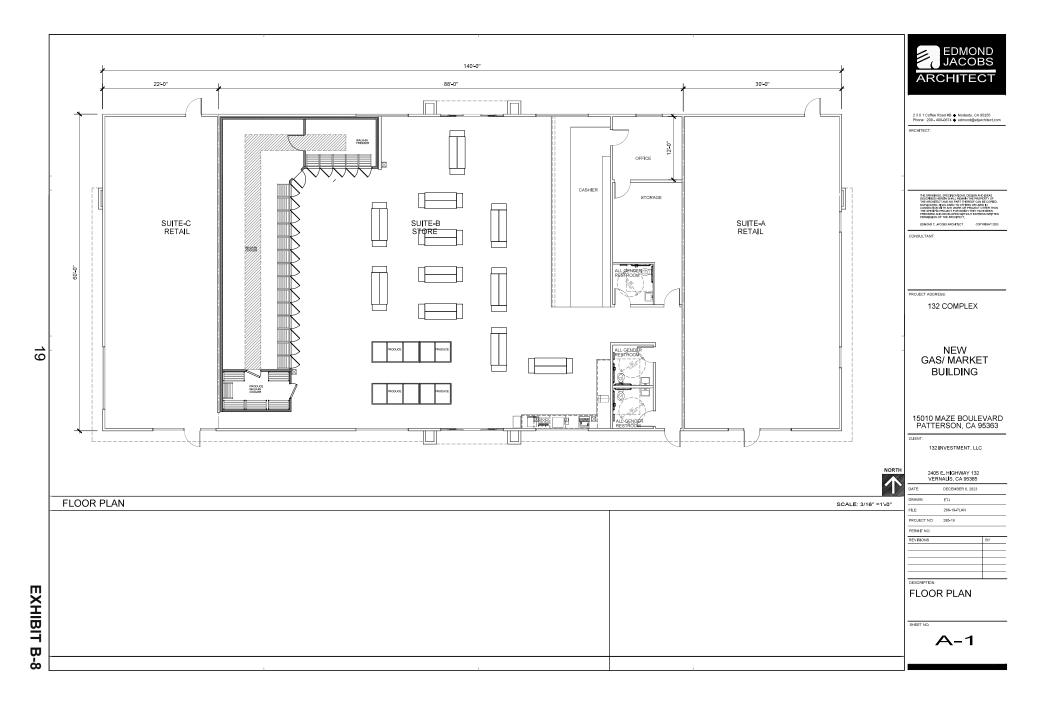
132 INVESTMENT, LLC

2405 E, HIGHWAY 132 VERNALIS, CA 95385

X29-2019 PROJECT NO: PERMIT NO:

SITE PLAN

SP-1.1



#### WELO COMPLIANCE

This project has been designed to conform with the State's Model Water Efficient Landscape Ordinan

IRRIGATION DESIGN

ne inigation or the size will use only inigation, will meet the City's requirements, and will compty wor be requirements of WELD. Equipment will include declicated inigation meter, smart controller, weaths ansor, and efficient inigation emitters, nozzlas, and other equipment.

PLANTING DES

The landscape design uses water-wise plant species suitable for this region and that are low maintenance and durable, uses trees to shade paved areas, and plants have been grouped into hydro-zones. References used for the landscape design include published information from the loci jurisdiction. Sunset Western Garden Book and WUCOLS.

#### LANDSCAPE AREA CALCULATIONS

| Total Site Area: 351,563 |
| Total Pervious Area: 212,303 |
| Imgated planner: 52,464 |
| Non-imgated hydroseed: 22,885 |
| Inert groundcover: 70,564 |
| Second Site Area |
|

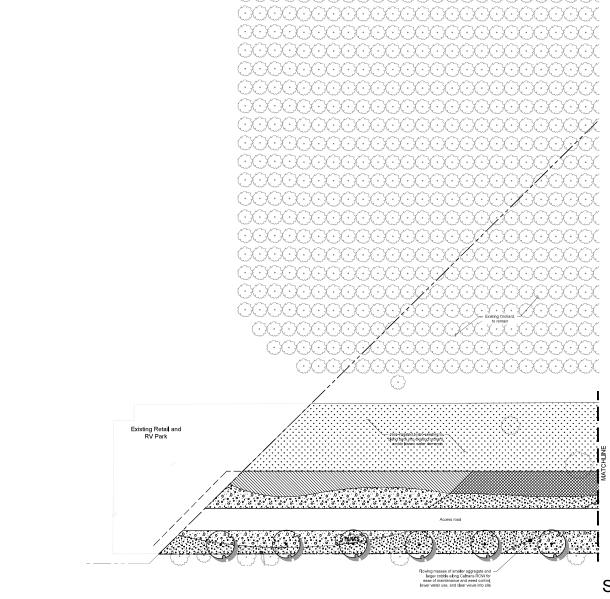
|                      | Reference I   | Evapotran  | spiration            | 49.7 in/yr         | ETAF                    | Maximum Allowed ETAF        |                   | 0.45                                   |  |  |
|----------------------|---|--|----------------------|--------------------|-------------------------|-----------------------------|-------------------|--|--|--|
| APPENDIX B WORKSHEET | Hydro-cone<br>(see desc.<br>below)  | Plant<br>Factor<br>(PF)                            | Irrigation<br>Method | Efficiency<br>(EE) | ETAF<br>(PF <b>(</b> E) | Landscape<br>Area (sq. ft.) | ETAF<br>X<br>Area | Estimated Total<br>Water Use<br>(ETWU) |  |  |
|                      | Regular Landscape Areas ("RLA") - See Hydrozone Descriptions for Referenced Numbers |  |                      |                    |                         |                             |                   |  |  |  |
|                      | Shrubs  | 0.30   | Drip                 | 0.81               | 0.37                    | 62,464 sf                   | 23,134,81         | 712,876 ga                             |  |  |
| í                    |   |  |                      |                    | Sub-totals              | 62,464.00                   | 23,134,81         | 712,876 gal                            |  |  |
|                      | Special La  | Special Landscape Areas ("SLA")                    |                      |                    |                         |                             |                   |  |  |  |
| ш                    | SLA1  |  |                      |                    | 1.00                    | 0 sf                        | 0.00              | 0 ga                                   |  |  |
| ì                    |   |  |                      |                    | Sub-totals              | 0 sf                        | 0.00              | 0 ga                                   |  |  |
| APPEN                |   | Total Landscape Area (RLA+SLA) 62,464 sf 23,134.81 |                      |                    |                         |                             | 23,134,81         |  |  |  |
|                      |   |  |                      |                    | ETWU Total              |                             |                   | 712,876 ga                             |  |  |
|                      |   |  |                      | M:                 | eximum Allowe           | nce (MAWA)                  | 866,145 ga        |  |  |  |
|                      | MAXIMU  | MAXIMUM ALLOWABLE WATER CALCULATION ("MAWA")       |                      |                    |                         |                             |                   |  |  |  |
| MAWA                 | MAWA  | -  | (ETo)                | (0,62)             | [ ( ETAF                | x LA) +                     | ( (1-ETAF)        | x sla)]                                |  |  |
|                      | 866,145 gal/yr 49,7 in/yr   |  |                      |                    | 62 464 sf               |                             | n ef              |  |  |  |
|                      | 866,145   | gal/yr   | 49,7 in/yr           | 0.62               | 0.45                    | 62,464 ST                   | 0.55              | 0.54                                   |  |  |
| _                    | 866,145<br>ETAF CAL   |  | ,                    | 0.62               | 0.45                    | 62,464 SI                   | 0.55              | 0 51                                   |  |  |
|                      |   | CULATIO  | VS.                  | 0.62               | Max<br>Allowed<br>ETAF  | 62,464 ST                   | 0.55              | 0.5                                    |  |  |
|                      | ETAF CAL  | CULATIO  | VS.                  | 0.62               | Max<br>Allowed          | 62,464 SF                   | 0.56              | 050                                    |  |  |
|                      | ETAF CAL<br>Regular La<br>ETAF  | CULATIO  | NS<br>Area (RLA)     |                    | Max<br>Allowed          | If Average ET               | AF is less than   | Max. Allower                           |  |  |



Sheet L1 - Conceptual Landscape Plan







#### PRELIMINARY PLANT PALETTE

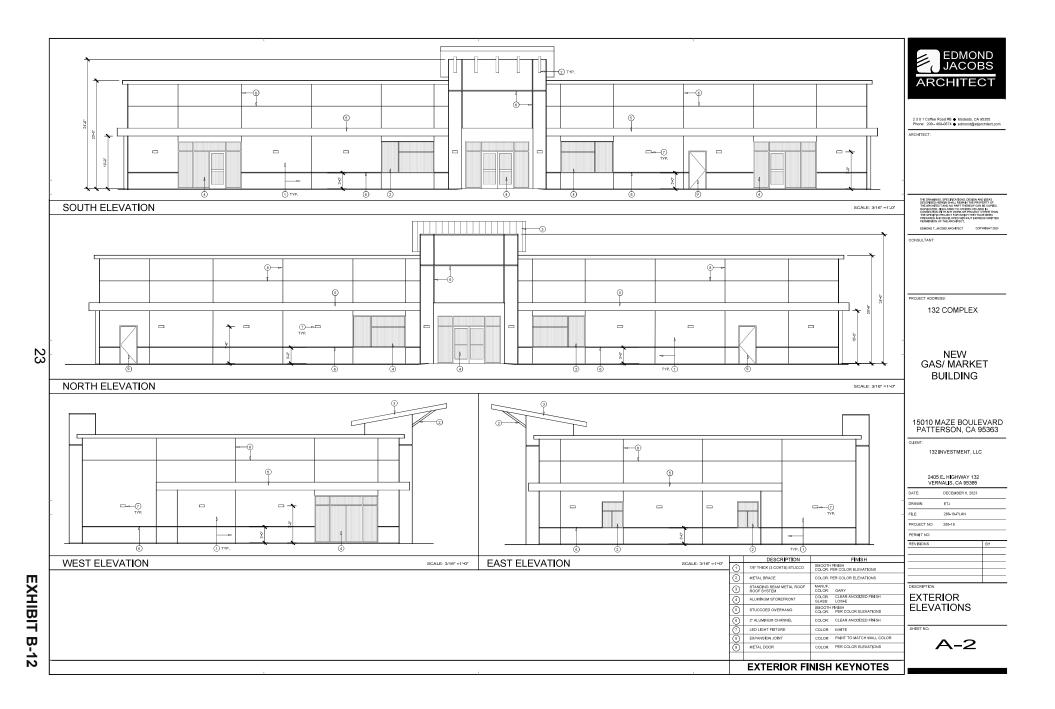
The Preliminary Plant Palette represents a sampling of the types of plants selected for this project that are suitable for the location and design concept. Plants in the final plan will be selected from this jest. Not all plants in the jet below will be used and additional plants may be incorporated with the final plans, but the overall design concept represented will be maintained.

| $\odot$  | PARKING LOT TREE / SHADE TREE Lophosteron conferns / Bistative Box Philatens recensors / California Systemore Cuarros synthes / Coast Live Oak Units partifold Toda's Crase Liseados Etn Zelbons serrins Village Green / Village Green Savilest Zalbons  | 58  | 15 gal.<br>15 gal.<br>15 gal.<br>15 gal.<br>15 gal.<br>15 gal.               | 20' oc<br>20' oc<br>35' oc<br>20' oc<br>20' oc                     |
|----------|--|---|--|--|
| 0        | ACCENT TREE Terois canadensis Forest Pansy / Forest Pansy Eastern Redbud Lagerstromsis indica x fauniei "Tuscarrora" / Tuscarrora Tuscarrora Pyrtie Pyrus calleryana "Chanticleer" / Chanticleer Callery Pear  | 4   | 24" box<br>24" box<br>24" box  | 20' oc<br>20' oc<br>20' oc   |
| 0        | EVERGREEN SHRUB / HEDGE Small to needum hedge, 307-42" high, may be informal or formal (whereoff hedge, depending on space and boation Ligustrum jeponicum Texanum / Texanum Privet Clea europaes Life folie TM / Ligh (Gio Clive Rhaphiolepis umbellata Minor / Yedda Hawthom   | 143   | 5 gal.<br>5 gal.<br>5 gal.   | 4" oc<br>5" oc<br>4" oc  |
| $\oplus$ | NETL SHOUB Empere shinks 78-42" high, for mid ground and meas sketting. Calistenero viminile Lifle John Y Lifle John Weeping Bottletrush Calistenero viminile Lifle John Y Lifle John Weeping Bottletrush Calisten purpuses (Scholi Robertise Dates Indioses / Fortsight Lifly Mandrad connected Calif Orleant* TM / Oalf Stream Heavenly Bantico Nandrad connected Calif Orleant* TM / Oalf Stream Heavenly Bantico Rhapholipis indica / Indian Hawthorn Rhapholipis indica / Indian Hawthorn   | 75  | 5 gal.<br>5 gal.<br>5 gal.<br>5 gal.<br>5 gal.<br>5 gal.<br>5 gal.           | 4" oc<br>4" oc<br>3,5" oc<br>3" oc<br>4" oc<br>4" oc               |
| 0        | LARGE EVERGREEN SCREEN SHRUB Large evergreen to provide screening Nerum deander / Oleander Photinis x haseri / Red Tip Photinia Pittosporum tobira Varinegata' / Varinegated Japanese Pittosporum  | 45  | 5 gal.<br>5 gal.<br>5 gal.   | 4" oc<br>4" oc<br>4" oc  |
|          | ORNAMENTAL GRASS Bootleon grade i Blac Grane Grass Bootleon grade i Blac Grane Grass | 11,285 sf<br>2,931<br>733<br>470<br>469<br>734<br>469<br>1,875  | 1 gal.<br>5 gal.<br>5 gal.<br>5 gal.<br>5 gal.<br>1 gal.<br>5 gal.<br>1 gal. | 24" oc<br>48" oc<br>60" oc<br>60" oc<br>48" oc<br>60" oc<br>30" oc |
|          | LOW GROWING GROUND COVER Low evergives pound cover of 2-51 for mass planting Low evergives pound cover of 2-51 for mass planting Copyrise Breath Copyrise Desire Annual Copyrise Breath Copyrise Desire Annual Copyrise Breath Cobossister damment Lowfast I Lowfast Beatherry Cobossister Annual Copyrise Desire Annual Copyrise Annual Copyrise Annual Copyrise Annual Procession Telling Mosparing Angonesis hockorosist Blee Copyrise Breathers Annual Copyrise Annual Cop | 28,351 sf<br>1,178<br>2,404<br>1,178<br>2,404<br>1,178<br>1,177 | 1 gal.<br>1 gal.<br>1 gal.<br>1 gal.<br>1 gal.<br>1 gal.<br>1 gal.           | 60" oc<br>42" oc<br>60" oc<br>42" oc<br>60" oc<br>60" oc           |
|          | ACCENT GROUND COVER Low planting, 6"-50", with interesting from, texture or flowers. Hemmocallis x Evergenen Yellow / Evergreen Yellow Daylity Lomandra longfolia Breeze in MI Breeze Mat Rush Trachetogenemu pasmioodes / Chinese Star Jasmine Verbena x hybrids / Verbena  | 7,399 sf<br>854<br>854<br>481<br>1,232                          | 1 gal.<br>1 gal.<br>1 gal.<br>1 gal.   | 36" oc<br>36" oc<br>48" oc<br>30" oc                               |
| 0 0      | COBBLE<br>Rounded river cobble, 4"-9"  | 32,844 sf   |  |  |
|          | GRAVEL Decorative gravel 2" minus, coerse aggregate. Color to complement overall landscape design.   | 23,546 sf   |  |  |
| ::::::   | HYDROSEEDING Non-irrigated hydro-seeding for erosion control at drainage basins. Hydro-seeding, non-irrigated / Local/native species   | 87,080 sf   | seed   |  |
|          | INERT GROUND COVER Mulch or gravel or other inert materal, for ease of maintenance and to Jessen water use.  | 6,369 sf  |  |  |











## **DEVELOPMENT STANDARDS AND MITIGATION MEASURES**

# GENERAL PLAN AMENDMENT AND REZONE APPLICATION NO. PLN2020-0123 132 INVESTMENTS

### **Department of Planning and Community Development (Planning)**

- Use(s) shall be conducted as described in the application and supporting information (including the plot plan) as approved by the Planning Commission and/or Board of Supervisors and in accordance with other laws and ordinances. All development standards and/or conditions of approvals from prior land use entitlements for the existing facility, previously zoned P-D 23, shall be superseded by the development standards applied to the project.
- 2. Pursuant to Section 711.4 of the California Fish and Game Code the applicant is required to pay a California Department of Fish and Wildlife fee at the time of filing a "Notice of Determination." Within five (5) days of approval of this project by the Planning Commission or Board of Supervisors, the applicant shall submit to the Department of Planning and Community Development a check for \$2,973.75, made payable to Stanislaus County, for the payment of California Department of Fish and Wildlife and Clerk-Recorder filing fees.

Pursuant to Section 711.4 (e) (3) of the California Fish and Game Code, no project shall be operative, vested, or final, nor shall local government permits for the project be valid, until the filing fees required pursuant to this section are paid.

- 3. Developer shall pay all Public Facilities Impact Fees and Fire Facilities Fees as adopted by Resolution of the Board of Supervisors. The fees shall be payable at the time of issuance of a building permit for any construction in the development project and shall be based on the rates in effect at the time of building permit issuance.
- 4. The developer/property owner is required to defend, indemnify, or hold harmless the County, its officers, and employees from any claim, action, or proceedings against the County to set aside the approval of the project which is brought within the applicable statute of limitations. The County shall promptly notify the applicant of any claim, action, or proceeding to set aside the approval and shall cooperate fully in the defense.
- 5. During the construction phases of the project, if any human remains, significant or potentially unique, are found, all construction activities in the area shall cease until a qualified archeologist can be consulted. Construction activities shall not resume in the area until an on-site archeological mitigation program has been approved by a qualified archeologist.
- 6. Planning shall record a Notice of Administrative Conditions and Restrictions with the County Recorder's Office within 30 days of project approval. The Notice includes: Conditions of Approval/Development Standards and Schedule; any adopted Mitigation Measures; and a project area map.

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# As Recommended by the Planning Commission June 20, 2024

- 7. No operations shall be conducted on any premises in such a manner as to cause an unreasonable amount of noise, odor, dust, smoke, vibration, or electrical interference detectable off the site.
- 8. All businesses operating on-site shall be subject to and maintain a valid Stanislaus County Business License prior to operation.
- 9. Prior to issuance of any building permit allowing for the installation of exterior lighting, a photometric lighting plan shall be submitted for review and approval by the Planning Director or appointed designee. All exterior lighting shall be designed (aimed down and toward the site) to provide adequate illumination without a glare effect. This shall include, but not be limited to, the use of shielded light fixtures to prevent skyglow (light spilling into the night sky) and the installation of shielded fixtures to prevent light trespass (glare and spill light that shines onto neighboring properties). The height of the lighting fixtures should not exceed 24 feet above grade.
- 10. On-site parking shall be developed and maintained in accordance with the approved development plan. All driveways, drive aisles, including truck drive aisles, truck parking areas, and customer and employee vehicle parking areas shall be paved (unless otherwise noted on the site plan). Pavement and parking spaces shall be installed in accordance with all applicable Stanislaus County standards.
- 11. Trash bins shall be kept in trash enclosures constructed of materials compatible with the architecture of the development. Trash enclosures shall be placed in locations as approved by the refuse collecting agency and the Planning Director or designee. Location and design shall be approved prior to issuance of any building permit.
- 12. A final landscaping plan and irrigation plan, in accordance with the approved development plan, shall be submitted for review and approval by the Planning Director or appointed designee, prior to issuance of any building permit. Landscape plans shall meet current State of California water use requirements at the time of submittal. The review of the landscape plan shall be subject to applicable County landscape review and inspection fees in effect at the time of review and inspection. Landscaping shall be installed and inspected prior to final of any building permit.
- 13. All landscaped areas, fences, and walls shall be maintained in an attractive condition and in compliance with the approved landscape and irrigation plan. The premises shall be kept free of weeds, trash, and other debris. Dead or dying plants shall be replaced with materials of equal size and similar variety within 30 days, at the property owner's expense.
- 14. A final sign plan including the location, height and area of the sign(s) shall be approved by the Planning Director or designee and shall be limited to: a 15-foot-tall monument pricing sign, not to exceed 150 square feet in size; a six (6) foot tall monument sign, not to exceed 32 square feet in size; identifying signage for each fueling canopy; and three (3) wall signs. Wall signs shall consist of individual lettering and shall not exceed 2-feet in height, a combined total size of 100 square feet, and/or 75% of the entire building frontage, unless otherwise allowed by the Planning Director. Signage shall be non-flashing, non-animated, and nonmoving. Directional signs, without limit on number, may be installed as approved by the Planning Director for size and placement.

- 15. Prior to any change in occupancy and/or area usage of the retail building, including each shell suite, beyond the 4,800 square feet of convenience market usage, the Department of Environmental Resources (DER) shall re-certify that the existing domestic well can maintain its exempt de minimis status. If DER determines the well usage will exceed the de minimis threshold, then all applicable permitting, including any required environmental review, shall be approved prior to the issuance of any tenant improvements allowing for the change in occupancy and/or area usage.
- 16. Development of the unpaved access road running east to west along the SR 132 frontage, in accordance with the approve development plan, shall be subject to the developer/property owner obtaining and securing an irrevocable access easement to allow the access to the adjoining property in San Joaquin County. If an irrevocable access easement, or any other easement allowing use, cannot be obtained by the developer/property owner, the area proposed to be developed with the paved access road, shall be landscaped, consistent with the surrounding area on-site.

### **Building Permits Division**

17. All required building permits shall conform to California Code of Regulations, Title 24, and any other applicable standards. Building permits shall be obtained within the timeframe specified in the Development Schedule approved for this project.

### **Department of Public Works (Public Works)**

- 18. No parking, loading, or unloading of vehicles shall be permitted within the Stanislaus County road right-of-way.
- 19. An encroachment permit shall be obtained from Public Works prior to any work being done in the Stanislaus County road right-of-way.
- 20. An encroachment permit shall be obtained from Caltrans prior to any work being done in the Caltrans road right-of-way.
- 21. Prior to the issuance of any building or grading permit, all driveway locations and widths shall be approved by Public Works. Any driveway approaches to be installed shall be done to Stanislaus County standards.
- 22. McCracken Road is classified as a 60-foot Local Road. The current right-of-way width of North McCracken Road at the project site is 40-foot for the full road width. The required ½ width of North McCracken Road is 30-foot west of the centerline of the roadway. The existing right-of-way is 20-foot west of the centerline of the roadway. The remaining 10-foot west of the centerline shall be dedicated as an Irrevocable Offer of Dedication prior to issuance of any grading or building permit.
- 23. Maze Boulevard is classified as a 135-foot Principle Arterial road. The current right-of-way width of Maze Boulevard at the project site is 90-foot for the full road width. The required ½ width of Maze Boulevard is 67.5-foot north of the centerline of the roadway. The existing right-of-way is 40-foot north of the centerline of the roadway. The remaining 27.5-foot north of the centerline shall be dedicated as an Irrevocable Offer of Dedication prior to issuance of any grading or building permit.

# As Recommended by the Planning Commission June 20, 2024

- 24. Stanislaus County's Public Works Standards and Specifications Detail 3C-1 for appropriate road right-of-way Chord shall be utilized for the intersection of McCracken Road and Maze Boulevard.
- 25. Prior to Public Works doing any plan review or inspections associated with the development, the property owner/developer shall sign a "Plan Check/Inspection Agreement" and post a \$5,000 deposit with Public Works.
- 26. Prior to the final of any building permit, the developer/property owner shall make road frontage improvements along the parcel frontage of North McCracken Road. The improvements shall meet County Standard Detail 3-A11. Improvement plans shall be submitted to Public Works for review and approval prior to issuance of any permit. An engineer's estimate shall be provided for the road improvements to determine the amount of the financial guarantee. This shall be submitted prior to issuance if of any permit and after the road improvements have been approved by Public Works.
- 27. A financial guarantee in a form acceptable to Public Works shall be deposited for the street improvements installation along the frontage on North McCracken Road prior to the issuance of any building or grading permit.
- 28. No grading shall be performed without first obtaining a Grading Permit. A grading, drainage, and erosion/sediment control plan for the project site shall be submitted to Public Works for review and approval. The grading, drainage, and erosion/sediment control plan shall include the following information:
  - a. The plan shall contain drainage calculations and enough information to verify that runoff from project will not flow onto adjacent properties and Stanislaus County road right-of-way. Public Works will review and approve the drainage calculations.
  - b. For projects greater than one acre in size, the grading drainage and erosion/sediment control plan shall comply with the current State of California Construction General Permit. A Waste Discharge Identification Number (WDID) and a copy of the Notice of Intent (NOI) and the project's Storm Water Pollution Prevention Plan (SWPPP) shall be provided prior to the approval of any grading, if applicable.
  - c. The applicant of the grading permit shall pay the current Stanislaus County Public Works weighted labor rate for review of the grading plan.
  - d. The applicant of the grading permit shall pay the current Stanislaus County Public Works weighted labor rate for all on-site inspections. The Public Works inspector shall be contacted 48 hours prior to the commencement of any grading or drainage work on-site.

### **Department of Environmental Resources (DER)**

- 29. Prior to the construction of or remodel of a retail food facility, a food facility permit shall be approved by DER.
- 30. Food facilities may be required to install grease interceptors in the wastewater line leading from drains, sinks, and other fixtures or equipment where grease may be introduced into the sewer system in quantities that can cause blockage.
- 31. Any on-site wastewater treatment system (OWTS) developed for this project shall consist of an individual Primary and Secondary wastewater treatment unit, operated under conditions and guidelines established by Measure X. All Local Agency Management Program (LAMP) standards shall be met.
- 32. If an existing OWTS is encountered, the property owner/developer shall contact DER for guidance and secure any required permits for the destruction of the OWTS.
- 33. The project constitutes a new public water system that is subject to SB 1263 and a water supply permit cannot be granted without concurrence from the State Water Boards.
- 34. A water supply permit shall be issued by DER, serving as the Local Primacy Agency, prior to final occupancy of any new building.

### **Department of Environmental Resources (DER) – Hazmat Materials Division**

- 35. A Phase 1 and Phase 2 study may be required to determine if any buried hazardous materials or contaminated soils exist on the project site prior to issuance of a grading permit.
- 36. The property owner/developer shall contact the DER Haz Mat regarding any discovery of underground storage tanks, former underground storage tank locations, buried chemicals, buried refuse, or contaminated soil, and appropriate permitting requirements for hazardous materials, and/or wastes. The property owner/developer and/or occupants handling hazardous materials or generating wastes must notify the Department of Environmental Resources prior to operation.

### **West Stanislaus Irrigation District**

- 37. All applicable assessment rates for the parcel shall continue to be assessed.
- 38. All existing irrigation facilities shall be protected in place or removed and replaced, as required by the District prior to the issuance of any grading or building permit.

### San Joaquin Valley Air Pollution Control District (SJVAPCD)

39. The proposed project shall be subject to SJVAPCD Rules and Regulations in place at the time of grading or building permit issuance. Prior to issuance of a grading or building permit, the applicant shall contact the SJVAPCD's Small Business Assistance Office to determine if any SJVAPCD permits are required, including but not limited to an Authority to Construct (ATC), an Air Impact Assessment (AIA), and a Permit to Operate (PTO).

## Central Valley Regional Water Quality Control Board

40. Prior to ground disturbance or issuance of a grading or building permit, the Central Valley Regional Quality Control Board shall be consulted to obtain any necessary permits and to implement any necessary measures, including but not limited to Construction Storm Water General Permit, Phase I and II Municipal Separate Storm Sewer System (MS4) Permits, Industrial Storm Water General Permit, Clean Water Act Section 404 Permit, Clean Water Act Section 401 Permit (Water Quality Certification), Waste Discharge Requirements, Low or Limited Threat General NPDES Permit, and any other applicable Regional Water Quality Control Board permit.

### **Mitigation Measures**

- 41. A left turn lane shall be developed north of the eastbound lane of SR 132, subject to approval by California Department of Transportation, to accommodate left hand turns into the site. The left turn lane shall begin 600 feet west of the project's proposed driveway onto SR 132 and shall continue to the SR 132/McCracken Road intersection.
- 42. A deceleration lane or enhanced 12-foot shoulder shall be developed on the northern side of the westbound lane of SR 132, subject to approval by California Department of Transportation (Caltrans), to accommodate right hand turns into the project site. The deceleration lane shall begin 600 feet east of the SR 132/McCracken Road intersection and shall provide a right turn pocket onto North McCracken Road; the deceleration lane shall continue west of the SR 132/McCracken Road intersection and shall provide a right turn pocket onto the project driveway on SR 132.
- 43. An acceleration lane or enhanced 12-foot shoulder shall be developed on the northern side of the westbound lane of SR 132, subject to approval by California Department of Transportation (Caltrans), to accommodate right hand turns out of the project site. The acceleration lane shall begin west of the proposed driveway onto SR 132 for 600 feet or a distance as determined by Caltrans.
- 44. All project driveways and both northwest and northeast corners of the SR 132 and McCracken Road intersection shall be constructed to accommodate the turning requirements of STAA trucks.

\*\*\*\*\*

Please note: If Conditions of Approval/Development Standards are amended by the Planning Commission or the Board of Supervisors, such amendments will be noted in the upper right-hand corner of the Conditions of Approval/Development Standards; new wording will be in bold font and deleted wording will be in strikethrough.

## **DEVELOPMENT SCHEDULE**

# GENERAL PLAN AMENDMENT AND REZONE APPLICATION NO. PLN2020-0123 – 132 INVESTMENTS

- Construction of the project shall begin within one year of project approval.
- An extension of the development schedule may be granted by the Planning Director subject to the issuance of a staff approval permit to allow for modifications to Development Standards/Schedule.

31 **EXHIBIT D** 



### DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

1010 10<sup>TH</sup> Street, Suite 3400, Modesto, CA 95354 Planning Phone: (209) 525-6330 Fax: (209) 525-5911 Building Phone: (209) 525-6557 Fax: (209) 525-7759

## AMENDED CEQA INITIAL STUDY

(New text is in bold font and deleted text is in strikethrough.)

Adapted from CEQA Guidelines APPENDIX G Environmental Checklist Form, Final Text, January 1, 2020

1. Project title: General Plan Amendment and Rezone PLN2020-0123-132

Application

Investments

2. Lead agency name and address: Stanislaus County

1010 10th Street, Suite 3400

Modesto, CA 95354

3. Contact person and phone number: Jeremy Ballard, Senior Planner

(209) 525-6330

**Project location:** 15101 Maze Boulevard (State Route 132), on 4.

> the northwest corner of State Route 132 and McCracken Road, abutting the Stanislaus and San Joaquin County border, in the Vernalis

area (APN:016-001-001).

5. Project sponsor's name and address: Abdo Almolaiki, d.b.a. 132 Investments

> 125 Maze Boulevard Modesto, CA 95351

6. **General Plan designation:** Agriculture

7. Zoning: Planned Development (P-D) (23)

8. **Description of project:** 

Request to amend the General Plan designation from Agriculture and zoning designation from Planned Development (P-D) (23) to a new Planned Development, to allow for the development of an 18-pump fueling station, serving both heavy-duty trucks and passenger vehicles, and a 8,400 square-foot retail building made up of a convenience market and two shell suites for future retail use, on a 9-acre portion of a 15.66-acre parcel.

The portion of the retail structure that will be occupied by a convenience market is proposed to be 4,800 square feet. The portion of the building for the two separate retail users, to be identified in the future, are proposed to be 1,800 square feet each. The convenience market will include areas for product display, storage, bathrooms, office, and a walk-in cooler and freezer. The fueling station will include a 1,380 square-foot canopied island that will include six fueling pumps for heavy-duty trucks and a 5,130 square-foot canopied island with 12 passenger vehicle fueling pumps. A total of 111 standard passenger vehicle parking spaces and 20 EV charging station spaces are proposed around the market structure and site perimeter. An open graveled area at the north end of the project site is proposed to accommodate the parking of heavy-duty trucks during use of the convenience market or other on-site business or amenities. No overnight truck parking is proposed. Additionally, the site will develop a 499-gallon propane tank and dispenser for retail sales and 2,000 square-foot area for aboveground fuel tanks totaling 16,000 gallons. The project will be served by a new domestic well and private septic facilities. The proposed domestic well will be drilled to a depth of approximately 250 feet and will use approximately 1.94-acre feet per year of water for domestic purposes. The project proposes two driveways, one onto State Route (SR) 132 and the second onto McCracken Road. Proposed hours of operation are anticipated to be seven days a week from 6:00 a.m. to 10:00 p.m. for the convenience market and 24 hours a day for the fueling stations. The applicant expects two shifts per day with 8-12 employees each shift and a total of three truck deliveries per day for the convenience market. Employees and hours of operation for the future retail uses will be identified at a later time during a separate discretionary land use process.

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**EXHIBIT E** 

Landscaping consisting of a mixture of evergreen and shade trees, ornamental grasses, low lying shrubs, and groundcover will be installed along both road frontages, throughout the customer parking areas, around the proposed market building, and around a walking path area that is located adjacent to the market. The proposed storm water basins for the site will be located along the northeastern portion of the site adjacent to the driveway onto McCracken Road and abutting the northwest corner of the SR 132 and McCracken intersection. Each basin will be planted with seasonal grasses and cobble. Additionally, the applicant is proposing installation of a 30-foot-tall free standing gasoline pricing sign. The sign will be located at the southeastern corner of the project site adjacent to the SR 132 and McCracken intersection.

The parcel abutting the project site to the west, which is located within San Joaquin County but is under common ownership as the project site, is developed with mixed uses such as two retail stores, an event center, drive thru coffee stand, and a RV park and walnut orchards. Although the proposed project is a separate development than those currently in operation within San Joaquin County, an existing access road that runs east to west along the SR 132 frontage between the two parcels is proposed to be paved and landscaped, connecting the two sites via reciprocal access.

The project site has a General Plan designation of Agriculture and a zoning designation of Planned Development (P-D) (23). P-D 23 was originally approved on July 15, 1976 (Rez 76-11) to allow the development of a farm animal zoo, including construction of 14 small animal pen structures. On January 4, 1979 the Planned Development was modified to convert half of the zoo space into a weekend only outdoor sales area for vendors to sell hand-crafted goods. The use has ceased for some time and all existing structures are proposed to be demolished as a result of development of the site. A rezone to a new Planned Development district is necessary for the development of the project.

- 9. Surrounding land uses and setting:
- 10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):

Orchards and scattered single family dwellings in all directions, commercial development and mobile home park to the west within San Joaquin County, Highway 33 and Vernalis further to the west, the San Joaquin River to the east, and State Route 132 to the south.

Caltrans

San Joaquin Valley Air Pollution Control District Stanislaus County Department of Public Works Stanislaus County Department of Environmental Resources

11. Attachments:

- I. Central California Information Center Report, dated October 13, 2020
- II. Traffic Impact Analysis prepared by KD Anderson and Associates, Inc., revised on September 27, 2021

Signature on file.

Prepared by Jeremy Ballard, Senior Planner

|  | ENTIALLY AFFECTED: ed below would be potentially affected icant Impact" as indicated by the checkl   |   |
|--|--|---|
| □Aesthetics  | ☐ Agriculture & Forestry Resources   | ☐ Air Quality   |
| ☐Biological Resources  | ☐ Cultural Resources   | □ Energy  |
| □Geology / Soils   | ☐ Greenhouse Gas Emissions   | ☐ Hazards & Hazardous Materials   |
| ☐ Hydrology / Water Quality  | ☐ Land Use / Planning  | ☐ Mineral Resources   |
| ☐ Noise  | ☐ Population / Housing   | ☐ Public Services   |
| ☐ Recreation   |  | ☐ Tribal Cultural Resources   |
| ☐ Utilities / Service Systems  | ☐ Wildfire   | ☐ Mandatory Findings of Significance  |
| I find that although the p not be a significant effect by the project proponent.  I find that the propose ENVIRONMENTAL IMPACE.  I find that the proposed unless mitigated" impact an earlier document pursue measures based on the earlier strength of the proposed purchased on the earlier strength of the proposed purchased on the earlier based on the earlier significant eff DECLARATION pursuant that earlier EIR or NEGA | on:    project COULD NOT have a significant of the project could have a significant of the project could have a significant of the project MAY hav | at effect on the environment, there will roject have been made by or agreed to DN will be prepared.  effect on the environment, and an ant impact" or "potentially significant ect 1) has been adequately analyzed in 2) has been addressed by mitigation sheets. An ENVIRONMENTAL IMPACT ain to be addressed.  effect on the environment, because all tely in an earlier EIR or NEGATIVE been avoided or mitigated pursuant to |

April 18, 2024 June 7, 2024

Date

#### **EVALUATION OF ENVIRONMENTAL IMPACTS:**

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration.

Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

- a) Earlier Analysis Used. Identify and state where they are available for review.
- b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
- c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific development standards for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). References to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
  - a) the significant criteria or threshold, if any, used to evaluate each question; and
  - b) the mitigation measure identified, if any, to reduce the impact to less than significant.

### **ISSUES**

| I. AESTHETICS – Except as provided in Public Resources Code Section 21099, could the project:   | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>With Mitigation<br>Included | Less Than<br>Significant<br>Impact | No Impact |
|---|--------------------------------------|---|------------------------------------|-----------|
| a) Have a substantial adverse effect on a scenic vista?   |                                      |   | X                                  |           |
| b) Substantially damage scenic resources, including,<br>but not limited to, trees, rock outcroppings, and<br>historic buildings within a state scenic highway?  |                                      |   | х                                  |           |
| c) In non-urbanized areas, substantially degrade the<br>existing visual character or quality of public views<br>of the site and its surroundings? (Public views are<br>those that are experienced from publicly accessible<br>vantage point). If the project is in an urbanized area,<br>would the project conflict with applicable zoning<br>and other regulations governing scenic quality? |                                      |   | X                                  |           |
| d) Create a new source of substantial light or glare<br>which would adversely affect day or nighttime views<br>in the area?   |                                      |   | X                                  |           |

**Discussion:** The site itself is not considered to be a scenic resource or unique scenic vista. The portion of the site in Stanislaus County is currently developed with 14 storage shed structures, used with the previous farm zoo and hand-crafted goods sales operation of P-D (23). The use has ceased for some time and all 16 structures are proposed to be demolished as a result of development of the site. The remaining portion of the site is planted in walnut orchard. The proposed project will landscape the developed portion of the site with a mixture of evergreen and shade trees, ornamental grasses, low lying shrubs, and groundcover which will be installed along both road frontages, throughout the customer parking areas, around the proposed market building, and around a walking path area that is located adjacent to the market. Additionally, the applicant has proposed a 30-foot-tall free standing gasoline pricing sign.

The only scenic designation in the County is along I-5, which is  $6\pm$  miles west of the project site. The project will not degrade the existing visual character or quality of the site or its surroundings. The applicant has proposed 51 free-standing light poles, 24 feet in height, installed throughout the developed area. Development standards will be added to this project to address glare from any on-site lighting. No adverse impacts to the existing visual character of the site or its surroundings are anticipated.

Mitigation: None.

**References:** Application information; Stanislaus County Zoning Ordinance; the Stanislaus County General Plan; and Support Documentation<sup>1</sup>.

| II. AGRICULTURE AND FOREST RESOURCES: In                      | Potentially | Less Than                   | Less Than   | No Impact |
|---|-------------|-----------------------------|-------------|-----------|
| determining whether impacts to agricultural resources are     | Significant | Significant                 | Significant |           |
| significant environmental effects, lead agencies may refer    | Impact      | With Mitigation<br>Included | Impact      |           |
| to the California Agricultural Land Evaluation and Site       |             | meraaca                     |             |           |
| Assessment Model (1997) prepared by the California            |             |                             |             |           |
| Department 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:  |             |                             |             |           |
| a) Convert Prime Farmland, Unique Farmland, or                |             |                             |             |           |
| Farmland of Statewide Importance (Farmland), as               |             |                             |             |           |
| shown on the maps prepared pursuant to the                    |             |                             | х           |           |
| Farmland Mapping and Monitoring Program of the                |             |                             | Α           |           |
| California Resources Agency, to non-agricultural              |             |                             |             |           |
| use?  |             |                             |             |           |
| b) Conflict with existing zoning for agricultural use, or     |             |                             | х           |           |
| a Williamson Act contract?                                    |             |                             |             |           |
| c) Conflict with existing zoning for, or cause rezoning       |             |                             |             |           |
| of, forest land (as defined in Public Resources Code          |             |                             |             |           |
| section 12220(g)), timberland (as defined by Public           |             |                             | Х           |           |
| Resources Code section 4526), or timberland zoned             |             |                             |             |           |
| Timberland Production (as defined by Government               |             |                             |             |           |
| Code section 51104(g))?                                       |             |                             |             |           |
| d) Result in the loss of forest land or conversion of         |             |                             | Х           |           |
| forest land to non-forest use?                                |             |                             |             |           |
| e) Involve other changes in the existing environment          |             |                             |             |           |
| which, due to their location or nature, could result          |             |                             | Х           |           |
| in conversion of Farmland, to non-agricultural use            |             |                             |             |           |
| or conversion of forest land to non-forest use?               |             |                             |             |           |

**Discussion:** A 2.85-acre portion of the 15.66-acre site was previously developed as a farm animal zoo including the sales of hand-crafted goods and is not currently in agricultural production with the balance of the property planted in walnuts. The site is not enrolled in a Williamson Act Contract. As proposed, 9 acres of the 15.66-acre parcel will be developed for a convenience market and fueling station, the remaining 6.66 acres will remain planted in walnuts. The USDA Natural Resources Conservation Service's Western Stanislaus County Soil Survey indicates that nearly the entire property is made up of Capay clay wet, which has a Story Index Rating of 35 and a Grade of 4. The California Revised Storie Index is a rating system based on soil properties that dictate the potential for soils to be used for irrigated agricultural production in California. This rating system grades soils with an Index rating of 81 and 100 as excellent soils to be used for irrigated farmland. Stanislaus County considers land that meets at least one of the following requirements to be prime farmland under the Uniform Rules: parcels comprised of Grade 1 or 2 soils; irrigated pastureland which supports livestock used for the production of food and fiber; and land used for unprocessed agricultural plant production with an annual gross value of not less than eight hundred dollars per acre. The project site does not meet the County's definition for prime agriculture under the County's Uniform Rules. However, the California Department of Conservation's Important Farmland Maps identifies the project site as Prime Farmland.

The project site is located within the West Stanislaus Irrigation District (WSID). The WSID responded to the project referral stating that existing irrigation infrastructure exists on the site and will be required to be relocate infrastructure and provide an easement for its continued use. A condition of approval will be added to the project to ensure these requirements are met.

Goal 2, Policy 2.7 of the Agricultural Element states that, "Proposed amendments to the General Plan Diagram (map) that would allow the conversion of agricultural land to non-agricultural uses shall be approved only if they are consistent with the County's conversion criteria." Implementation 1, of the Agricultural Element's Policy 2.7 describes the procedures for processing amendments to the General Plan land use designation from "Agriculture" to another designation:

<u>Conversion Consequences</u>. The direct and indirect effects, as well as the cumulative effects, of the proposed conversion of agricultural land shall be fully evaluated.

<u>Conversion Considerations</u>. In evaluating the consequences of a proposed amendment, the following factors shall be considered: plan designation; soil type; adjacent uses; proposed method of sewage treatment; availability of water, transportation, public utilities, fire and police protection, and other public services; proximity to existing airports and airstrips; impacts on air and water quality, wildlife habitat, endangered species and sensitive lands; and any other factors that may aid the evaluation process.

<u>Conversion Criteria</u>. Proposed amendments to the General Plan Diagram (map) that would allow the conversion of agricultural land to urban uses shall be approved only if the Board of Supervisors makes the following findings:

- A. Overall, the proposal is consistent with the goals and policies of the General Plan.
- B. There is evidence on the record to show a demonstrated need for the proposed project based on population projections, past growth rates, and other pertinent data.
- C. No feasible alternative site exists in areas already designated for the proposed uses.
- D. Approval of the proposal will not constitute a part of, or encourage, piecemeal conversion of a larger agricultural area to non-agricultural uses and will not be growth-inducing (as used in the California Environmental Quality Act).
- E. The proposed project is designed to minimize conflict and will not interfere with agricultural operations on surrounding agricultural lands or adversely affect agricultural water supplies.
- F. Adequate and necessary public services and facilities are available or will be made available as a result of the development.
- G. The design of the proposed project has incorporated all reasonable measures, as determined during the CEQA review process, to mitigate impacts to agricultural lands, fish and wildlife resources, air quality, water quality and quantity, or other natural resources.

A comment letter was received from the California Department of Conservation (DOC) stating that the County must consider feasible alternatives or mitigations to the loss of agricultural land. The DOC recommended further discussion on other farmland converted as a result of this project, impacts to current and future agricultural operations in the vicinity, and any mitigation measures.

As the entirety of the parcel within Stanislaus County was rezoned to a Planned Development zoning district to allow for a farm animal zoo in 1976 and later in 1979 for the sales of hand-crafted goods, the conversion of a portion of the agricultural land on the parcel took place at that time. To allow for the development of the convenience market and fueling station, a new Planned Development zoning district is needed. The General Plan designation of the parcel is still Agriculture and must be consistent with the proposed zoning district, thus the application includes a General Plan amendment to Planned Development as well. However, because of the unique nature of the site including the previous agro-commercial uses of P-D 23, adjacency to a mix of commercial and residential uses within San Joaquin County, the location of a state highway, and soils that are not considered prime, the amendment of the General Plan Designation from Agriculture to Planned Development is considered to be consistent with the required conversion criteria of Goal 2 of the Agricultural Element. Because of these factors, it is not anticipated that the project would lead to, directly or indirectly, conversion of agricultural lands adjacent to the project nor are impacts to those lands expected to be significant.

All new or expanding uses approved by discretionary permit in the A-2 zoning district or on a parcel adjoining the A-2 zoning district are required to incorporate a minimum 150-foot-wide agricultural buffer setback, or 300-foot-wide buffer setback for people-intensive uses. Public roadways, utilities, drainage facilities, rivers and adjacent riparian areas, landscaping, parking lots, and similar low people intensive uses are permitted uses within the buffer setback area. The nearest A-2 zoned property is located a minimum of 60 feet to the south, across SR 132 and to the east, across McCracken Road, of the project site. Based on the proposed use a 300-foot-wide buffer for people intensive uses would be required, however, the applicant has proposed an alternative buffer for compliance with the policy. Along the frontage

of both SR 132 and McCracken Road, the applicant has proposed a combination of shade trees and evergreen hedges positioned behind the two proposed storm drain basins as their alternative.

Impacts to agricultural resources are considered to be less than significant.

Mitigation: None.

**References:** Natural Resources Conservation Service Soil Survey; application information; Stanislaus Soil Survey (1957); California State Department of Conservation Farmland Mapping and Monitoring Program - Stanislaus County Farmland 2018; Referral response received from West Stanislaus Irrigation District, dated February 04, 2021; Referral response received from Department of Conservation, dated February 10, 2021; Stanislaus County General Plan and Support Documentation<sup>1</sup>.

| III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations Would the project: | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>With Mitigation<br>Included | Less Than<br>Significant<br>Impact | No Impact |
|---|--------------------------------------|---|------------------------------------|-----------|
| a) Conflict with or obstruct implementation of the applicable air quality plan?   |                                      |   | x                                  |           |
| b) Result in a cumulatively considerable net increase<br>of any criteria pollutant for which the project region<br>is non-attainment under an applicable federal or<br>state ambient air quality standard?                              |                                      |   | X                                  |           |
| c) Expose sensitive receptors to substantial pollutant concentrations?  |                                      |   | x                                  |           |
| d) Result in other emissions (such as those odors adversely affecting a substantial number of people?   |                                      |   | X                                  | _         |

**Discussion:** The proposed project is located within the San Joaquin Valley Air Basin (SJVAB) and, therefore, falls under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). In conjunction with the Stanislaus Council of Governments (StanCOG), the SJVAPCD is responsible for formulating and implementing air pollution control strategies. The SJVAPCD's most recent air quality plans are the 2007 PM10 (respirable particulate matter) Maintenance Plan, the 2008 PM2.5 (fine particulate matter) Plan, and the 2007 Ozone Plan. These plans establish a comprehensive air pollution control program leading to the attainment of state and federal air quality standards in the SJVAB, which has been classified as "extreme non-attainment" for ozone, "attainment" for respirable particulate matter (PM-10), and "non-attainment" for PM 2.5, as defined by the Federal Clean Air Act.

The primary source of air pollutants generated by this project would be classified as being generated from "mobile" sources. Mobile sources would generally include dust from roads, farming, and automobile exhausts. Mobile sources are generally regulated by the Air Resources Board of the California EPA which sets emissions for vehicles and acts on issues regarding cleaner burning fuels and alternative fuel technologies. As such, the SJVAPCD has addressed most criteria air pollutants through basin wide programs and policies to prevent cumulative deterioration of air quality within the SJVAB. The project will increase traffic in the area and, thereby, impacting air quality.

Construction activities associated with new development can temporarily increase localized PM10, PM2.5, volatile organic compound (VOC), nitrogen oxides (NOX), sulfur oxides (SOX), and carbon monoxide (CO) in the project's vicinity. The primary source of construction-related CO, SOX, VOC, and NOX emission is gasoline and diesel-powered, heavy-duty mobile construction equipment. Primary sources of PM10 and PM2.5 emissions are generally clearing and demolition activities, grading operations, construction vehicle traffic on unpaved ground, and wind blowing over exposed surfaces. Construction associated with the project includes development of an 18-pump fueling station, serving both heavy-duty trucks and passenger vehicles, and 8,400 square-foot retail building made up of a convenience market and two shell suites for future retail use. The project site will also be developed with a total of 111 standard passenger vehicle parking spaces and 20 EV charging station spaces are proposed around the market structure and site perimeter. An open graveled area at the north end of the project is proposed accommodate heavy-duty truck parking during use of the convenience market or other on-site business or amenities. No overnight parking is proposed. Additionally, the site will develop a 499-gallon propane tank and dispenser for retail sales and 2,000 square-foot area for aboveground fuel tanks totaling 16,000 gallons.

Development of the site will include frontage landscaping be installed along both road frontages, throughout the customer parking areas, around the proposed market building, and around a walking path area that is located adjacent to the market.

The SJVAPCD's Small Project Analysis Level (SPAL) Analysis indicates that the typical minimum threshold of significance for convenience markets with fueling stations projects are an average of 1,900 passenger vehicle trips and 35 average heavy duty truck trips per day. A traffic impact analysis was completed for the project by KD Anderson & Associates, Inc. on September 27, 2021. The analysis stated that the average daily vehicle trips for passenger vehicles will be 675 trips and 88 heavy duty truck trips. Although the heavy duty truck trips exceed the SJVAPCD's 35 truck average, due to the fact that they are coming from existing pass-by trips combined with requirements to meet Air District standards in place, impacts are anticipated to be less than significant.

The project was referred to SJVAPCD during the early consultation process, in which they responded the project was not expected to exceed annual emissions from construction and operation of criteria pollutants past any of the significant SJVAPCD thresholds. The SVJAPCD's comment letter also stated that the project would be subject to other SJVAPCD rules and regulations such as Rule 2010 and 2201 – Air Quality Permitting for Stationary Sources, Rule 9510 – Indirect Source Review, and Regulation VIII – Fugitive PM 10 Prohibitions. The SJVAPCD requested the applicant demonstrate compliance with these Rules and Regulations through SJVAPCD permitting such as an Authority to Construction (ATC), Permit to Operate (PTO), and an Air Impact Assessment (AIA) prior to issuance of any permit. These permit requirements will be added as development standards for the project.

Potential impacts on local and regional air quality are anticipated to be less than significant, falling below SJVAPCD thresholds, as a result of the nature of the proposed project and project's operation after construction. Implementation of the proposed project would fall below the SJVAPCD significance thresholds for both short-term construction and long-term operational emissions, as discussed above. Because construction and operation of the project would not exceed the SJVAPCD significance thresholds, the proposed project would not increase the frequency or severity of existing air quality standards or the interim emission reductions specified in the air plans.

For these reasons, the proposed project would be consistent with the applicable air quality plans. Also, the proposed project would not conflict with applicable regional plans or policies adopted by agencies with jurisdiction over the project and would be considered to have a less than significant impact.

Mitigation: None.

**References:** Application material; San Joaquin Valley Air Pollution Control District - Regulation VIII Fugitive Dust/PM-10 Synopsis; www.valleyair.org; Referral response received from San Joaquin Valley Air Pollution Control District, dated May 28, 2021; Traffic Impact Analysis Prepared by KD Anderson & Associates, Inc., revised September 27, 2021; and the Stanislaus County General Plan and Support Documentation<sup>1</sup>.

| IV. BIOLOGICAL RESOURCES Would the project:   | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>With Mitigation<br>Included | Less Than<br>Significant<br>Impact | No Impact |
|---|--------------------------------------|---|------------------------------------|-----------|
| a) Have a substantial adverse effect, either directly or<br>through habitat modifications, on any species<br>identified as a candidate, sensitive, or special status<br>species in local or regional plans, policies, or<br>regulations, or by the California Department of Fish<br>and Game or U.S. Fish and Wildlife Service? |                                      |   | X                                  |           |
| b) Have a substantial adverse effect on any riparian<br>habitat or other sensitive natural community<br>identified in local or regional plans, policies,<br>regulations, or by the California Department of Fish<br>and Game or U.S. Fish and Wildlife Service?   |                                      |   | x                                  |           |

| c) Have a substantial adverse effect on st<br>federally protected wetlands (including, b<br>limited to, marsh, vernal pool, coastal, etc.) th<br>direct removal, filling, hydrological interrupt<br>other means?     | ut not not X |
|--|--------------|
| d) Interfere substantially with the movement<br>native resident or migratory fish or wildlife s<br>or with established native resident or mig<br>wildlife corridors, or impede the use of<br>wildlife nursery sites? | pecies X     |
| e) Conflict with any local policies or ordir protecting biological resources, such as preservation policy or ordinance?  |              |
| f) Conflict with the provisions of an adopted by Conservation Plan, Natural Components Conservation Plan, or other approved regional, or state habitat conservation plan?  | munity Y     |

**Discussion:** It does not appear this project will result in impacts to endangered species or habitats, locally designated species, or wildlife dispersal or mitigation corridors. The project is located within the Vernalis Quad of the California Natural Diversity Database (CNDDB). There are 10 animal species which are state or federally listed, threatened, or identified as species of special concern or a candidate of special concern within the Vernalis CNDDB Quad such as the Swainsons Hawk, the Western Yellow Billed Cuckoo, the Tricolored Blackbird, the Green Sturgeon – Southern DPS, Delta Smelt, Steelhead-Central Valley DPS, Chinook Salmon Central Valley Spring Run ESU and Fall/Late Fall Run ESU, Riparian Woodrat, Riparian Brush Rabbit, and the Delta Button-Celery. CNDDB data shows a record of the riparian brush rabbit and the riparian woodrat within one mile of the project site along the west bank of the San Joaquin River and a tri-colored blackbird within a quarter mile of the project site at the intersection of SR 132 and River Road. Per the CNDDB, it is believed that the case of the Riparian Brush Rabbit and the Riparian Woodrat have been extirpated from the vicinity, therefore it would be unlikely to have a presence on the project site.

With the project site being zoned for the purposes of operating a farm animal zoo and for the sales of hand-crafted goods on a portion of the project site and the remaining balance of the parcel having been historically and continually in agricultural production would unlikely allow for suitable habitat.

The project will not conflict with a Habitat Conservation Plan, a Natural Community Conservation Plan, or other locally approved conservation plans. Impacts to endangered species or habitats, locally designated species, or wildlife dispersal or mitigation corridors are considered to be less than significant.

An early consultation was referred to the California Department of Fish and Wildlife and no response was received to date.

Mitigation: None.

**References:** California Department of Fish and Wildlife's Natural Diversity Database Quad Species List; Stanislaus County General Plan and Support Documentation<sup>1</sup>.

| V. CULTURAL RESOURCES Would the project:   | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>With<br>Mitigation<br>Included | Less Than<br>Significant<br>Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|-----------|
| <ul> <li>a) Cause a substantial adverse change in the<br/>significance of a historical resource pursuant to in §<br/>15064.5?</li> </ul> |                                      |  | Х                                  |           |
| b) Cause a substantial adverse change in the<br>significance of an archaeological resource pursuant<br>to § 15064.5?                     |                                      |  | Х                                  |           |

| c) Disturb any human remains, including those interred |  | Х |  |
|--|--|---|--|
| outside of formal cemeteries?                          |  |   |  |

**Discussion:** As this project is a General Plan Amendment it was referred to the tribes listed with the Native American Heritage Commission (NAHC), in accordance with SB 18, for a 90-day review period. Tribal notification of the project was not referred to any tribes in conjunction with AB 52 requirements, as Stanislaus County has not received any requests for consultation from the tribes listed with the NAHC. No responses from the tribal contacts were received. A records search conducted by the Central California Information Center (CCIC) indicated that there are no historical, cultural, or archeological resources recorded on-site but that the site has a moderate to high sensitivity for the discovery of such resources. As stated previously, the project site was rezoned to a PD-23 for the purposes of developing a farm animal zoo and allowing the sales of hand-crafted goods on a portion of the project site, the remaining balance has been historically and continually in agricultural production, which would be less likely to include undisturbed cultural resources. A development standard will be added to the project which requires if any cultural or tribal resources are discovered during project-related activities, all work is to stop, and the lead agency and a qualified professional are to be consulted to determine the importance and appropriate treatment of the find. *Cultural Resources* impacts are considered to be less-than significant.

Mitigation: None.

**References:** Application materials; Central California Information Center Report, dated October 13, 2020; Stanislaus County General Plan and Support Documentation<sup>1</sup>.

| VI. ENERGY Would the project:  | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>With Mitigation<br>Included | Less Than<br>Significant<br>Impact | No Impact |
|--|--------------------------------------|---|------------------------------------|-----------|
| a) Result in potentially significant environmental<br>impact due to wasteful, inefficient, or unnecessary<br>consumption of energy resources, during project<br>construction or operation? |                                      |   | х                                  |           |
| b) Conflict with or obstruct a state or local plan for<br>renewable energy or energy efficiency?   |                                      |   | х                                  |           |

**Discussion:** The CEQA Guidelines Appendix F states that energy consuming equipment and processes, which will be used during construction or operation such as energy requirements of the project by fuel type and end use, energy conservation equipment and design features, energy supplies that would serve the project, total estimated daily vehicle trips to be generated by the project, and the additional energy consumed per-trip by mode, shall be taken into consideration when evaluating energy impacts. Additionally, the project's compliance with applicable state or local energy legislation, policies, and standards must be considered.

The site will be to be served by the Pacific Gas & Electric Company (PG&E) for electrical services. The project was referred to PG&E with no response received to date.

The SJVAPCD's Small Project Analysis Level (SPAL) Analysis indicates that the typical minimum threshold of significance for convenience markets with fueling stations projects are an average of 1,900 passenger vehicle trips and 35 average heavy duty truck trips per day. A traffic impact analysis was completed for the project by KD Anderson & Associates, Inc. on September 27, 2021. The analysis stated that the average daily vehicle trips for passenger vehicles will be 675 trips and 88 heavy duty truck trips. Although the heavy duty truck trips exceed the SJVAPCD's 35 truck average, due to the fact that they are coming from existing pass-by trips combined with requirements to meet Air District standards in place, impacts are anticipated to be less than significant.

Senate Bill 743 (SB743) requires that the transportation impacts under the California Environmental Quality Act (CEQA) evaluate impacts by using Vehicle Miles Traveled (VMT) as a metric. Stanislaus County has currently not adopted any significance thresholds for VMT, and projects are treated on a case-by-case basis for evaluation under CEQA. However, the State of California - Office of Planning and Research (OPR) has issued guidelines regarding VMT significance under CEQA. One of the guidelines, presented in the December 2018 document Technical Advisory on Evaluating Transportation Impacts in CEQA, states that locally serving retail would generally redistribute trips from other local uses, rather than generate new trips. The prepared traffic analysis also analyzed VMT and found that the project would consist of an additional retail opportunity for residents of western Stanislaus County traveling on SR 132 and 33 and would likely be a

closer option for residences than current options, thus likely having a net effect in helping to incrementally reduce regional VMT. Ultimately, the analysis found the projects impact on VMT to be less than significant.

Construction of the market and development of the site all applicable SJVAPCD permits would be required to be obtained and all SJVAPCD standards will be required to be met. Additionally, all construction must meet California Green BuildingStandards Code (CALGreen Code), which includes mandatory provisions applicable to all new residential, commercial, and school buildings. The intent of the CALGreen Code is to establish minimum statewide standards to significantly reduce the greenhouse gas emissions from new construction. The CALGreen Code includes provisions to reduce water use, wastewater generation, and solid waste generation, as well as requirements for bicycle parking and designated parking for fuel-efficient and carpool/vanpool vehicles in commercial development. It is the intent of the CALGreen Code that buildings constructed pursuant to the code achieve at least a 15 percent reduction in energy usage when compared to the state's mandatory energy efficiency standards contained in Title 24. The CALGreen Code also sets limits on VOCs (volatile organic compounds) and formaldehyde content of various building materials, architectural coatings, and adhesives.

The project will be required to meet all applicable SJVAPCD and PG&E standards and to obtain all applicable SJVAPCD permits. The proposed project would be consistent with all applicable renewable energy or energy efficiency requirements. Impacts related to *Energy* are considered to be less-than significant.

Mitigation: None.

**References:** Application material; San Joaquin Valley Air Pollution Control District - Regulation VIII Fugitive Dust/PM-10 Synopsis; www.valleyair.org; Referral response received from San Joaquin Valley Air Pollution Control District, dated May 28, 2021; Traffic Impact Analysis Prepared by KD Anderson & Associates, Inc., dated September 27, 2021 California Green Building Standards Code Title 24, Part 11(Cal Green); 2016 California Energy Code Title 24, Part 6; State of California – Office of Planning and Research (OPR) guidelines regarding VMT significance under CEQA; Stanislaus County General Plan; and Support Documentation<sup>1</sup>.

| VII. GEOLOGY AND SOILS Would the project:  | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>With Mitigation<br>Included | Less Than<br>Significant<br>Impact | No Impact |
|--|--------------------------------------|---|------------------------------------|-----------|
| <ul> <li>a) Directly or indirectly cause potential substantial<br/>adverse effects, including the risk of loss, injury, or<br/>death involving:</li> </ul>   |                                      |   | Х                                  |           |
| 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. |                                      |   | х                                  |           |
| ii) Strong seismic ground shaking?   |                                      |   | Χ                                  |           |
| iii) Seismic-related ground failure, including liquefaction?   |                                      |   | X                                  |           |
| iv) Landslides?  |                                      |   | Х                                  |           |
| b) Result in substantial soil erosion or the loss of topsoil?  |                                      |   | х                                  |           |
| 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?   |                                      |   | х                                  |           |
| d) Be located on expansive soil, as defined in Table 18-<br>1-B of the Uniform Building Code (1994), creating<br>substantial direct or indirect risks to life or<br>property?  |                                      |   | X                                  |           |

| 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? | X |  |
|--|---|--|
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?  | x |  |

Discussion: The USDA Natural Resources Conservation Service's Western Stanislaus County Soil Survey indicates that nearly the entire property is made up of Capay clay wet. As contained in Chapter 5 of the General Plan Support Documentation, the areas of the County subject to significant geologic hazard are located in the Diablo Range, west of Interstate 5; however, as per the California Building Code, all of Stanislaus County is located within a geologic hazard zone (Seismic Design Category D, E, or F) and soil tests may be required at building permit application. Results from the soil tests will determine if unstable or expansive soils are present. If such soils are present, special engineering of the structure will be required to compensate for the soil deficiency. Any structures resulting from this project will be designed and built according to building standards appropriate to withstand shaking for the area in which they are constructed. An early consultation referral response received from Stanislaus County Department of Public Works indicated that a grading, drainage, and erosion/sediment control plan for the project will be required, subject to Public Works review and Standards and Specifications. The applicant is proposing the development of two on-site basins to ensure all stormwater is kept on-site. Stanislaus County Department of Environmental Resources (DER) responded, stating the project would be required to install individual and secondary wastewater treatment units (Measure X) for all on-site wastewater treatment system. Development standards will be placed on the project for each requirement of Public Works and DER.

The project site is not located near an active fault or within a high earthquake zone. Landslides are not likely due to the flat terrain of the area.

DER, Public Works, and the Building Permits Division review and approve any building or grading permit to ensure their standards are met. Development standards regarding these requirements will be triggered when a building permit is requested.

Mitigation: None.

**References:** Referral response received from the Stanislaus County Department of Environmental Resources (DER), dated February 12, 2021; Referral response from the Stanislaus County Department of Public Works, dated February 8, 2021; Stanislaus County General Plan and Support Documentation<sup>1</sup>.

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

**Discussion:** The principal Greenhouse Gasses (GHGs) are carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), sulfur hexafluoride (SF6), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and water vapor (H2O). CO2 is the reference gas for climate change because it is the predominant greenhouse gas emitted. To account for the varying warming potential of different GHGs, GHG emissions are often quantified and reported as CO2 equivalents (CO2e). In 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] No. 32), which requires the California Air Resources Board (ARB) design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020. Two additional bills, SB 350 and SB32, were passed in 2015 further amending the states Renewables Portfolio Standard (RPS) for electrical generation and amending the reduction targets to 40% of 1990 levels by 2030.

Construction associated with the project includes development of an 18-pump fueling station, serving both heavy-duty trucks and passenger vehicles, and an 8,000 square-foot retail building made up of a convenience market and two shell suites for future retail use. The project site will also be developed with a total of 111 standard passenger vehicle parking spaces and 20 EV charging station spaces are proposed around the market structure and site perimeter. An open graveled area at the north end of the project site is proposed to accommodate the parking of heavy-duty trucks during use of the convenience market or other on-site business or amenities. No overnight parking is proposed. Additionally, the site will develop a 499-gallon propane tank and dispenser for retail sales and 2,000 square-foot area for aboveground fuel tanks totaling 16,000 gallons. Development of the site will include landscaping across both road frontages on SR 132 and McCracken Road. Additional landscaping will be planted within portion of the customer parking areas, around the proposed market building, and the walking path area.

The SJVAPCD's Small Project Analysis Level (SPAL) Analysis indicates that the typical minimum threshold of significance for convenience markets with fueling stations projects are an average of 1,900 passenger vehicle trips and 35 average heavy duty truck trips per day. A traffic impact analysis was completed for the project by KD Anderson & Associates, Inc. on September 27, 2021. The analysis stated that the average daily vehicle trips for passenger vehicles will be 675 trips and 88 heavy duty truck trips. Although the heavy duty truck trips exceed the SJVAPCD's 35 truck average, due to the fact that they are coming from existing pass-by trips combined with requirements to meet Air District standards in place, impacts are anticipated to be less than significant.

The project was referred to SJVAPCD during the early consultation process, in which they responded the project was not expected to exceed annual emissions from construction and operation of criteria pollutants past any of the significant SJVAPCD thresholds. The SJVACPD's comment letter also stated that the project would be subject to other SJVAPCD rules and regulations such as Rule 2010 and 2201 – Air Quality Permitting for Stationary Sources, Rule 9510 – Indirect Source Review, and Regulation VIII – Fugitive PM 10 Prohibitions. The SJVAPCD requested the applicant demonstrate compliance with these Rules and Regulations through SJVAPCD permitting such as an Authority to Construction (ATC), Permit to Operate (PTO), and an Air Impact Assessment (AIA) prior to issuance of any permit. These permit requirements will be added as required for the project.

Senate Bill 743 (SB743) requires that the transportation impacts under the California Environmental Quality Act (CEQA) evaluate impacts by using Vehicle Miles Traveled (VMT) as a metric. Stanislaus County has currently not adopted any significance thresholds for VMT, and projects are treated on a case-by-case basis for evaluation under CEQA. However, the State of California - Office of Planning and Research (OPR) has issued guidelines regarding VMT significance under CEQA. One of the guidelines, presented in the December 2018 document Technical Advisory on Evaluating Transportation Impacts in CEQA, states that locally serving retail would generally redistribute trips from other local uses, rather than generate new trips. The prepared traffic analysis also analyzed VMT and found that the project would consist of an additional retail opportunity for residents of western Stanislaus County traveling on SR 132 and 33 and would likely be a closer option for residences than current options, thus likely having a net effect in helping to incrementally reduce regional VMT. Ultimately, the analysis found the projects impact on VMT to be less than significant.

Mitigation: None.

**References:** Application material; San Joaquin Valley Air Pollution Control District - Regulation VIII Fugitive Dust/PM-10 Synopsis; www.valleyair.org; Referral response received from San Joaquin Valley Air Pollution Control District, dated May 28, 2021; Traffic Impact Analysis Prepared by KD Anderson & Associates, Inc., revised September 27, 2021; State of California - Office of Planning and Research (OPR) guidelines regarding VMT significance under CEQA; Stanislaus County General Plan and Support Documentation<sup>1</sup>.

| IX. HAZARDS AND HAZARDOUS MATERIALS Would the project:  | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>With Mitigation<br>Included | Less Than<br>Significant<br>Impact | No Impact |
|---|--------------------------------------|---|------------------------------------|-----------|
| a) Create a significant hazard to the public or the<br>environment through the routine transport, use, or<br>disposal of hazardous materials? |                                      |   | x                                  |           |

| b) | Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?   | х |  |
|----|--|---|--|
| c) | Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?   | Х |  |
| 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?  | Х |  |
| e) | For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | х |  |
| f) | Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?   | Х |  |
| g) | Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?   | Х |  |

**Discussion:** The project does not interfere with the Stanislaus County Local Hazard Mitigation Plan, which identifies risks posed by disasters and identifies ways to minimize damage from those disasters. The Stanislaus County Department of Environmental Resources (DER) is responsible for overseeing hazardous materials. This project was referred to the Department of Environmental Resources – Hazardous Materials Division, who did not respond. However, the facility will be required to obtain all required hazardous materials permits through the DER Hazardous Materials (Haz Mat) Division, including but not limited to submission of hazardous materials Business information into the California Electronic Reporting System (CERS), preparation of a Risk Management Prevention Program which must be implemented prior to operation of the facility, preparation of a Phase I or Phase II study, and compliance with the County's UST/AST program.

Gasoline and diesel tanks are heavily regulated by the federal Environmental Protection Agency (EPA) and State Water Resources Control Board, as well as the local regulatory agency, such as, the Haz Mat Division and Fire Departments. As the lead entity for the Underground Storage Tank (UST) and Above Storage Tank (AST) Programs, Haz Mat reviews, approves, and monitors the construction, operation, repair and removals of UST or AST systems in Stanislaus County. The UST and AST programs are in place in order to protect the environment and groundwater from contamination resulting from UST/ASTs. Each UST/AST site is inspected annually as mandated by State law. Depending on the end uses, the gas station may include an EV charging station or hydrogen fuel. At the time of construction, including the installation of fuel tanks, all applicable building, fire, and hazardous material codes will need to be meet as part of the permitting process. Permitting and compliance with Haz Mat's UST/AST Programs and all applicable state or federal permitting will be applied to the project as development standards.

The retail and convenience store will be subject to submitting food facility plans to DER for review and approval, which would require conformance with any local or State requirements for grease interceptors or charbroilers. The food facility will also need to meet the Air District's standards for chain-driven (CD) and underfired (UF) charbroilers and for Gasoline dispensing facilities (GDFs). These requirements will be applied as development standards for the project.

Pesticide exposure is a risk in areas located in the vicinity of agriculture. Sources of exposure include contaminated groundwater from drift from spray applications. Application of sprays is strictly controlled by the Agricultural Commissioner and can only be accomplished after first obtaining permits. Additionally, agricultural buffers are intended to reduce the risk of spray exposure to surrounding people. The nearest A-2 zoned property is located a minimum of 60 feet to the south, across SR 132 and to the east, across McCracken Road, of the project site. Based on the proposed use a 300-foot-wide buffer for people intensive uses would be required, however, the applicant has proposed an alternative buffer for compliance

with the policy. Along the frontage of both SR 132 and McCracken Road, the applicant has proposed a combination of shade trees and evergreen hedges positioned behind the two proposed storm drain basins as their alternative.

The project site is not within the vicinity of any airstrip or wildlands.

Mitigation: None.

**References:** Application material; Referral response received from the Department of Environmental Resources (DER), dated February 12, 2021; Stanislaus County General Plan and Support Documentation<sup>1</sup>.

| X. HYDROLOGY AND WATER QUALITY Would the project:  | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>With Mitigation<br>Included | Less Than<br>Significant<br>Impact | No Impact |
|--|--------------------------------------|---|------------------------------------|-----------|
| <ul> <li>a) Violate any water quality standards or waste<br/>discharge requirements or otherwise substantially<br/>degrade surface or ground water quality?</li> </ul>   |                                      |   | X                                  |           |
| b) Substantially decrease groundwater supplies or<br>interfere substantially with groundwater recharge<br>such that the project may impede sustainable<br>groundwater management of the basin?                                     |                                      |   | X                                  |           |
| c) Substantially alter the existing drainage pattern of<br>the site or area, including through the alteration of<br>the course of a stream or river or through the<br>addition of impervious surfaces, in a manner which<br>would: |                                      |   | х                                  |           |
| <ul> <li>i) result in substantial erosion or siltation on- or off-site;</li> </ul>   |                                      |   | х                                  |           |
| ii) substantially increase the rate of amount of<br>surface runoff in a manner which would result<br>in flooding on- or off-site.  |                                      |   | X                                  |           |
| iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or   |                                      |   | x                                  |           |
| iv) impede or redirect flood flows?  |                                      |   | Х                                  |           |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?  |                                      |   | х                                  |           |
| <ul> <li>e) Conflict with or obstruct implementation of a water<br/>quality control plan or sustainable groundwater<br/>management plan?</li> </ul>  |                                      |   | Х                                  |           |

**Discussion:** The project has proposed to develop an individual potable domestic well from use of the commercial development, which would include a convenience market, future retail uses, and irrigation of landscaped area. Stormwater capture will take place within two proposed landscaped basins along the eastern and southeastern portions of the development.

The project site is located within the West Stanislaus Irrigation District (WSID). The WSID responded to the project referral stating that existing irrigation infrastructure exists on the site and will be required to be relocate infrastructure and provide an easement for its continued use. A condition of approval will be added to the project to ensure these requirements are met.

Areas subject to flooding have been identified in accordance with the Federal Emergency Management Act (FEMA). Runoff is not considered an issue because of several factors which limit the potential impact. These factors include the relatively flat terrain of the subject site, and relatively low rainfall intensities in the Central Valley. Areas subject to flooding have been

identified in accordance with the Federal Emergency Management Act. The project site itself is located in Zone X (outside the 0.2 percent floodplain) and, as such, exposure to people or structures to a significant risk of loss/injury/death involving flooding due to levee/dam failure and/or alteration of a watercourse, at this location is not an issue with respect to this project. Flood zone requirements are enforced through the building permit process. The Building Permits Division also reviews building permits and determines if geotechnical reports are required with submission of building permits. A requirement to obtain all applicable building permits will be incorporated into the project's development standards.

A referral response received from the Stanislaus County Department of Public Works indicated that a grading, drainage, and erosion/sediment control plan for the project is required and will be subject to Public Works review and Standards and Specifications, as well as the submittal of a Storm Water Pollution Prevention Plan (SWPPP) prior to the approval of any grading plan. The submittal and approval of the grading, drainage, erosion/sediment control plan and SWPPP will be made part of the development standards for this project prior to issuance of a building permit. Accordingly, runoff associated with the construction at the proposed project site will be reviewed as part of the grading review process and be required to be maintained on-site. Additionally, any construction will be reviewed under the Building Permit process and must be reviewed and approved by DER and adhere to current Local Agency Management Program (LAMP) standards. LAMP standards include minimum setback from wells to prevent negative impacts to groundwater quality.

The proposed new potable domestic well is to be constructed on-site and is proposed to include a casing diameter of approximately 8" and a pump with a range of 5-10 gallons per minute. The depth of the well is anticipated to be no less the 250 feet with more specific locations during the drilling phase based on water quality testing. In total, the well usage is expected to be approximately 1.95-acre feet per year. The well will be subject to review under the County's Well Permitting Program, which will determine whether a new well will require environmental review. At the proposed usage amount, which is below the 2.05-acre feet per year threshold established by County Code, the drilling of the well would be considered a de minimis extraction.

The Sustainable Groundwater Management Act (SGMA) was passed in 2014 with the goal of ensuring the long-term sustainable management of California's groundwater resources. SGMA requires agencies throughout California to meet certain requirements including forming Groundwater Sustainability Agencies (GSA), developing Groundwater Sustainability Plans (GSP), and achieving balanced groundwater levels within 20 years. The site is located in the West Stanislaus Irrigation District GSA, which is a part of the Delta Mendota Groundwater Subbasin. The GSA's initial GSP has been determined to be inadequate by the California Department of Water Resources (DWR). The GSA is expected to resubmit their plan by the end of 2024 for review and adoption.

The California Safe Drinking Water Act (California Health and Safety Code (CHSC) Section 116275(h)) defines a Public Water System as a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year. A public water system includes the following:

- 1. Any collection, treatment, storage, and distribution facilities under control of the operator of the system that are used primarily in connection with the system.
- 2. Any collection or pretreatment storage facilities not under the control of the operator that are used primarily in connection with the system.
- 3. Any water system that treats water on behalf of one or more public water systems for the purpose of rendering it safe for human consumption.

A referral response received from DER indicated that the proposed well for the project site will meet the definition of a Public Water System as defined in California Health and Safety Code Section 116275(h). To become a Public Water System, the applicant must submit an application for a water supply permit with the associated technical report to Stanislaus County DER which will determine if the well water meets State of California mandated standards for water quality and must also obtain concurrence from the State of California Water Resources Control Board (SWRCB), Drinking Water Division, in accordance to CHSC Section 116527 (SB1263). If the well water does not meet State of California standards, the applicant may need to either drill a new well or install a water treatment system for the new well. Title 22 compliant well testing will take place during the initial drilling process. Potential contaminants of concern that would require treatment include Total Dissolved Solids and similar naturally occurring minerals, Hexavalent Chromium, Arsenic, organic compounds, and Nitrates. This requirement of issuance of a water supply permit will be added as a condition of approval, to be met prior to issuance of a building permit.

Mitigation: None.

**References:** Application material; Referral response received from the Stanislaus County Department of Environmental Resources (DER) dated February 12, 2021; Referral response received from West Stanislaus Irrigation District, dated February 04, 2021; Referral response received from the Stanislaus County Department of Public Works, dated February 8, 2021; Stanislaus County General Plan and Support Documentation<sup>1</sup>.

| XI. LAND USE AND PLANNING Would the project:  | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>With Mitigation<br>Included | Less Than<br>Significant<br>Impact | No Impact |
|---|--------------------------------------|---|------------------------------------|-----------|
| a) Physically divide an established community?  |                                      |   | Х                                  |           |
| b) Cause a significant environmental impact due to a<br>conflict with any land use plan, policy, or regulation<br>adopted for the purpose of avoiding or mitigating an<br>environmental effect? |                                      |   | x                                  |           |

**Discussion:** This is a request to amend the General Plan designation from Agriculture and zoning designation from Planned Development (P-D) (23) to a new Planned Development, to allow for the development of an 18-pump fueling station, serving both heavy-duty trucks and passenger vehicles, and an 8,400 square-foot retail building made up of a convenience market and two shell suites for future retail use on a 9-acre portion of a 15.66-acre.

The project site has a General Plan designation of Agriculture and a zoning designation of Planned Development (P-D) (23). P-D 23 was originally developed with 14 structures that were utilized as a farm animal zoo and for the sales of hand-crafted goods. The use has ceased for some time and all 14 structures are proposed to be demolished as a result of development of the site. All of the existing structures are proposed to be demolished as a result of development of the site. A rezone to a new Planned Development district is necessary for the development of the project.

As stated by the Introduction to the General Plan, General Plan Amendments affect the entire County and any evaluation must give primary concern to the County as a whole; therefore, a fundamental question must be asked in each case: "Will this amendment, if adopted, generally improve the economic, physical and social well-being of the County in general?" Additionally, the County in reviewing General Plan amendments shall consider how the levels of public and private service might be affected; as well as how the proposal would advance the long-term goals of the County. In each case, in order to take affirmative action regarding a General Plan Amendment application, it must be found that the General Plan Amendment will maintain a logical land use pattern without detriment to existing and planned land uses and that the County and other affected government agencies will be able to maintain levels of service consistent with the ability of the government agencies to provide a reasonable level of service. In the case of a proposed amendment to the Land Use diagrams of the Land Use Element, an additional finding that the amendment is consistent with the goals and policies of the General Plan must also be made. Additionally, Goal 2 of the Land Use Element aims to ensure compatibility between land uses.

The Land Use Element describes the Planned Development designation as a designation intended for land which, because of demonstrably unique characteristics, may be suitable for a variety of uses without detrimental effects on other property. The Land Use Element also requires that the Agricultural Element's Conversion Criteria (Goal 2, Policy 2.7) be met when converting agricultural land to non-agricultural uses. A comment letter was received from the California Department of Conservation (DOC) stating that the County must consider feasible alternatives or mitigations to the loss of agricultural land. The DOC recommended further discussion on other farmland converted as a result of this project, impacts to current and future agricultural operations in the vicinity, and any mitigation measures.

Section II – Agricultural Resources contains the full discussion on Conversion Criteria and the DOC's letter. Because of the unique nature of the site including the previous agro-commercial uses of P-D 23, adjacency to a mix of commercial and residential uses within San Joaquin County, the location of a state highway, and soils that are not considered prime, the amendment of the General Plan Designation from Agriculture to Planned Development the proposed project would be consistent with the required conversion criteria of Goal 2 of the Agricultural Element. Because of these factors, it is not anticipated that the project would lead to, directly or indirectly, conversion of agricultural lands adjacent to the project nor are impacts to those lands expected to be significant.

To approve a Rezone, the Planning Commission must find that it is consistent with the General Plan. Pursuant to the General Plan, land within a Planned Development designation should be zoned A-2 (General Agriculture) until development occurs through Planned Development zoning. Therefore, the proposed Planned Development General Plan Designation and rezoning the parcel to a new Planned Development would be consistent.

The project will not physically divide an established community nor conflict with any habitat conservation plans.

Mitigation: None.

**References:** Application material; Referral Response received from Department of Conservation, dated February 10, 2021; Stanislaus County General Plan and Support Documentation<sup>1</sup>.

| XII. MINERAL RESOURCES Would the project:   | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>With Mitigation<br>Included | Less Than<br>Significant<br>Impact | No Impact |
|---|--------------------------------------|---|------------------------------------|-----------|
| a) Result in the loss of availability of a known mineral<br>resource that would be of value to the region and<br>the residents of the state?                                    |                                      |   | x                                  |           |
| b) Result in the loss of availability of a locally-<br>important mineral resource recovery site delineated<br>on a local general plan, specific plan or other land<br>use plan? |                                      |   | X                                  |           |

**Discussion:** The location of all commercially viable mineral resources in Stanislaus County has been mapped by the State Division of Mines and Geology in Special Report 173. There are no known significant resources on the site, nor is the project site located in a geological area known to produce resources.

Mitigation: None.

**References:** Stanislaus County General Plan and Support Documentation<sup>1</sup>.

| XIII. N | OISE Would the project result in:  | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>With Mitigation<br>Included | Less Than<br>Significant<br>Impact | No Impact |
|---------|--|--------------------------------------|---|------------------------------------|-----------|
| a)      | Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?   |                                      |   | x                                  |           |
| b)      | Generation of excessive groundborne vibration or groundborne noise levels?   |                                      |   | х                                  |           |
| c)      | For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? |                                      |   | X                                  |           |

**Discussion:** The proposed convenience market and fuel station hours of operation are anticipated to be seven days a week from 6:00 a.m. to 10:00 p.m. for the convenience market and 24 hours a day for the fueling stations. The applicant expects two shifts per day with 8-12 employees each shift and a total of three truck deliveries per day for the convenience market. Customer traffic is anticipated to generate 88 truck trips and 676 vehicle trips daily. Employees and hours of operation for the future retail uses will be identified at a later time during a separate discretionary land use process. The Stanislaus County General Plan Noise Element identifies daytime (7:00 a.m. to 10:00 p.m.) maximum allowable average noise exposure for stationary noise sources to be an hourly average of 55 decibels and maximum level of 75 decibels, and

nighttime (10:00 p.m. to 7:00 a.m.) to be an hourly average of 45 decibels and maximum of 65 decibels, measured at residential or other noise-sensitive land use on neighboring properties. The Stanislaus County General Plan identifies noise levels up to 75 dB Ldn (or CNEL) as the normally acceptable level of noise environment for industrial, manufacturing, utilities, and agriculture uses.

The site itself is impacted by the noise generated from State Route 132. All construction activities will be required to meet the noise ordinance and Noise Element standards.

The site is not located within an airport land use plan. Noise impacts are considered to be less-than significant.

Mitigation: None.

**References:** Application materials; Stanislaus County Noise Ordinance; Stanislaus County General Plan and Support Documentation<sup>1</sup>.

| XIV. POPULATION AND HOUSING Would the project:  | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>With Mitigation<br>Included | Less Than<br>Significant<br>Impact | No Impact |
|---|--------------------------------------|---|------------------------------------|-----------|
| a) Induce substantial unplanned population growth in<br>an area, either directly (for example, by proposing<br>new homes and businesses) or indirectly (for<br>example, through extension of roads or other<br>infrastructure)? |                                      |   | x                                  |           |
| b) Displace substantial numbers of existing people or<br>housing, necessitating the construction of<br>replacement housing elsewhere?   |                                      |   | х                                  |           |

**Discussion:** The property is improved with a legal non-conforming duplex and four-plex, which are proposed to remain. The site is not included in the vacant sites inventory for the 2016 Stanislaus County Housing Element, which covers the 5<sup>th</sup> cycle Regional Housing Needs Allocation (RHNA) for the County and will therefore not impact the County's ability to meet their RHNA. No population growth will be induced, nor will any existing housing be displaced as a result of this project.

Impacts related to Population and Housing are considered to be less-than significant.

Mitigation: None.

**References:** Application materials; Stanislaus County General Plan and Support Documentation<sup>1</sup>.

| XV. PUBLIC SERVICES   | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>With Mitigation<br>Included | Less Than<br>Significant<br>Impact | No Impact |
|---|--------------------------------------|---|------------------------------------|-----------|
| a) Would the project result in the substantial adverse<br>physical impacts associated with the provision of<br>new or physically altered governmental facilities,<br>need for new or physically altered governmental<br>facilities, the construction of which could cause<br>significant environmental impacts, in order to<br>maintain acceptable service ratios, response times<br>or other performance objectives for any of the<br>public services: |                                      |   | X                                  |           |
| Fire protection?  |                                      |   | Х                                  |           |
| Police protection?  |                                      |   | Х                                  |           |
| Schools?  |                                      |   | X                                  |           |
| Parks?  |                                      |   | X                                  |           |
| Other public facilities?  | -                                    |   | X                                  | -         |

**Discussion:** The project site is served by the West Stanislaus Fire District for fire protection services, the Patterson Joint Unified School District for school services, the Stanislaus County Sheriff Department for police protections, and the Pacific Gas & Electric Company (PG&E) for power, and proposes to be served by an on-site well and septic system. County adopted Public Facilities Fees, as well as fire and school fees are required to be paid based on the development type prior to issuance of a building permit. Payment of the applicable district fees will be required prior to issuance of a building permit.

As discussed in full within Section X – *Hydrology and Water Quality*, the project has proposed to develop an individual potable domestic well from use of the commercial development, which would include a convenience market, future retail uses, and irrigation of landscaped area. The proposed new potable domestic well is to be constructed on-site and is proposed to include a casing diameter of approximately 8" and a pump with a range of 5-10 gallons per minute and is subject to the requirements of SB1263 as a new public water system. In total, the well usage is expected to be approximately 1.95 acre feet per year. The well will be subject to review under the County's Well Permitting Program, which will determine whether a new well will require environmental review. Construction will be reviewed under the Building Permit process and must be reviewed and approved by DER and adhere to current Local Agency Management Program (LAMP) standards. LAMP standards include minimum setback from wells to prevent negative impacts to groundwater quality.

This project was circulated to all applicable public service providers including: school, fire, police, irrigation district, and public works departmentduring the early consultation referral periodThe project is not anticipated to have any significant adverse impact on public services.

Mitigation: None.

**References:** Stanislaus County General Plan and Support Documentation<sup>1</sup>.

| XVI. RECREATION  | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>With Mitigation<br>Included | Less Than<br>Significant<br>Impact | No Impact |
|--|--------------------------------------|---|------------------------------------|-----------|
| a) Would the project increase the use of existing<br>neighborhood and regional parks or other<br>recreational facilities such that substantial physical<br>deterioration of the facility would occur or be<br>accelerated? |                                      |   | x                                  |           |
| b) Does the project include recreational facilities or<br>require the construction or expansion of<br>recreational facilities which might have an adverse<br>physical effect on the environment?                           |                                      |   | х                                  |           |

**Discussion:** This project will not increase demands for recreational facilities, as such impacts typically are associated with residential development. One of the storm drainage basins proposed to be installed onsite will include a walking path and landscaping.

No significant impacts related to Recreation were identified.

Mitigation: None.

**References:** Application material; Stanislaus County General Plan and Support Documentation<sup>1</sup>.

| XVII. TRANSPORTATION Would the project:  | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>With Mitigation<br>Included | Less Than<br>Significant<br>Impact | No Impact |
|--|--------------------------------------|---|------------------------------------|-----------|
| <ul> <li>a) Conflict with a program plan, ordinance or policy<br/>addressing the circulation system, including transit,<br/>roadway, bicycle and pedestrian facilities?</li> </ul> |                                      | X   |                                    |           |
| b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?  |                                      |   | X                                  |           |

| c) Substantially increase hazards due to a geometric<br>design feature (e.g., sharp curves or dangerous<br>intersections) or incompatible uses (e.g., farm<br>equipment)? | х |  |
|---|---|--|
| d) Result in inadequate emergency access?   | Х |  |

**Discussion:** The convenience market and fueling stations proposes two driveways, one onto State Route (SR) 132 and the second on McCracken Road. Proposed hours of operation are anticipated to be seven days a week from 6:00 a.m. to 10:00 p.m. for the convenience market and 24 hours a day for the fueling stations. The applicant expects two shifts per day with 8-12 employees each shift and a total of three truck deliveries per day for the convenience market. Employees and hours of operation for the future retail uses will be identified at a later time during a separate discretionary land use process.

A response received from the California Department of Transportation (Caltrans) requested that the project may cause a significant impact to the State Highway System. Caltrans requested that a traffic impact analysis (TIA) take place to study any near-term and long-term impacts to their to the state's facilities. A TIA was initially performed by KD Anderson & Associates, Inc. on June 4, 2021 and revised on September 27, 2021 to address comments from both the County and Caltrans. The analysis found that the project would likely generate 675 daily trips, including 205 daily trips for the gas station and convenience store and 470 daily trips for a future quick service restaurant, for passenger vehicles. Additionally, the analysis found that that Heavy-Duty truck trips would account for a total daily average of 88 trips per day. Although no longer a criteria for CEQA evaluation, the analysis found that Level of Service (LOS) conditions of vehicles existing the site via the SR 132 driveway or McCracken Road would exceed the minimum LOS D standard of the County. However, this factor alone would not warrant Caltrans or the County's criteria for signalization of the SR 132 and McCracken intersection. The analysis did note the Cumulate traffic conditions of the year 2046 the intersection would operate at a LOS of F but future assumptions of Caltrans long term plans of widening SR 132 to four lanes and other traffic calming devices would alleviate congestion to a potential LOS C for the intersection. Additionally, to provide adequate mobility between the proposed project site and the commercial development existing within San Joaquin to the west, the analysis recommended development of internal circulation between both sites. The applicant has developed their proposal to provide for this recommendation.

The analysis did also find that the proposed project would pose a standalone significant safety impact due to the potential for cueing in mainline SR 132 to turn left towards onto the project site as well as vehicles slowing to turn right onto McCracken Road or the project site driveway located on SR 132. The analysis developed mitigation to these impacts in the form of a center turn lane north of the eastbound lane, extending from McCracken Road the length of the site's frontage on SR 132 and an acceleration/deceleration lane for westbound vehicles ingress and egress to the site. A measure to design project driveways and the northern corners of the SR 132 and McCracken Road intersection to accommodate turning movements of STAA trucks was also included. Other projects requirements suggested by the analysis that were not intended as mitigation included preparation of STAA truck turning exhibits and construction of the access between the project site and the commercial development in San Joaquin County. These mitigation measures have been applied to the project and the design will ultimately be subject to Caltrans standards.

As stated in both Sections VI - *Energy* and VIII - *Greenhouse Gas Emissions*, Senate Bill 743 (SB743) requires that the transportation impacts under the California Environmental Quality Act (CEQA) evaluate impacts by using Vehicle Miles Traveled (VMT) as a metric. Stanislaus County has currently not adopted any significance thresholds for VMT, and projects are treated on a case-by-case basis for evaluation under CEQA. However, the State of California - Office of Planning and Research (OPR) has issued guidelines regarding VMT significance under CEQA. One of the guidelines, presented in the December 2018 document Technical Advisory on Evaluating Transportation Impacts in CEQA, states that locally serving retail would generally redistribute trips from other local uses, rather than generate new trips. The analysis also analyzed VMT and found that the project would consist of an additional retail opportunity for residents of western Stanislaus County traveling on SR 132 and 33 and would likely be a closer option for residences than current options, thus likely having a net effect in helping to incrementally reduce regional VMT. Ultimately, the analysis found the projects impact on VMT to be less than significant.

Both Caltrans and Stanislaus County's Public Works Department has reviewed the analysis and has agreed with its assumptions and conclusions.

A referral response received from Stanislaus County's Public Works Department provided project requirements for development of the site to be applied to the project for areas such as: encroachment permits for work being done in County

or state right-of-way, dedication of right-of-way for both McCracken and SR 132, a requirement for a grading and drainage plan, and requirements related to parking, loading and unloading of vehicles in the right-of-way. These requirements will be placed as development standards for the project.

Impacts associated with *Transportation* are expected to have a less than significant impact with mitigation included.

#### Mitigation:

- 1. A left turn lane shall be developed north of the eastbound lane of SR 132, subject to approval by California Department of Transportation, to accommodate left hand turns into the site. The left turn lane shall begin 600 feet west of the project's proposed driveway onto SR 132 and shall continue to the SR 132/McCracken Road intersection.
- 2. A deceleration lane or enhanced 12-foot shoulder shall be developed on the northern side of the westbound lane of SR 132, subject to approval by California Department of Transportation (Caltrans), to accommodate right hand turns into the project site. The deceleration lane shall begin 600 feet east of the SR 132/McCracken Road intersection, and shall provide a right turn pocket onto North McCracken Road; the deceleration lane shall continue west of the SR 132/McCracken Road intersection and shall provide a right turn pocket onto the project driveway on SR 132.
- 3. An acceleration lane or enhanced 12-foot shoulder shall be developed on the northern side of the westbound lane of SR 132, subject to approval by California Department of Transportation (Caltrans), to accommodate right hand turns out of the project site. The acceleration lane shall begin west of the proposed driveway onto SR 132 for 600 feet or for a distance as determined by Caltrans.
- 4. All project driveways and both northwest and northeast corners of the SR 132 and McCracken Road intersection shall be constructed to accommodate the turning requirements of STAA trucks.

**References:** Application materials; Referral response received from California Department of Transportation, dated February 17, 2021; Email Correspondence from California Department of Transportation, dated July 7, 2021; Referral response from Stanislaus County Department of Public Works, dated February 8, 2021; Traffic Impact Analysis prepared by KD Anderson & Associates, Inc., dated revised September 27, 2021; State of California - Office of Planning and Research (OPR) guidelines regarding VMT significance under CEQA; Stanislaus County General Plan and Support Documentation<sup>1</sup>.

| XVIII. TRIBAL CULTURAL RESOURCES Would the project:  | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>With Mitigation<br>Included | Less Than<br>Significant<br>Impact | No Impact |
|--|--------------------------------------|---|------------------------------------|-----------|
| a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California native American tribe, and that is: |                                      |   | X                                  |           |
| <ul> <li>i) Listed or eligible for listing in the California<br/>Register of Historical Resources, or in a local<br/>register of historical resources as defined in<br/>Public Resources Code section 5020.1(k), or</li> </ul>   |                                      |   | X                                  |           |

| ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set for the in subdivision (c) of Public Resource Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a | х |  |
|---|---|--|
| consider the significance of the resource to a California Native American tribe.  |   |  |

**Discussion:** As this project is a General Plan Amendment it was referred to the tribes listed with the Native American Heritage Commission (NAHC), in accordance with SB 18, for a 90-day review period. Tribal notification of the project was not referred to any tribes in conjunction with AB 52 requirements, as Stanislaus County has not received any requests for consultation from the tribes listed with the NAHC. No responses from the tribal contacts were received. A records search conducted by the Central California Information Center (CCIC) indicated that there are no historical, cultural, or archeological resources recorded on-site but that the site has a moderate to high sensitivity for the discovery of such resources. As stated previously, the project site was rezoned to a PD-23 for the purposes of developing a farm animal zoo and for the sales of hand-crafted goods on a portion of the project site, the remaining balance has been historically and continually in agricultural production, which would be less likely to include undisturbed cultural resources. A development standard will be added to the project which requires if any cultural or tribal resources are discovered during project-related activities, all work is to stop, and the lead agency and a qualified professional are to be consulted to determine the importance and appropriate treatment of the find. Tribal Cultural Resources are considered to be less-than significant.

Mitigation: None.

**References:** Application material; Central California Information Center Report for the project site, dated October 13, 2020; Stanislaus County General Plan and Support Documentation<sup>1</sup>.

| XIX.<br>projec | UTILITIES AND SERVICE SYSTEMS Would the t:   | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>With Mitigation<br>Included | Less Than<br>Significant<br>Impact | No Impact |
|----------------|--|--------------------------------------|---|------------------------------------|-----------|
| a)             | Require or result in the relocation or construction of<br>new or expanded water, wastewater treatment or<br>storm water drainage, electric power, natural gas, or<br>telecommunications facilities, the construction or<br>relocation of which could cause significant<br>environmental effects? |                                      |   | X                                  |           |
| b)             | Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?   |                                      |   | X                                  |           |
| c)             | Result in a determination by the wastewater treatment provider 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?   |                                      |   | x                                  |           |
| d)             | Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?   |                                      |   | X                                  |           |
| е)             |  |                                      |   | х                                  |           |

**Discussion:** Limitations on providing services have not been identified. The project has proposed to develop an individual potable domestic well from use of the commercial development, which would include a convenience market, future retail uses, and irrigation of landscaped area, which is anticipated to be below 2.**0**5 acre feet per year as well as a private on-site septic system. Stormwater capture will take place within two proposed landscaped basins along the eastern and southeastern portions of the development.

A referral response received from Stanislaus County Department of Public Works indicated that a grading, drainage, and erosion/sediment control plan for the project is required and will be subject to Public Works review and Standards and Specifications, as well as the submittal of a Storm Water Pollution Prevention Plan (SWPPP) prior to the approval of any grading plan. The submittal and approval of the grading, drainage, erosion/sediment control plan and SWPPP will be made development standards for this project prior to issuance of a building permit. Accordingly, runoff associated with the construction at the proposed project site will be reviewed as part of the grading review process and be required to be maintained on-site. Additionally, any construction will be reviewed under the Building Permit process and must be reviewed and approved by DER and adhere to current Local Agency Management Program (LAMP) standards. LAMP standards include minimum setback from wells and septic systems to prevent negative impacts to groundwater quality.

As discussed in Section X – *Hydrology and Water Quality* the proposed well for the project site will meet the definition of a Public Water System as defined in California Health and Safety Code Section 116275(h). To become a Public Water System, the applicant must submit an application for a water supply permit with the associated technical report to Stanislaus County DER which will determine if the well water meets State of California mandated standards for water quality and must also obtain concurrence from the State of California Water Resources Control Board (SWRCB), Drinking Water Division, in accordance to CHSC Section 116527 (SB1263). If the well water does not meet State of California standards, the applicant may need to either drill a new well or install a water treatment system for the new well. Title 22 compliant well testing will take place during the test well process. Potential contaminants of concern that would require treatment include Total Dissolved Solids and similar naturally occurring minerals, Hexavalent Chromium, Arsenic, organic compounds, and Nitrates. This requirement of issuance of a water supply permit will be added as a development standard, to be met prior to issuance of a building permit.

The project site is located within the West Stanislaus Irrigation District (WSID). The WSID responded to the project referral stating that existing irrigation infrastructure exists on the site and will be required to be relocate infrastructure and provide an easement for its continued use. A development standard will be added to the project to ensure these requirements are met.

The project is not anticipated to have a significant impact to utilities and service systems.

Mitigation: None.

**References:** Application material; Referral response received from Stanislaus County Department of Environmental Resources (DER), dated February 12, 2021; Referral response received from Stanislaus County Department of Public Works, dated February 8, 2021; Referral Response received from West Stanislaus Irrigation District, dated February 04, 2021; Stanislaus County General Plan and Support Documentation<sup>1</sup>.

| XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:   | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>With Mitigation<br>Included | Less Than<br>Significant<br>Impact | No Impact |
|---|--------------------------------------|---|------------------------------------|-----------|
| a) Substantially impair an adopted emergency response plan or emergency evacuation plan?  |                                      |   | х                                  |           |
| b) Due to slope, prevailing winds, and other factors,<br>exacerbate wildfire risks, and thereby expose<br>project occupants to, pollutant concentrations from<br>a wildfire or the uncontrolled spread of a wildfire? |                                      |   | х                                  |           |

| c) Require the installation of maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | х |  |
|--|---|--|
| d) Expose people or structures to significant risks,<br>including downslope or downstream flooding or<br>landslides, as a result of runoff, post-fire slope<br>instability, or drainage changes?   | X |  |

**Discussion:** The Stanislaus County Local Hazard Mitigation Plan identifies risks posed by disasters and identifies ways to minimize damage from those disasters. With the Wildfire Hazard Mitigation Activities of this plan in place, impacts to an adopted emergency response plan or emergency evacuation plan are anticipated to be less-than significant. The terrain of the site is relatively flat, and the site has access to a County-maintained road. The site is located in a Local Responsibility Area (LRA) for fire protection and is served by West Stan Fire Protection District (WSFPD). The project was referred to the WSFPD, but no response was received. California Building Code establishes minimum standards for the protection of life and property by increasing the ability of a building to resist intrusion of flame and embers. All construction is required to meet fire code, which will be verified through the building permit review process. A grading and drainage plan will be required and all fire protection, and emergency vehicle access standards met. These requirements will be applied as development standards for the project.

Wildfire risk and risks associated with postfire land changes are considered to be less-than significant.

Mitigation: None.

**References:** Application materials; California Building Code Title 24, Part 2, Chapter 7; Stanislaus County Local Hazard Mitigation Plan; Stanislaus County General Plan; and Support Documentation<sup>1</sup>.

| XXI. M | IANDATORY FINDINGS OF SIGNIFICANCE  | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>With Mitigation<br>Included | Less Than<br>Significant<br>Impact | No Impact |
|--------|---|--------------------------------------|---|------------------------------------|-----------|
| a)     | Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? |                                      |   | X                                  |           |
| b)     | Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)   |                                      |   | x                                  |           |
| c)     | Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?  |                                      |   | х                                  |           |

**Discussion:** The project is located at the northwest portion of the SR 132 and McCracken Road intersection, which abuts the Stanislaus and San Joaquin County jurisdictional lines running from north to west along the project site. Within San Joaquin County there are multiple commercial uses and a mobile park directly west of the project site. The remaining

surrounding uses to the property include orchards and scattered single family dwellings in all directions. Currently only one other discretionary action is being processed by the County in the vicinity, a parcel map application, located southwest of the project site near the intersection of SR 132 and River Road. The application will only be for the creation of parcels consistent with the General Agriculture A-2-40 zoning district and not include any physical development.

The project site has a General Plan designation of Agriculture and a zoning designation of Planned Development (P-D) (23). P-D 23 was originally developed with 14 structures that were utilized as a farm animal zoo and for the sales of hand-crafted goods. The use has ceased for some time and all exisiting structures are proposed to be demolished as a result of development of the site. A rezone to a new Planned Development district is necessary for the development of the project.

Section II – Agriculture and Forest Resources and Section XI - Land Use and Planning contain a full discussion of the land use action and amendment of the General Plan, however, because of the unique nature of the site including the previous agro-commercial uses of P-D 23, adjacency to a mix of commercial and residential uses within San Joaquin County, the location of a state highway, and soils that are not considered prime, the amendment of the General Plan Designation from Agriculture to Planned Development the proposed project would be consistent with the required conversion criteria of Goal 2 of the Agricultural Element. Because of these factors, it is not anticipated that the project would lead to, directly or indirectly, conversion of agricultural lands adjacent to the project nor are impacts to those lands expected to be significant.

As discussed in Section X – *Hydrology and Water Quality* the proposed well for the project site will meet the definition of a which requires the applicant must submit an application for a water supply permit with the associated technical report to Stanislaus County DER which will determine if the well water meets State of California mandated standards for water quality and must also obtain concurrence from the State of California Water Resources Control Board (SWRCB), Drinking Water Division. If the well water does not meet State of California standards, the applicant may need to either drill a new well or install a water treatment system for the new well. Title 22 compliant well testing will take place during the test well process.

Additionally, the project will be subject to two mitigation measures that included a center turn lane extended the length of the site's frontage on SR 132 and an acceleration/deceleration lane for westbound vehicles ingress and egress to the site. The measures are intended to reduce impacts to safety but lessening cueing onto State Route 132.

Review of this project has not indicated any features which might significantly impact the environmental quality of the site and/or the surrounding area.

Mitigation: None.

**References:** Application material: Initial Study: Stanislaus County General Plan and Support Documentation<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup>Stanislaus County General Plan and Support Documentation adopted in August 23, 2016, as amended. *Housing Element* adopted on April 5, 2016.

#### CENTRAL CALIFORNIA INFORMATION CENTER



California Historical Resources Information System

Department of Anthropology – California State University, Stanislaus

One University Circle, Turlock, California 95382

(209) 667-3307

Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus & Tuolumne Counties

Date: 10/13/2020

Records Search File#: 11526N
Project: Site Approval, Rezoning
and General Plan Amendment, Gas
Station and Convenience Store on SR 132
at McCracken Road

Edmond T. Jacobs, Architect 2301 Coffee Road, Suite B Modesto, CA 95355 209-408-0674/209-499-3495

edmond@etjarchitect.com

Dear Mr. Jacobs:

We have conducted a records search as per your request for the above-referenced project area located on the Vernalis USGS 7.5-minute quadrangle map in Stanislaus County.

Search of our files includes review of our maps for the specific project area and the immediate vicinity of the project area, and review of the following:

National Register of Historic Places (NRHP)

California Register of Historical Resources (CRHR)

California Inventory of Historic Resources (1976)

California Historical Landmarks

California Points of Historical Interest listing

Office of Historic Preservation Built Environment Resource Directory (BERD) and the

Archaeological Determinations of Eligibility (ADOE)

Survey of Surveys (1989)

Caltrans State and Local Bridges Inventory

General Land Office Plats

Other pertinent historic data available at the CCaIC for each specific county

The following details the results of the records search:

#### Prehistoric or historic resources within the project area:

- (1) There are no formally reported prehistoric archaeological resources or historic buildings located within the project area.
- (2) A segment of the Tesla-Salado-Manteca transmission line (construction date of 1952) is located on or immediately adjacent to the project area (historical resource P-50-003228).

- (3) The General Land Office Survey Plats for T3S R6E (1860) and T3S R6E (1875-1883) show that the project area within the NE ¼ of the SW ¼ of Section 35, part of an 160-acre parcel immediately adjacent to the Rancho El Pescadaro Mexican Land Grant.
- (4) The Map of the County of Stanislaus, California (1906) references H. Southerland as the historic landowner of that time.
- (5) The 1969 edition of the Vernalis USGS 7.5' quadrangle references buildings and structures that are at least 51 years in age (or older) on or adjacent to the project area, qualifying as possible historical resources. We have no information on file that pertains to these buildings or structures.

Prehistoric or historic resources within the immediate vicinity of the project area: None formally reported to the Information Center.

Resources that are known to have value to local cultural groups: None has been formally reported to the Information Center.

Previous investigations within the project area: None has been formally reported to the Information Center.

**Recommendations/Comments:** Based on existing data in our files the project area has a moderate to high sensitivity for the possible discovery of historic archaeological resources or historic buildings or structures.

Please be advised that a historical resource is defined as a building, structure, object, prehistoric or historic archaeological site, or district possessing physical evidence of human activities over 45 years old. Since the project area has not been subject to previous investigations, there may be unidentified features involved in your project that are 45 years or older and considered as historical resources requiring further study and evaluation by a qualified professional of the appropriate discipline.

If the current project does not include ground disturbance, further study for archaeological resources is not recommended at this time. If ground disturbance is considered a part of the current project, we recommend further review for the possibility of identifying prehistoric or historic-era archaeological resources.

If the proposed project contains buildings or structures that meet the minimum age requirement (45 years in age or older) it is recommended that the resource/s be assessed by a professional familiar with architecture and history of the county. Review of the available historic building/structure data has included only those sources listed above and should not be considered comprehensive.

If at any time you might require the services of a qualified professional the Statewide Referral List for Historical Resources Consultants is posted for your use on the internet at <a href="http://chrisinfo.org">http://chrisinfo.org</a>

If archaeological resources are encountered during project-related activities, work should be temporarily halted in the vicinity of the discovered materials and workers should avoid altering the materials and their context until a qualified professional archaeologist has evaluated the situation and provided appropriate recommendations. Project personnel should not collect cultural resources.

If human remains are discovered, California Health and Safety Code Section 7050.5 requires you to protect the discovery and notify the county coroner, who will determine if the find is Native American. If the remains are recognized as Native American, the coroner shall then notify the Native American Heritage Commission (NAHC). California Public Resources Code Section 5097.98 authorizes the NAHC to appoint a Most Likely Descendant (MLD) who will make recommendations for the treatment of the discovery.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the State Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

We thank you for contacting this office regarding historical resource preservation. Please let us know when we can be of further service. Please sign and return the attached **Access Agreement Short Form.** 

**Note:** Billing will be transmitted separately via email from the Financial Services office (\$150.00), payable within 60 days of receipt of the invoice.

If you wish to include payment by Credit Card, you must wait to receive the official invoice from Financial Services so that you can reference the CMP # (Invoice Number), and then contact the link below:

https://commerce.cashnet.com/ANTHROPOLOGY

Sincerely,

E. G. Greathouse

E. A. Greathouse, Coordinator Central California Information Center California Historical Resources Information System

Copy of invoice to Laurie Marroquin, Financial Services (lamarroquin@csustan.edu)

#### TRAFFIC OPERATIONAL ANALYSIS

For

# SR 132/ MCCRACKEN ROAD GAS STATION / CONVENIENCE STORE PROJECT Stanislaus County, CA

*Prepared for:* 

#### 132 INVESTMENTS LLC

2405 E. Highway 132 Vernalis, CA 95385

Prepared by:

KDAnderson & Associates, Inc.

3853 Taylor Road, Suite G Loomis, CA 95650 (916) 660-1555

Revised September 27, 2021 June 4, 2021

0045-01

SR 132 McCracken Road Gas Station TIA



# TRAFFIC OPERATIONAL ANALYSIS FOR SR 132 / MCCRACKEN ROAD GAS STATION / C-STORE PROJECT

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September 27, 2021



# TRAFFIC IMPACT ANALYSIS FOR SR 132 / MCCRACKEN ROAD GAS STATION / C-STORE PROJECT

Stanislaus County, CA

#### **INTRODUCTION**

This report summarizes **KDAnderson & Associates'** analysis of the potential traffic impacts associated with development of a Gas Station / Convenience Store along SR 132 at the McCracken Road intersection in rural Stanislaus County. Figure 1 identifies the project's location, and Figure 2 is the project site plan.

#### **Study Scope**

The purpose of this analysis is to identify potential project traffic operational effects and transportation impacts under CEQA. The analysis includes an evaluation of existing traffic operations in the area based on recent data that has been adjusted to account for the effects of COVID 19. Project effects have been evaluated within the context of this existing background traffic and under a long-term scenario that assumes regional traffic growth per the SR 132 Extension project: Dakota to Gates EIR Traffic Operational Analysis Report (TOAR). To assess project traffic effects, the characteristics of the proposed project have been determined, including estimated automobile and truck trip generation, as well as the directional distribution / assignment of the project traffic. "Existing plus Project" and "Long Term Cumulative plus Project" conditions were then evaluated.

The study area includes the adjoining SR 132 / McCracken Road intersection and the project's two proposed access points on SR 132 and on McCracken Road.

The status of other facilities for transportation modes, including pedestrian and bicycle circulation and transit services has been described. The project's impact under CEQA within the requirements of SB 743 based on Vehicle Miles Traveled (VMT) has also been discussed within the context of screening criteria presented in Office of Planning and Research (OPR) CEQA guidance.

#### **Summary Conclusions**

**Setting.** Because current traffic volumes on McCracken Road are low, traffic operating conditions in the area of the proposed project are acceptable based on satisfaction of Stanislaus County's minimum standards for Level of Service. A traffic signal is not warranted today at the SR 132 / McCracken Road intersection, and while no left turn lane exists on SR 132, current traffic volume levels do not require a turn lane.

**Trip Generation.** The proposed project includes new full access driveways on SR 132 and on McCracken Road. The project is expected to generate a total of 260 a.m. and 279 p.m. peak hour trips at those locations. Of these totals 22 trips are expected to be heavy trucks at both times.



**VMT Impacts.** SB 743 requires the Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within CEQA. In this case, the proposed project provides another opportunity for gasoline and convenience items for western Stanislaus County / San Joaquin County area residents and employees and other persons traveling on SR 132. The project will likely be closer to some residences and businesses than current options and as a result the project is likely to have the net effect of helping to incrementally reduce regional VMT. Based on these considerations and on OPR screening guidance, the project's Transportation impact under CEQA based on VMT is not significant.

**Safety Impacts under CEQA**. The proposed project will increase the length of average delays on existing approaches to SR 132 and traffic pausing to turn left towards the site will cause queuing in mainline SR 132. This is a significant safety impact under CEQA, and mitigation is required. A center left turn area on SR 132 will be needed. Subject to Caltrans approval, this treatment would begin as a westbound left turn lane at McCracken Road, continue westerly along the project frontage and create a Two-Way Left-Turn (TWLT) lane that extended for at least 600 feet beyond the driveway.

The project will cause slow moving trucks to turn off of and onto SR 132 at the McCracken Road intersection and at the new driveway. Conflicts between slow moving trucks and high speed through traffic on SR 132 is a significant safety issue that will require mitigation. An acceleration / deceleration area beginning east of the McCracken Road intersection and continuing westerly beyond the project driveway will be needed. This area could take the form of dedicated turn lanes or a widened shoulder constructed to the standard travel lane section. The site layout and all access points will also need to be designed to accommodate the turning requirement of STAA trucks.

**Impacts to Alternative Transportation Modes.** The project could generate pedestrians traveling between the site and the existing commercial and residential areas to the west near Greenwood Road. Mixing pedestrians and high speed traffic along SR 132 is a potential safety issue that should be addressed by creating an all-weather connection between the two areas.

**Long Term Conditions.** Year 2046 traffic conditions were assessed based on traffic volume forecasts derived from the *SR 132 Extension Dakota to Gates EIR Traffic Operational Analysis Report (TOAR)*. Without improvements to SR 132, long term traffic operations with the project would fall below minimum standards with appreciable congestion and long queues. Widening SR 132 to four lanes, as anticipated by the SR 132 Transportation Concept Report (TCR) but not yet identified in the Stanislaus County Regional Transportation Plan will be needed, however, even with widening long delays will result for motorists attempting to access SR 132. If the project proceeds the SR 132 / McCracken Road intersection would eventually need a traffic signal or roundabout.

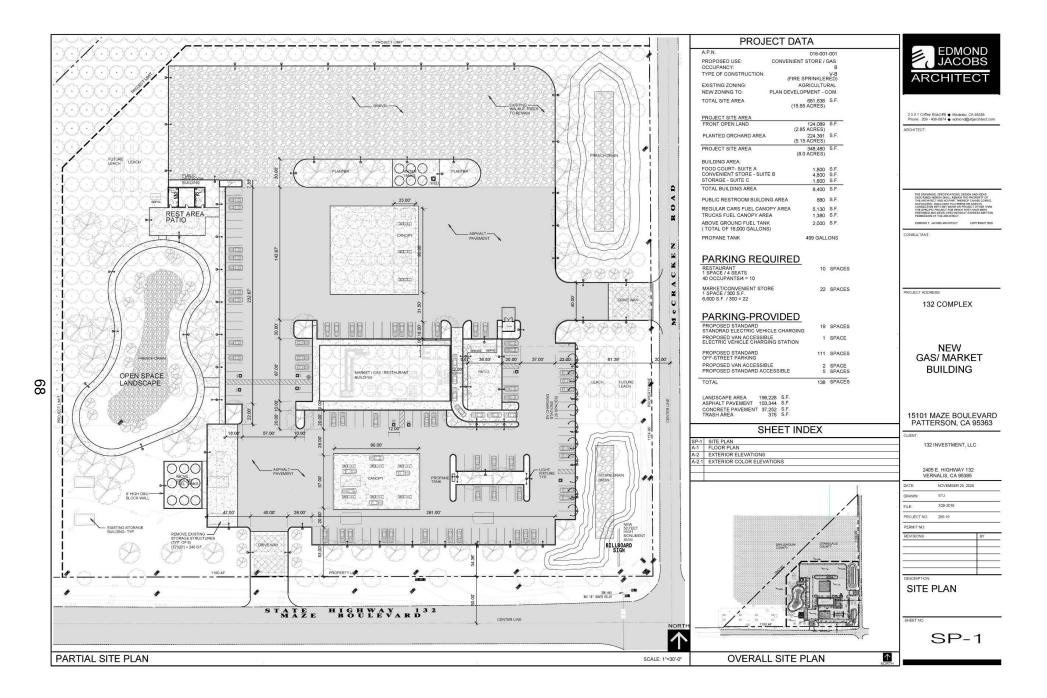
**Site Access.** The proposed driveway on SR 132 should be made wide enough to accommodate two exiting lanes and should be made wide enough to accommodate the turning requirements of inbound trucks when other vehicles are waiting to exit. With that improvement driveway throats would be adequate.





KD Anderson & Associates, Inc. Transportation Engineers

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#### KD Anderson & Associates, Inc.

# **Recommended Mitigations / Conditions of Approval**

**SR 132 Improvements.** Under an Encroachment Permit from Caltrans install the following improvements to SR 132.

- 1. *Install a continuous center Two-Way Left-Turn (TWLT)* on SR 132 beginning as a westbound left turn lane at the SR 132 / McCracken Road intersection and continuing westerly to a point at least 600 feet beyond the project's driveway.
- 2. On westbound SR 132 *install westbound right turn lanes or enhanced 12-foot shoulders* from a point 600 feet east of McCracken Road to a point 600 feet beyond the project driveway.
- 3. Construct all project access and reconstruct SR 132 / McCracken Road northside corners as needed to accommodate the turning requirements of STAA trucks.

# **Other Requirements**

- 4. Prepare and submit to Stanislaus County STAA truck turning exhibits and written summary narrative needed to support a Stanislaus County application to Caltrans for an *STAA terminal route designation* on McCracken Road from SR 132 to the project access.
- 5. Construct an *all-weather pedestrian route* from the project's western boundary to the Orchard RV Park.



#### **EXISTING SETTING**

## **Existing Street System**

Regional access to the project is provided by State Route 132, which in turn links the site with SR 33 and Interstate 5 to the west and with SR 99 and the Modesto urban area to the east. Local access to the project will be via driveways on SR 132 and via McCracken Road.

The text that follows describes these existing transportation facilities. Functionally, the Stanislaus County General Plan Circulation Element classifies study area streets as Arterials, Collectors or Local Streets.

**State Route 132** (**SR 132**). SR 132 is a major roadway providing important access from the Modesto area westerly to Interstate 5. In Stanislaus County near the project SR 132 is designated a Principal Arterial and is a two-lane conventional highway. Further east Caltrans is currently constructing Phase 1 of a project to improve SR 132 to expressway standards, and Phase 2, which would extend those improvements to Gates Road (i.e., six miles east of the project) is undergoing environmental review. Near the project SR 132 is a two-lane roadway with eight-foot shoulders, and prima facie 55 mph speed limit applies. A continuous Two-Way Left-Turn (TWLT) lane begins about 1,800 feet west of the McCracken Road intersection in the vicinity of existing highway commercial uses with direct access to SR 132. SR 132 is designed an STAA truck route.

The most recent daily traffic counts reported by Caltrans (2019) indicate that SR 33 carried an *Annual Average Daily Traffic (AADT)* volume of 15,000 vehicles per day at the San Joaquin County line immediately west of the project, with the peak month volume rising to 22,900 vehicles per day (vpd). Caltrans reports that trucks comprise 15% of the total traffic volume on SR 132 west of the San Joaquin County / Stanislaus County line.

McCracken Road. McCracken Road is a local Stanislaus County road that extends north from the I-5 / Howard Road interchange for about 5 miles to SR 33 and another 2 miles to SR 132. About ½ mile north of SR 132 McCracken Road intersects Greenwood Road, and that road continues northeasterly to Kasson Road. In the area of the project McCracken Road generally has two 10-foot travel lanes separated by a centerline stripe and unimproved shoulders. The rural prima facie 55 mph speed limit applies.

No 24-hr traffic counts are available for McCracken Road, but assuming 10% of the daily traffic occurs in the p.m. peak hour, recent peak hour intersection counts suggest that the road carries about 300 vpd north of SR 132.

#### **Existing Study Intersections**

The geometric configuration and traffic controls at the study intersection are discussed in the text which follows.

The **SR 132** / **McCracken Road intersection** is controlled by stop signs on the northbound and southbound McCracken Road approaches. There are no auxiliary turn lanes at the intersection,



but the corners of the intersection have been widened to accommodate truck turns. The are no marked crosswalks or streetlights at this intersection.

# **Alternative Transportation Modes**

**Public Transit.** Stanislaus Regional Transit provides transit service county-wide. Fixed route service is provided by StaRT, but no route extends to the area of this project.

**Bicycle Facilities**. The Stanislaus County Non-Motorized Transportation Master Plan (StanCOG 2021) guides development of pedestrian and bicycle facilities in the County<sup>1</sup>. While the wide shoulder on SR 132 can accommodate bicycles, there are no dedicated bicycle facilities in this area of the County, and the plan does not suggest future improvements.

**Pedestrian Facilities.** There are no dedicated pedestrian facilities along SR 132 or McCracken Road in this area of rural Stanislaus County.

#### **Existing Traffic Volumes**

To quantify existing traffic conditions, new weekday a.m. and p.m. peak hour intersection turning movement counts were conducted on April 20, 2020. These volumes would not necessarily represent "normal" conditions due to the overall effects of COVID-19 on travel. Current CEQA guidance suggests that a baseline of "normal" traffic should be created that reflects non-Covid-19 conditions.

A method was developed to adjust the April 2021 traffic counts to "normal" Year 2020 volumes.

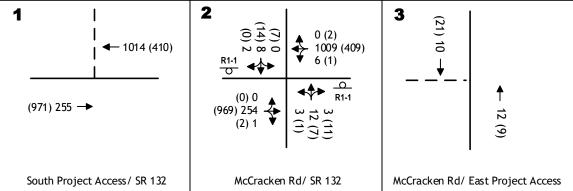
- 1. Pre-COVID traffic counts were obtained for the SR 132 / Gates Road intersection from the Final Traffic Operations Report (TOAR) for the State Route 132 Dakota Avenue to Gates Road Extension Project.
- 2. Cellphone based GIS data was obtained from StreetLight Data Inc. for average weekday Year 2019 peak hours at the SR 132 / Gates Road intersection and the SR 132 / Kasson Road intersection just east of the project. The results were compared to determine the anticipated difference in directional peak hour traffic volume on SR 132 between locations west of Gates Road and west of Kasson Road.
- 3. The identified volume differences were added to the SR 132 through traffic volumes in the 2021 SR 132 / McCracken Road traffic counts.

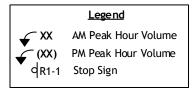
Figure 3 displays the adjusted weekday 2021 a.m. and p.m. peak hour traffic volumes at the SR 132 / McCracken Road intersection used for this analysis.

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<sup>&</sup>lt;sup>1</sup> http://www.stancog.org/pdf/documents/final\_nonmotorized\_transportation\_plan.pdf









KD Anderson & Associates, Inc. Transportation Engineers EXISTING TRAFFIC VOLUMES AND LANE CONFIGURATIONS

### **Level of Service Calculation**

"Levels of Service" were determined at study area intersections and driveways to quantitatively evaluate traffic conditions and to provide a basis for comparison of operating conditions with and without project generated traffic.

"Level-of-Service" (LOS) is a quantitative measure of traffic operating conditions whereby a letter grade "A" through "F" is assigned to an intersection. LOS "A" through "F" represents progressively worsening traffic conditions. The characteristics associated with the various LOS for intersections are presented in Table 1. LOS "E" and "F" are associated with severe congestion and delay and are unacceptable to most motorists.

|                     | LEVEL OF S   | TABLE 1<br>ERVICE DEFINITIONS                               |   |
|---------------------|--|---|---|
| Level of<br>Service | Signalized Intersection  | Unsignalized Intersection                                   | Roadway (Daily)   |
| "A"                 | Uncongested operations, all queues clear in a single-signal cycle. Delay < 10.0 sec  |   | Completely free flow.                                   |
| "B"                 | Uncongested operations, all queues clear in a single cycle. Delay $> 10.0$ sec and $\leq 20.0$ sec   | Delay > 10 sec/veh and ≤ 15 sec/veh                         | Free flow, presence other vehicles noticeable.          |
| "C"                 | Light congestion, occasional backups on critical approaches. Delay > 20.0 sec and ≤ 35.0 sec   | Average traffic delays. Delay > 15 sec/veh and < 25 sec/veh | Ability to maneuver an select operating spee affected.  |
| "D"                 | Significant congestions of critical  | Delay > 25 sec/veh and ≤ 35 sec/veh                         | Unstable flow, speeds an ability to maneuve restricted. |
| "E"                 | Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). Delay > 55.0 sec and $\leq 80.0$ sec | extreme congestion. Delay > 35 sec/veh and ≤ 50 sec/veh     | At or near capacity, flo quite unstable.                |
| "F"                 |  | Intersection blocked by external causes. Delay > 50 sec/veh | Forced flow, breakdown.                                 |

Levels of Service were calculated for different intersection control types using the respective methods in the <u>Highway Capacity Manual</u>, 6<sup>th</sup> <u>Edition</u> (HCM) using SYNCHRO 10.0 / Simtraffic software.



### **Year 2021 Peak Hour Traffic Conditions**

**Level of Service.** Levels of Service (LOS) were calculated at the SR 132 / McCracken Road intersections (Refer to Appendix for calculation worksheets) under the "Adjusted" Year 2021 conditions. Current LOS at the study intersection is presented on Table 2. As shown, the stop-controlled approaches to the SR 132 / McCracken Road intersection operates at LOS B in the a.m. peak hour and LOS B in the p.m. peak hour.

**Peak Hour Traffic Signal Warrants.** Traffic operating conditions at unsignalized intersections is also evaluated based on the extent to which existing or projected traffic volumes satisfy traffic signal warrant requirements based on guidelines contained in the Manual of Uniform Traffic Control Devices (MUTCD). The peak hour traffic volumes at the intersection were reviewed to determine whether either the a.m. or p.m. volume satisfies peak hour warrant requirements (i.e., Warrant 3). Today the volume of traffic is well below the minimum thresholds for peak hour volumes on high-speed roads.

**Safety Improvements.** Caltrans has already acted to install safety improvements along SR 132 in the general area of the proposed project. These include:

- Edgeline Striping with Rumble Strip
- Centerline Striping with Rumble Strip
- Delineators along the edge of shoulder at intersections
- Left turn lanes at key intersections
- Two-way Left-Turn (TWLT) lane in the area of private access west of the project

Left turn lanes are generally provided at major intersections on SR 132, including the Greenwood Road intersection about ½ mile west of the project and the signalized Kasson Road / River Road intersection about ½ miles to the east. Decisions regarding the need for separate left turn lanes are made in response to factors such as automobile and truck traffic volume and collision history following the general guidance of Highway Safety Manual. Today conditions at the SR 132 / McCracken Road intersection do not appear to justify separate left turn lanes.

| TABLE 2 YEAR 2021 PEAK HOUR INTERSECTION LEVELS OF SERVICE              |            |             |      |             |      |  |  |  |  |  |  |
|---|------------|-------------|------|-------------|------|--|--|--|--|--|--|
|   |            | AM Peak H   | Iour | PM Peak H   | lour |  |  |  |  |  |  |
| Average Delay Average Delay   |            |             |      |             |      |  |  |  |  |  |  |
| Location  | Control    | (sec / veh) | LOS  | (sec / veh) | LOS  |  |  |  |  |  |  |
| SR 132 / McCracken Road   | NB/SB Stop |             |      |             |      |  |  |  |  |  |  |
| NB left+thru+right turn   |            | 14          | В    | 13          | В    |  |  |  |  |  |  |
| SB left+thru+right turn 11 B 10 B                                       |            |             |      |             |      |  |  |  |  |  |  |
| Bold values indicate conditions in excess of the County's LOS D minimum |            |             |      |             |      |  |  |  |  |  |  |

### **Regulatory Framework**

The text which follows summarizes the circulation policies which govern the study area.

#### State of California

#### SB 743

SB 743 modified CEQA direction and requires local agencies to move from a Level of Service (LOS) based analysis to evaluation of impacts based on Vehicle Miles Traveled (VMT). General guidance as to methods for calculating VMT and significance criteria are contained in the Office of Planning & Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (California Governor's Office of Planning and Research 2018). However, while SB 743 eliminates LOS as a CEQA criteria, this measure can still be considered in terms of General Plan consistency.

#### California Department of Transportation

In its Vehicle Miles Traveled-Focused Transportation Impact Study Guideline (2020), Caltrans establishes operational objectives for highway performance based on VMT and safety rather than Level of Service while addressing impacts to alternative transportation modes.

Caltrans plans / polices for its state highways are also presented in the **SR 132 Transportation Concept Report, 2014 (SR 132 TCR).** The Concept facility for the 20-year planning horizon is a 4-laen expressway, although the TCR indicates that current two-lane conventional highway will operate at LOS E-F through 2030.

Caltrans policy regarding applicable traffic controls is based on **Traffic Operations Policy Directive 13-02.** This directive requires that Caltrans consider the relative merits of alternative traffic controls when it becomes necessary to stop traffic on state highways. Roundabouts are the default intersection control, but all-way stops and traffic signals are to be considered. The policy directive requires preparation of an *Intersection Control Evaluation (ICE)* to determine the preferred traffic control.

**Caltrans Encroachment Permit** is required for improvements made to the state highway by private parties or local agencies, and the design of these improvements is subject to Caltrans approval.

Large trucks are permitted on designated facilities under the **Surface Transportation Authority Act (STAA).** Roadways to be added to designated routes are processed through Caltrans with evidence of the adequacy of each road and intersection for the trucks.



## Regional

Stanislaus Council of Governments (StanCOG)

The 2018 Regional Transportation Plan and Sustainable Communities Strategy (RTP/STS) for Stanislaus County is a federally mandated, long-range transportation plan for the nine incorporated cities and the unincorporated county. The RTP specifies the policies, projects, and programs necessary over a 20-plus year period to maintain, manage, and improve the region's transportation systems. It establishes goals and objectives for the future system. It identifies the actions necessary to achieve these goals and describes a funding strategy and options for implementing the actions. The RTP is updated every 3 years. The present 2018 update concerns the period from 2018 to 2040.

To coordinate local planning efforts with other regional, state, and federal agencies, and to monitor and respond to policies that will affect the development and implementation of the RTP, the Stanislaus Council of Governments prioritizes transportation projects in a Regional Transportation Improvement Program for federal and state funding. The process is based on each project for need, feasibility, and adherence to federal transportation policies.

The RTP's Regional Road network includes SR 132 through the study area. Tier I projects (i.e., projects that have a funding source) included Appendix K of the RTP/STS include:

• SR 132: SR 132 Extension Dakota to Gates: 4-lane divided Expressway

#### PROJECT CHARACTERISTICS

The characteristics of the project with regards to trip generation and distribution are discussed in this report section.

#### **Project Description**

**Land Uses.** The proposed project is a Gasoline Station with Convenience Store and adjoining Fast Food Restaurant with Drive-thru lane. The project offers 12 automobile fuel dispensers, and the Convenience Store building is 8,400 sf, including storage and the 1,800 sf food court. An outdoor patio and separate restroom building are also provided. A separate commercial truck fueling area is proposed. This area can accommodate six vehicles fueling concurrently, however, large tractor-trailer combinations that fuel on both sides of the rig concurrently would occupy two positions.

**Site Layout**. The project circulation layout includes a primary automobile circulation on the south side of the site and truck circulation on the north. Both areas would use both project driveways. The truck fueling positions are facing easterly, which would allow westbound truck entry via the SR 132 driveway and truck exit directly to McCracken Road. However, the circulation layout surrounding the truck positions is broad enough to allow trucks to maneuver into and out the positions from either direction.

Two driveways are proposed. The SR 132 driveway is located 450 feet west of McCracken Road measured centerline to centerline just beyond the limits of the intersection's existing eastbound "no passing" zone striping. This driveway would have full access as proposed. The McCracken Road driveway is 360 feet north of SR 132, and full access is planned at this location as well.

#### **Trip Generation**

**Approach.** To quantify the amount of vehicular traffic generated by the project, daily and a.m. / p.m. peak hour trip generation rates presented in the Institute of Transportation Engineers (ITE) publication *Trip Generation Manual*,  $10^{th}$  *Edition*, were employed. These rates are presented in Table 3. The *ITE Trip Generation Handbook*,  $3^{rd}$  *Edition* includes data regarding the share of traffic drawn to retail commercial land uses from the stream of traffic passing the project site (i.e., pass-by trips).

**Trip Generation Rates**. Trip Generation rates are available for Gasoline Stations with Convenience Stores (Code 945), and these rates are applicable to the project based on the number of fueling positions. For this analysis it has been assumed that the food court will also be a trip generator, and the ITE rate for Fast Food Restaurant with Drive Thru Aisle (Code 934) have been employed. Other elements of the plan are ancillary features that would not generate their own trips (i.e., rest rooms).



|          | TABLE 3 TRIP GENERATION RATES        |                  |        |     |          |       |     |              |       |  |  |
|----------|--------------------------------------|------------------|--------|-----|----------|-------|-----|--------------|-------|--|--|
| <b>G</b> | D                                    | 04'4             | D - 21 | AM  | I Peak H | our   | PM  | PM Peak Hour |       |  |  |
| Source   | Description                          | Quantity         | Daily  | In  | Out      | Total | In  | Out          | Total |  |  |
| 945      | Gas Station with Convenience Market  | Fueling position | 205.36 | 51% | 49%      | 12.47 | 51% | 49%          | 13.99 |  |  |
| 934      | Fast Food Restaurant with Drive-Thru | ksf              | 470.95 | 51% | 49%      | 40.19 | 52% | 48%          | 32.67 |  |  |

**Trip Generation Forecasts.** The number of vehicle trips that may be generated by the project is shown in Table 4. As shown, it has been assumed that internal "trips" made between the restaurant and gas sales elements of the project would be equal to 25% of the restaurant trip generation. After this discount, a total of 260 trips is projected at the project driveway in the a.m. peak hour, and 279 trips is forecasted in the weekday p.m. peak hour. Of these totals, 158 a.m. peak hour and 154 p.m. peak hour trips would be made by "pass-by" motorists who simply stop at this location as part of another trip along SR 132. The remainder would either be trips made by motorists on other regional facilities such as SR 33 or Kasson Road who divert momentarily to this location or would be primary trips generated by area residents to this location.

**Heavy Truck Trip Generation.** The share of total trips generated by heavy truck has been considered from three perspectives. Applying Code 945 ITE rates to the fueling positions that are available to tractor trailer combinations for concurrent fueling (i.e., two trucks in positions) suggests that 25 a.m. and 28 p.m. peak hour trips would be heavy trucks.

Alternatively, it is possible to estimate truck visits based on the total daily diesel fuel sales anticipated by the proponent and the average number of gallons per truck fuel sale. The project proponent has indicated that 50,000 to 75,000 gallons of diesel fuel may be sold monthly. Over 30 days this would equate to 1,667 to 2,500 gallons per day. Tractor trailer combinations typically have tank capacity for 150 to 200 gallons. Assuming fueling occurs when tanks are 75% empty, the average full up could be 112 to 150 gallons. Thus, if all diesel sales were made to tractor trailer combinations, then the number of daily truck sales would be 11 to 22. Based on this calculation and the share of daily trips generated in the peak hour by code 945 (i.e., 6.8%), only 1 or 2 heavy truck sales would be anticipated each hour (i.e. 2 to 4 trips).

Additionally, we considered the time needed to fuel up a tractor trailer and the number of heavy trucks that can theoretically be accommodated concurrently over an hour. A typical pump can deliver 10 gallons per minute, so 20 gallons per minute can be dispensed using two pumps concurrently. Assuming 112 to 150 gallons per sale, sales would require 5.6 to 7.5 minutes just to fill. A workable estimate accounting for all aspects of the visit would be 10 minutes per transaction, or 6 truck sales per position per hour. If fully utilized, the two tractor trailer positions could accommodate 12 sales per hour, or 24 peak hour trips.



For this analysis it has been conservatively assumed that peak hour heavy truck trips would be the average of the three estimates or 22 heavy truck trips per hour (i.e., 11 in and 11 out). On a daily basis, we have assumed twice the truck trips anticipated based on fuel sales, or 88 trips.

| TABLE 4 TRIP GENERATION ESTIMATES   |                             |                      |       |           |          |   |              |     |       |  |
|---|-----------------------------|----------------------|-------|-----------|----------|---|--------------|-----|-------|--|
| G   | D ' '                       | 0 44                 | ъ "   | AN        | I Peak H | our   | PM Peak Hour |     |       |  |
| Source  | Description                 | Quantity             | Daily | In        | Out      | Total   | In           | Out | Total |  |
|   | Gas Station w/ C Store      | 18 Fueling positions | 3,696 | 114       | 110      | 224   | 128          | 124 | 252   |  |
| 0.45  | Internal Trips              |                      | 212   | 9         | 9        | 18  | 8            | 8   | 16    |  |
| 945   | External Trips              |                      | 3,484 | 105       | 101      | 206   | 120          | 116 | 236   |  |
|   | Pass-by Trips               | 63%-56% <sup>1</sup> | 1,742 | 65        | 65       | 130   | 66           | 66  | 132   |  |
|   | Net Primary External Trips  |                      | 1,742 | 40        | 36       | 76  | 54           | 50  | 104   |  |
|   | Food Court                  | 1.8 ksf              | 848   | 37        | 35       | 72  | 31           | 28  | 59    |  |
| Source         Description         Quantity         Daily         AM Peak Hour           In         Out         Total           Gas Station w/ C Store         18 Fueling positions         3,696         114         110         224           Internal Trips         212         9         9         18           External Trips         3,484         105         101         206           Pass-by Trips         63%-56% <sup>l</sup> 1,742         65         65         130           Net Primary External Trips         1,742         40         36         76 | 8                           | 8                    | 16    |           |          |   |              |     |       |  |
| 934   | External Trips              |                      | 636   | 28        | 26       | 54  | 23           | 20  | 43    |  |
|   | Pass-by trips               | 50%                  | 318   | 14        | 14       | 28  | 11           | 11  | 22    |  |
|   | Net Primary External Trips  |                      | 318   | 14        | 12       | Hour         PM Peak H           Total         In         Out           224         128         124           18         8         8           206         120         116           130         66         66           76         54         50           72         31         28           18         8         8           54         23         20           28         11         11           26         12         9           158         77         77           102         66         59           260         143         136 | 21           |     |       |  |
|   |                             |                      |       |           |          |   |              |     |       |  |
| 1   | Total Pass-by Tr            | ips                  | 2,060 | <i>79</i> | 79       | 158   | 77           | 77  | 154   |  |
|   | Total Primary External Trip | S                    | 2,060 | 54        | 48       | 102   | 66           | 59  | 125   |  |
| SIIC  | Total Driveway T            | rips                 | 3,120 | 133       | 127      | 260   | 143          | 136 | 279   |  |
|   | Heavy Trucks                |                      | 88    | 11        | 11       | 22  | 11           | 11  | 22    |  |

## **Trip Distribution**

The distribution of project trips will reflect the project's location near the crossroads of two major regional highways (SR 33 and SR 132) as well as the demographics of the area around the site. Assumptions have been made relative to the distribution of the project's *Primary* trips and link diverted trips made specifically to visit the site and for *Pass-by* trips drawn from traffic already passing the site on SR 132.

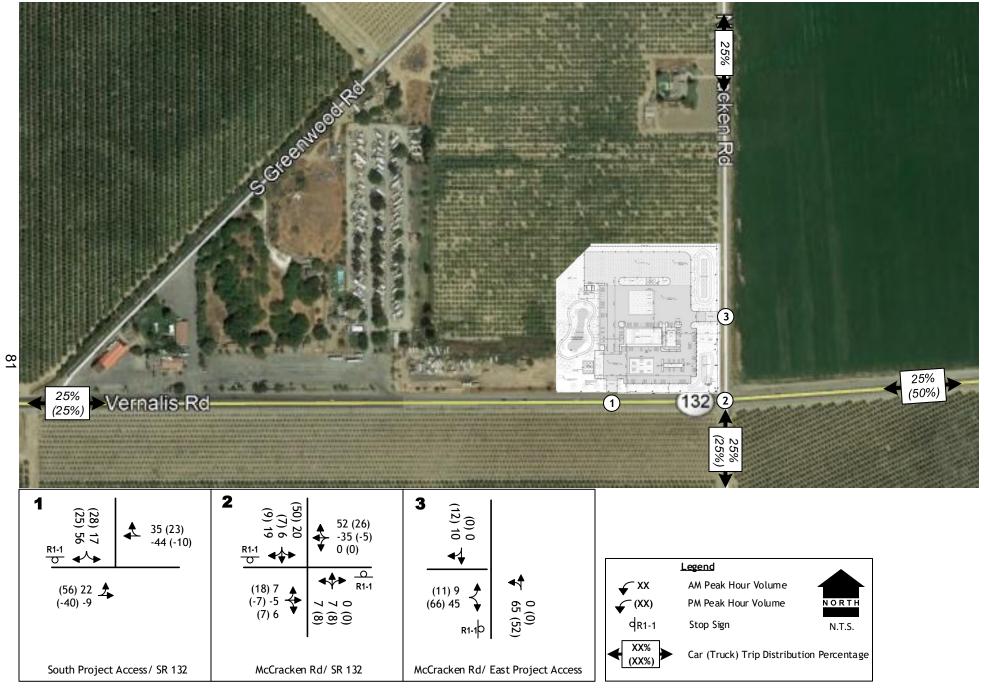
For this analysis, trips made by patrons who are traveling on SR 33 and are diverted to the site have been classified as "new" trips relative to the immediate study area. Due to the layout of SR 33, it is likely that trips originating on northbound SR 33 would use McCracken Road to reach the site, as would trips leaving the site but intending to travel south on SR 33. Pass-by trips have been assumed to be drawn from traffic on SR 132 in proportion to the directional traffic volume of traffic passing the site during each peak hour. Table 5 presents the primary and pass by trip distribution assumptions made for this analysis.



|           | TABLE 5 PROJECT TRIP DISTRIBUTION SUMMARY |        |         |            |        |         |      |  |  |  |  |
|-----------|---|--------|---------|------------|--------|---------|------|--|--|--|--|
|           |   |        |         | otal Trips | Trips  |         |      |  |  |  |  |
| Direction | Route                                     | Primar | y Trips |            | Pass-k | y Trips |      |  |  |  |  |
|           |   | Auto   | Truck   | Au         | ito    | Tru     | ck   |  |  |  |  |
| North     | McCracken Road                            | 25%    | 0%      |            |        |         |      |  |  |  |  |
| South     | McCracken Road to SR 33                   | 25%    | 25%     |            |        |         |      |  |  |  |  |
| East      | SR 132                                    | 25%    | 50%     |            |        |         |      |  |  |  |  |
| West      | SR 132                                    | 25%    | 25%     |            |        |         |      |  |  |  |  |
| Total     |   | 100%   | 100%    |            |        |         |      |  |  |  |  |
|           |   |        |         | AM         | PM     | AM      | PM   |  |  |  |  |
|           | Eastbound on SR 132                       |        |         | 20%        | 75%    | 20%     | 75%  |  |  |  |  |
|           | Westbound on SR 132                       |        |         | 80%        | 25%    | 80%     | 25%  |  |  |  |  |
|           |   |        |         | 100%       | 100%   | 100%    | 100% |  |  |  |  |

## **Trip Assignment**

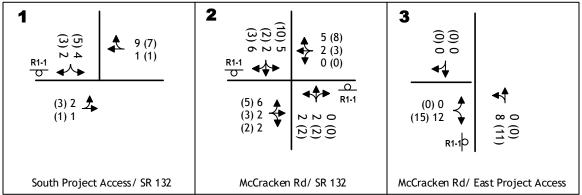
Using the trip generation and distribution assumptions described above, the trips generated by the proposed project were assigned to the study area street system via the project's driveways. Figure 4 presents peak hour traffic volumes accompanying development of the project, while Figure 5 is the project's truck trips. Full access was assumed at each location.

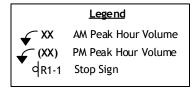


PROJECT ONLY TRAFFIC VOLUMES AND LANE CONFIGURATIONS

0045-01 RA 6/3/2021









PROJECT ONLY (TRUCK) TRAFFIC VOLUMES AND LANE CONFIGURATIONS

#### EXISTING PLUS PROJECT CONDITIONS

#### **Vehicle Miles Traveled (VMT) Impact**

SB 743 requires the Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within CEQA. For land use projects, OPR identified Vehicle Miles Traveled (VMT) per capita, VMT per employee, and net VMT as new metrics for transportation analysis. The CEQA Guidelines state that lead agencies, such as Stanislaus County, may establish "thresholds of significance" to assist with the determination of significant impacts of a project. The CEQA Guidelines generally state that projects that decrease VMT can be assumed to have a less than significant transportation impact. The CEQA Guidelines do not provide any specific criteria on how to determine what level of project VMT would be considered a significant impact.

The OPR Technical Advisory indicates that it is generally good practice to evaluate retail land use projects by estimating the "total change in VMT" in the project study area. According to the OPR Technical Advisory, this is because new retail development often redistributes existing shopping trips rather than solely creating new trips, and so the effect of the project on the overall region needs to be considered. The OPR Technical Advisory recommends that any increase in regional VMT due to a new retail project could be considered a significant impact, however, the Advisory also noted that "locally serving retail" less than 50,000 sf in size can be presumed to have no significant impact on regional VMT. Similar methodologies could be applied to other non-office commercial land uses, such as restaurants, gas stations and cafes.

In this case, the proposed project provides another opportunity for gasoline, food and convenience items for western Stanislaus County residents and other persons traveling on SR 33 and SR 132. The project will likely be closer to some residences than current options and as a result the project is likely to have the net effect helping to incrementally reduce regional VMT. Based on these considerations and on OPR guidance, the project's Transportation impact under CEQA based on VMT is not significant.

#### **Traffic Volume Forecasts**

Project trips were superimposed onto adjusted Year 2021 background traffic volumes to create the "Existing plus Project" traffic peak hour volumes presented in Figure 6.

## **Existing Plus Project Intersection Operations**

**Level of Service.** Table 6 summarizes the results of Level of Service calculations for study intersections under "Existing plus Project" conditions. As noted, the addition of project traffic without improvements would result in long delays on the approaches to SR 132 at the McCracken Road intersection and at the project's driveways. While conditions in the morning would exceed the Stanislaus County minimum LOS D standard, under current CEQA guidelines intersection LOS is not a significance criteria.



**Queueing**. Table 7 identifies the length of 95<sup>th</sup> percentile queues at key locations. With regards to safety on the state highway, the most significant project impact is the creation of queues of eastbound traffic behind vehicles to turn left across westbound traffic at the project access and at the McCracken Road intersection. This is a significant safety issue that will need to be addressed be creating a separate left turn area. The design of recommended improvements is discussed later in this report.

**Traffic Signal Warrants.** The volume of traffic at SR 132 McCracken Road intersection and at the SR 132 / Project Driveway was compared to MUTCD peak hour warrants requirements to determine whether conditions with the project reach the level that may justify a traffic signal. The volume of traffic on the southbound McCracken Road approach in the p.m. peak hour is projected to reach 87 vehicles, which would exceed the minimum 75 vehicle threshold for locations with design speed in excess of 40 mph. The a.m. peak hour volume does not reach the level that meets the minimum requirements.

While meeting peak hour warrants may suggest that a traffic signal could be needed, simply satisfying an individual warrant among the nine addressed in the MUTCD is not by itself justification for a traffic signal. As noted in Policy Directive 13.02, alternatives to signalization would need to be considered. In this case widening the southbound McCracken Road approach to provide room to separate left and right turns would result in volumes that did not satisfy peak hour warrants. The design of recommended improvements is discussed later in this report.

**Safety Impacts under CEQA**. The proposed project will increase the length of average delays on existing approaches to SR 132 and traffic pausing to turn left towards the site will cause queuing in mainline SR 132. This is a significant safety impact under CEQA, and mitigation is required. A center left turn area on SR 132 will be needed. Subject to Caltrans approval, this treatment would begin as a westbound left turn lane at McCracken Road, continue westerly along the project frontage and create a Two-Way Left-Turn (TWLT) lane that extended for at least 600 feet beyond the driveway.

The project will cause slow moving trucks to turn off of and onto SR 132 at the McCracken Road intersection and at the new driveway. Conflicts between slow moving trucks and high speed through traffic on SR 132 is a significant safety issue that will require mitigation. An acceleration / deceleration area beginning east of the McCracken Road intersection and continuing westerly beyond the project driveway will be needed. This area could take the form of dedicated turn lanes or a widened shoulder constructed to the standard travel lane section. The site layout will also need to be designed to accommodate the turning requirement of STAA trucks.

### **Impacts to Other Transportation Modes**

**Pedestrian Facilities.** While there are few developed areas around the project to create pedestrian travel to and from the site, the project could result in pedestrian travel between the site and the existing land uses along the northside of SR 132 east of Greenwood Road. The existing

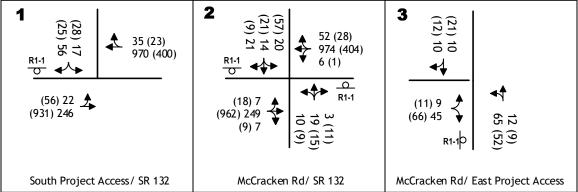


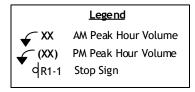
highway convenience center is about ¼ mile beyond the project and the Orchard RV Park is about 600 feet beyond the project. Adding regular pedestrian travel on the SR 132 shoulder the area of the project and its access could be a safety issue, and an all-weather pedestrian route off the highway linking the two areas would be desirable.

**Bicycle Facilities**. The same locations west of the project could generate bicycle trips to and from the site, however, the 8-foot shoulder along SR 132 is adequate for bicycles, and the project's impact on bicycles is not significant.

**Transit.** It is conceivable that some employees would elect to use transit service if it was available to this area of Stanislaus County, but the number of transit users caused by this project would not justify changes to StaRT routes to serve this area.









EXISTING PLUS PROJECT TRAFFIC VOLUMES AND LANE CONFIGURATIONS

# TABLE 6 YEAR 2021 PLUS PROJECT PEAK HOUR INTERSECTION LEVELS OF SERVICE

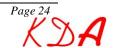
|                             |            |             | AM Peal | у Ноше      |              |             | DM Doc     | ık Hour                |     |  |
|-----------------------------|------------|-------------|---------|-------------|--------------|-------------|------------|------------------------|-----|--|
|                             |            |             | ANTICAR | Tioui       |              |             | 1 1/1 1 62 | ik 110ui               |     |  |
|                             |            | Year 2      | 021     | Year 2021 l | Plus Project | Year        | 2021       | Year 2021 Plus Project |     |  |
|                             |            | Average     |         | Average     |              | Average     |            | Average                |     |  |
|                             |            | Delay       |         | Delay       |              | Delay       |            | Delay                  |     |  |
| Location                    | Control    | (sec / veh) | LOS     | (sec/veh)   | LOS          | (sec / veh) | LOS        | (sec/veh)              | LOS |  |
| SR 132 / McCracken Road     |            |             |         |             |              |             |            |                        |     |  |
| NB left+thru+right turn     | NB/SB Stop | 14          | В       | 44          | E            | 13          | В          | 30                     | D   |  |
| SB left+thru+right turn     |            | 11          | В       | 48          | E            | 10          | В          | 32                     | D   |  |
| SR 132 / Project Driveway   | CD Ctom    |             |         | 22          | C            |             |            | 18                     | C   |  |
| SB left+right turn          | SB Stop    | -           | -       | - 22        | 22 C         | -           | -          | 18                     | C   |  |
| McCracken Rd / Project Drwy | NB Stop    |             |         |             |              |             |            |                        |     |  |
| EB left+right turn          | ND Stop    | -           | -       | 3           | A            | -           | 1          | 4                      | A   |  |
|                             |            |             |         |             |              |             |            |                        |     |  |

**Bold** values indicate conditions in excess of the County's LOS D minimum

## TABLE 7 2021 PLUS PROJECT PEAK HOUR 95th % QUEUES

|                                      |             |                 |         | AM Pe              | ak Hour           |                    | PM Peak Hour |                    |            |                              |  |
|--------------------------------------|-------------|-----------------|---------|--------------------|-------------------|--------------------|--------------|--------------------|------------|------------------------------|--|
| Intersection                         | Lane        | Storage         | Exi     | sting              | <b>Existing P</b> | lus Project        | Ex           | isting             | Existing P | <b>Existing Plus Project</b> |  |
| intersection                         | Lunc        | (feet)          | Volume  | 95 <sup>th</sup> % | Volume            | 95 <sup>th</sup> % | Volume       | 95 <sup>th</sup> % | Volume     | 95 <sup>th</sup> %           |  |
|                                      |             |                 | (vph)   | Queue (ft)         | (vph)             | Queue (ft)         | (vph)        | Queue (ft)         | (vph)      | Queue (ft)                   |  |
| SR 132 /<br>McCracken Road           | NB approach | n.a             | 18      | 55                 | 32                | 95                 | 19           | 45                 | 35         | 80                           |  |
|                                      | SB approach | $260^{1}$       | 10      | 40                 | 55                | 155                | 21           | 50                 | 87         | 135                          |  |
|                                      | EB approach | n.a.            | $0^{2}$ | <25                | $7^{2}$           | 95                 | $0^{2}$      | <25                | $18^{2}$   | 90                           |  |
|                                      | WB approach | n.a             | 62      | 25                 | $6^{2}$           | 30                 | $1^{2}$      | <25                | $1^{2}$    | <25                          |  |
| SR 132 /                             | EB approach | n.a.            | -       | -                  | $22^{2}$          | 110                | -            | -                  | 56         | 135                          |  |
| Project Driveway                     | SB approach | 80              | -       | -                  | 73                | 90                 | -            | -                  | 53         | 80                           |  |
| AcCracken Road /<br>Project Driveway | NB approach | 75 <sup>2</sup> | -       | -                  | 65 <sup>1</sup>   | <25                | -            | -                  | $52^{2}$   | <25                          |  |
|                                      | EB approach | 100             | _       | -                  | 54                | 65                 | -            | -                  | 77         | 75                           |  |

**BOLD** is 95<sup>th</sup> % queue that exceeds storage by 20 feet or more



<sup>&</sup>lt;sup>1</sup> distance to driveway <sup>2</sup> number of left turns made from through lane

### **CUMULATIVE (YEAR 2046) TRAFFIC CONDITIONS**

The relative effects of the proposed project have also been assessed within the context of future traffic conditions that account for long term development in Stanislaus County and regional traffic growth on SR 132.

### **Methodology / Assumptions**

**SR 132 Extension Dakota to Gates EIR.** The TOAR supporting the EIR is currently under public review and comment but provides long term traffic volume information for SR 132 immediately west of Gates Road. The incremental change in peak hour volume in each direction between Year 2018 and Year 2046 condition is noted in Table 8.

| TABLE 8 FUTURE TRAFFIC VOLUME GROWTH ON SR 132  |    |           |       |       |     |  |  |  |  |  |
|---|----|-----------|-------|-------|-----|--|--|--|--|--|
| Location Time Period Direction Year 2018 <sup>1</sup> Year 2046 <sup>2</sup> Change (vph) (vph) (vph) |    |           |       |       |     |  |  |  |  |  |
| SR 132 West of Gates Road   | AM | Westbound | 1,296 | 1,980 | 684 |  |  |  |  |  |
|   |    | Eastbound | 123   | 870   | 747 |  |  |  |  |  |
|   | DM | Westbound | 433   | 980   | 447 |  |  |  |  |  |
|   | PM | Eastbound | 1,443 | 2,070 | 627 |  |  |  |  |  |

Source: State Route 132 Dakota Avenue to Gates Road Extension TOAR

<sup>1</sup> Figure 3. <sup>2</sup> Figure 14

**Tri-County Travel Demand Forecasting Model.** As alternative source for future traffic volume forecast was considered. The SJCOG Tri County traffic model includes the San Joaquin County, Stanislaus County and Merced County areas, and this tool has been used for the RTP/STS updates in each jurisdiction. The current version of the Tri-County traffic model was reviewed with regards to conditions in the area of the proposed project. The hourly traffic volume increases suggested by the Tri-County model are similar to but less than those identified in the SR 132 TOAR. The Tri-County model does not include minor Stanislaus County roads such as McCracken Road.

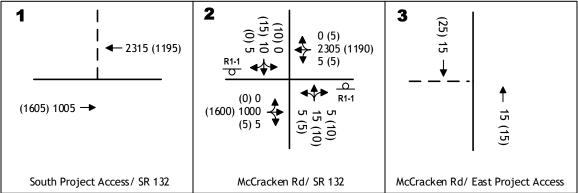
**Forecasts.** For this analysis it has conservatively been assumed that the volume increases identified in the SR 132 TOAR (Table 8) would also occur to mainline traffic on SR 132 at the McCracken Road intersection. It has been assumed that the background traffic volume on McCracken Road would be similar to that occurring today.

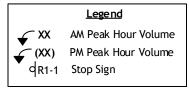
Figure 7 presents the long term (year 2046) Cumulative background traffic volumes assumed for this analysis, while Figure 8 presents Cumulative plus project traffic volumes.

**Circulation System Improvements.** As noted earlier the 2018 Stanislaus County RTP/SCS Tier 1 project list does not identify work on SR 132 in the area of the project, although a four-lane expressway is the ultimate concept for the highway. This analysis initially assumes no improvements have been made to SR 132 in this area.





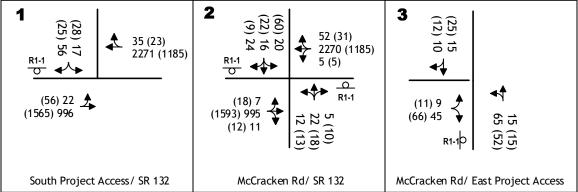


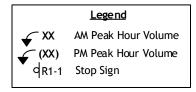




2046 TRAFFIC VOLUMES AND LANE CONFIGURATIONS









2046 PLUS PROJECT TRAFFIC VOLUMES AND LANE CONFIGURATIONS

### Year 2046 Conditions without the Proposed Project

**Intersection Level of Service.** Table 9 identifies peak hour Levels of Service at study locations with and without the proposed project if no improvements are made to SR 132 by 2046. As shown, if the project does not proceed then long delays will occur for traffic waiting on the McCracken Road approaches to SR 132 and LOS F will result. Peak hour traffic signal warrant would not be met.

**95**<sup>th</sup> **Percentile Queues.** As noted in Table 10, if the project does not proceed then relatively long queues will occur on the McCracken Road approaches and in the pm peak hour traffic waiting to turn left onto southbound McCracken Road will cause a long queue in the westbound through lane on SR 132.

## Year 2046 Conditions with the Proposed Project

**Intersection Level of Service.** Table 9 also identifies the Level of Services at study intersections and driveways if the proposed project proceeds as planned but SR 132 is not widened. As shown all approaches to the state highway will operate at LOS F with extremely long delays, and queuing on southbound McCracken Road would extend so far as to cause LOS F the project access as well. The status of traffic signal warrants would be the same as noted under short term conditions (i.e., p.m. peak hour warrant met at the SR 132 / McCracken Road intersection).

**95**<sup>th</sup> **Percentile Queue Lengths.** As shown in Table 10, extremely long queues will occur at all locations based on SimTraffic simulation under Year 2046 conditions with no improvements to SR 132.



# TABLE 9 YEAR 2046 PLUS PROJECT PEAK HOUR INTERSECTION LEVELS OF SERVICE WITHOUT IMPROVEMENTS

|   |            |                                 | AM Pe | ak Hour                       |              | PM Peak Hour                    |      |                               |     |  |
|---|------------|---------------------------------|-------|-------------------------------|--------------|---------------------------------|------|-------------------------------|-----|--|
|   |            | Year                            | 2046  | Year 2046 I                   | Plus Project | Year                            | 2046 | Year 2046 Plus Project        |     |  |
| Location  | Control    | Average<br>Delay<br>(sec / veh) | LOS   | Average<br>Delay<br>(sec/veh) | LOS          | Average<br>Delay<br>(sec / veh) | LOS  | Average<br>Delay<br>(sec/veh) | LOS |  |
| SR 132 / McCracken Road                           |            |                                 |       |                               |              |                                 |      |                               |     |  |
| NB left+thru+right turn                           | NB/SB Stop | 96                              | F     | >300                          | F            | >300                            | F    | >300                          | F   |  |
| SB left+thru+right turn                           |            | 51                              | F     | >300                          | F            | >300                            | F    | >300                          | F   |  |
| SR 132 / Project Driveway<br>SB left+right turn   | SB Stop    | -                               | -     | >300                          | F            | -                               | -    | >300                          | F   |  |
| McCracken Rd / Project Drwy<br>EB left+right turn | NB Stop    | -                               | -     | >300                          | F            | -                               | -    | >300                          | F   |  |

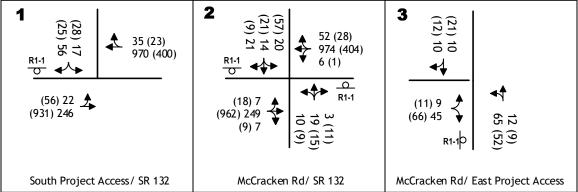
**Bold** values indicate conditions in excess of the County's LOS D minimum

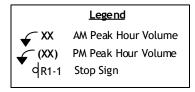
# TABLE 6 YEAR 2021 PLUS PROJECT PEAK HOUR INTERSECTION LEVELS OF SERVICE

|                             |            |             | AM Peal | у Ноше      |              |             | DM Doc     | ık Hour                |     |  |
|-----------------------------|------------|-------------|---------|-------------|--------------|-------------|------------|------------------------|-----|--|
|                             |            |             | ANTICAR | Tioui       |              |             | 1 1/1 1 62 | ik 110ui               |     |  |
|                             |            | Year 2      | 021     | Year 2021 l | Plus Project | Year        | 2021       | Year 2021 Plus Project |     |  |
|                             |            | Average     |         | Average     |              | Average     |            | Average                |     |  |
|                             |            | Delay       |         | Delay       |              | Delay       |            | Delay                  |     |  |
| Location                    | Control    | (sec / veh) | LOS     | (sec/veh)   | LOS          | (sec / veh) | LOS        | (sec/veh)              | LOS |  |
| SR 132 / McCracken Road     |            |             |         |             |              |             |            |                        |     |  |
| NB left+thru+right turn     | NB/SB Stop | 14          | В       | 44          | E            | 13          | В          | 30                     | D   |  |
| SB left+thru+right turn     |            | 11          | В       | 48          | E            | 10          | В          | 32                     | D   |  |
| SR 132 / Project Driveway   | CD Ctom    |             |         | 22          | C            |             |            | 18                     | C   |  |
| SB left+right turn          | SB Stop    | -           | -       | - 22        | 22 C         | -           | -          | 18                     | C   |  |
| McCracken Rd / Project Drwy | NB Stop    |             |         |             |              |             |            |                        |     |  |
| EB left+right turn          | ND Stop    | -           | -       | 3           | A            | -           | 1          | 4                      | A   |  |
|                             |            |             |         |             |              |             |            |                        |     |  |

**Bold** values indicate conditions in excess of the County's LOS D minimum









EXISTING PLUS PROJECT TRAFFIC VOLUMES AND LANE CONFIGURATIONS

# TABLE 6 YEAR 2021 PLUS PROJECT PEAK HOUR INTERSECTION LEVELS OF SERVICE

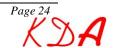
|                             |            |             | AM Peal | у Ноше      |              |             | DM Doc     | ık Hour                |     |  |
|-----------------------------|------------|-------------|---------|-------------|--------------|-------------|------------|------------------------|-----|--|
|                             |            |             | ANTICAR | Tioui       |              |             | 1 1/1 1 62 | ik 110ui               |     |  |
|                             |            | Year 2      | 021     | Year 2021 l | Plus Project | Year        | 2021       | Year 2021 Plus Project |     |  |
|                             |            | Average     |         | Average     |              | Average     |            | Average                |     |  |
|                             |            | Delay       |         | Delay       |              | Delay       |            | Delay                  |     |  |
| Location                    | Control    | (sec / veh) | LOS     | (sec/veh)   | LOS          | (sec / veh) | LOS        | (sec/veh)              | LOS |  |
| SR 132 / McCracken Road     |            |             |         |             |              |             |            |                        |     |  |
| NB left+thru+right turn     | NB/SB Stop | 14          | В       | 44          | E            | 13          | В          | 30                     | D   |  |
| SB left+thru+right turn     |            | 11          | В       | 48          | E            | 10          | В          | 32                     | D   |  |
| SR 132 / Project Driveway   | CD Ctom    |             |         | 22          | C            |             |            | 18                     | C   |  |
| SB left+right turn          | SB Stop    | -           | -       | - 22        | 22 C         | -           | -          | 18                     | C   |  |
| McCracken Rd / Project Drwy | NB Stop    |             |         |             |              |             |            |                        |     |  |
| EB left+right turn          | ND Stop    | -           | -       | 3           | A            | -           | 1          | 4                      | A   |  |
|                             |            |             |         |             |              |             |            |                        |     |  |

**Bold** values indicate conditions in excess of the County's LOS D minimum

## TABLE 7 2021 PLUS PROJECT PEAK HOUR 95th % QUEUES

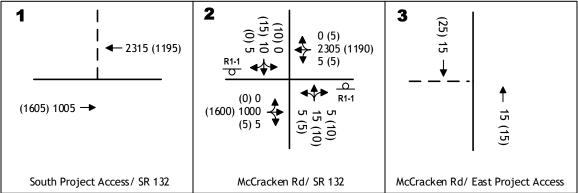
|                                      |             |                 |         | AM Pe              | ak Hour           |                    | PM Peak Hour |                    |            |                              |  |
|--------------------------------------|-------------|-----------------|---------|--------------------|-------------------|--------------------|--------------|--------------------|------------|------------------------------|--|
| Intersection                         | Lane        | Storage         | Exi     | sting              | <b>Existing P</b> | lus Project        | Ex           | isting             | Existing P | <b>Existing Plus Project</b> |  |
| intersection                         | Lunc        | (feet)          | Volume  | 95 <sup>th</sup> % | Volume            | 95 <sup>th</sup> % | Volume       | 95 <sup>th</sup> % | Volume     | 95 <sup>th</sup> %           |  |
|                                      |             |                 | (vph)   | Queue (ft)         | (vph)             | Queue (ft)         | (vph)        | Queue (ft)         | (vph)      | Queue (ft)                   |  |
| SR 132 /<br>McCracken Road           | NB approach | n.a             | 18      | 55                 | 32                | 95                 | 19           | 45                 | 35         | 80                           |  |
|                                      | SB approach | $260^{1}$       | 10      | 40                 | 55                | 155                | 21           | 50                 | 87         | 135                          |  |
|                                      | EB approach | n.a.            | $0^{2}$ | <25                | $7^{2}$           | 95                 | $0^{2}$      | <25                | $18^{2}$   | 90                           |  |
|                                      | WB approach | n.a             | 62      | 25                 | $6^{2}$           | 30                 | $1^{2}$      | <25                | $1^{2}$    | <25                          |  |
| SR 132 /                             | EB approach | n.a.            | -       | -                  | $22^{2}$          | 110                | -            | -                  | 56         | 135                          |  |
| Project Driveway                     | SB approach | 80              | -       | -                  | 73                | 90                 | -            | -                  | 53         | 80                           |  |
| AcCracken Road /<br>Project Driveway | NB approach | 75 <sup>2</sup> | -       | -                  | 65 <sup>1</sup>   | <25                | -            | -                  | $52^{2}$   | <25                          |  |
|                                      | EB approach | 100             | _       | -                  | 54                | 65                 | -            | -                  | 77         | 75                           |  |

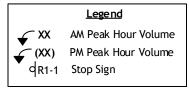
**BOLD** is 95<sup>th</sup> % queue that exceeds storage by 20 feet or more



<sup>&</sup>lt;sup>1</sup> distance to driveway <sup>2</sup> number of left turns made from through lane



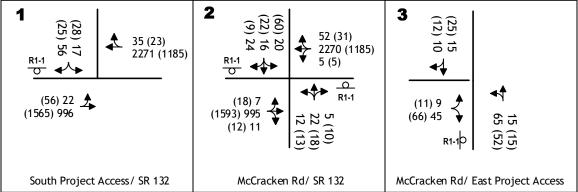


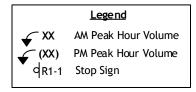




2046 TRAFFIC VOLUMES AND LANE CONFIGURATIONS









2046 PLUS PROJECT TRAFFIC VOLUMES AND LANE CONFIGURATIONS

# TABLE 9 YEAR 2046 PLUS PROJECT PEAK HOUR INTERSECTION LEVELS OF SERVICE WITHOUT IMPROVEMENTS

|   |            | AM Peak Hour                    |     |                               |     | PM Peak Hour                    |     |                               |     |  |
|---|------------|---------------------------------|-----|-------------------------------|-----|---------------------------------|-----|-------------------------------|-----|--|
|   |            | Year 2046                       |     | Year 2046 Plus Project        |     | Year 2046                       |     | Year 2046 Plus Project        |     |  |
| Location  | Control    | Average<br>Delay<br>(sec / veh) | LOS | Average<br>Delay<br>(sec/veh) | LOS | Average<br>Delay<br>(sec / veh) | LOS | Average<br>Delay<br>(sec/veh) | LOS |  |
| SR 132 / McCracken Road                           |            |                                 |     |                               |     |                                 |     |                               |     |  |
| NB left+thru+right turn                           | NB/SB Stop | 96                              | F   | >300                          | F   | >300                            | F   | >300                          | F   |  |
| SB left+thru+right turn                           |            | 51                              | F   | >300                          | F   | >300                            | F   | >300                          | F   |  |
| SR 132 / Project Driveway<br>SB left+right turn   | SB Stop    | -                               | -   | >300                          | F   | -                               | -   | >300                          | F   |  |
| McCracken Rd / Project Drwy<br>EB left+right turn | NB Stop    | -                               | -   | >300                          | F   | -                               | -   | >300                          | F   |  |

**Bold** values indicate conditions in excess of the County's LOS D minimum

# TABLE 6 YEAR 2021 PLUS PROJECT PEAK HOUR INTERSECTION LEVELS OF SERVICE

|                             |            |              | PM Peak Hour |                        |         |                |     |                        |     |  |
|-----------------------------|------------|--------------|--------------|------------------------|---------|----------------|-----|------------------------|-----|--|
|                             |            | AM Peak Hour |              |                        |         | r w r eak nour |     |                        |     |  |
|                             |            | Year 2021    |              | Year 2021 Plus Project |         | Year 2021      |     | Year 2021 Plus Project |     |  |
|                             |            | Average      |              | Average                |         | Average        |     | Average                |     |  |
|                             |            | Delay        |              | Delay                  |         | Delay          |     | Delay                  |     |  |
| Location                    | Control    | (sec / veh)  | LOS          | (sec/veh)              | LOS     | (sec / veh)    | LOS | (sec/veh)              | LOS |  |
| SR 132 / McCracken Road     |            |              |              |                        |         |                |     |                        |     |  |
| NB left+thru+right turn     | NB/SB Stop | 14           | В            | 44                     | ${f E}$ | 13             | В   | 30                     | D   |  |
| SB left+thru+right turn     |            | 11           | В            | 48                     | E       | 10             | В   | 32                     | D   |  |
| SR 132 / Project Driveway   | SB Stop    | -            | -            | 22                     | С       | -              | -   | 18                     | С   |  |
| SB left+right turn          |            |              |              |                        |         |                |     |                        |     |  |
| McCracken Rd / Project Drwy | NB Stop    | -            | -            |                        |         | -              | -   |                        |     |  |
| EB left+right turn          |            |              |              | 3                      | A       |                |     | 4                      | A   |  |
|                             |            |              |              |                        |         |                |     |                        |     |  |

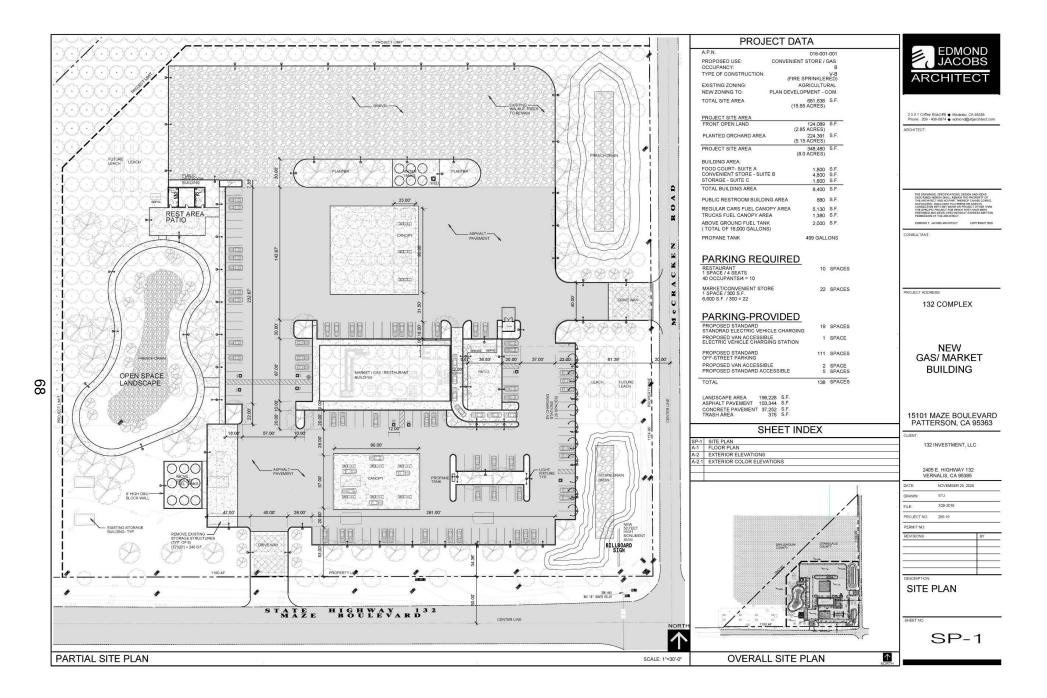
**Bold** values indicate conditions in excess of the County's LOS D minimum



0045-01 RA 6/3/2021

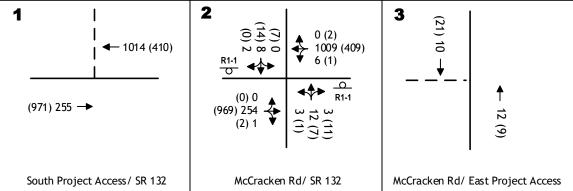


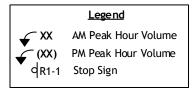
0045-01 RA 6/3/2021



### KD Anderson & Associates, Inc.

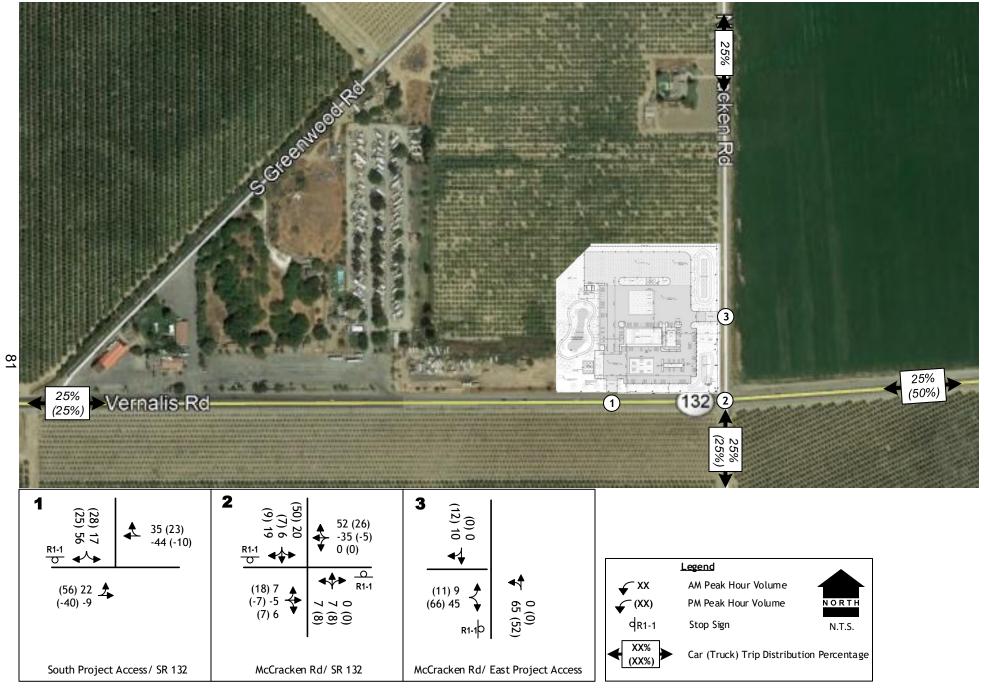








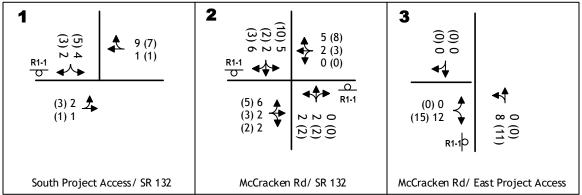
EXISTING TRAFFIC VOLUMES AND LANE CONFIGURATIONS

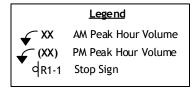


PROJECT ONLY TRAFFIC VOLUMES AND LANE CONFIGURATIONS

0045-01 RA 6/3/2021



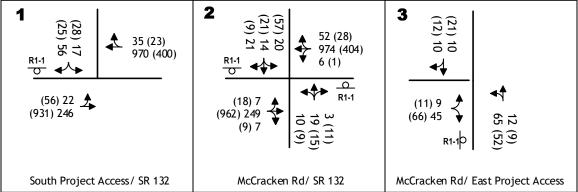


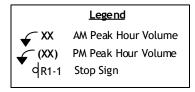




PROJECT ONLY (TRUCK) TRAFFIC VOLUMES AND LANE CONFIGURATIONS









EXISTING PLUS PROJECT TRAFFIC VOLUMES AND LANE CONFIGURATIONS

### TABLE 6 YEAR 2021 PLUS PROJECT PEAK HOUR INTERSECTION LEVELS OF SERVICE

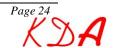
|                             |            |             | AM Peal | у Ноше      |              |             | DM Doc     | ık Hour     |              |
|-----------------------------|------------|-------------|---------|-------------|--------------|-------------|------------|-------------|--------------|
|                             |            |             | ANTICAR | Tioui       |              |             | 1 1/1 1 62 | ik 110ui    |              |
|                             |            | Year 2      | 021     | Year 2021 l | Plus Project | Year        | 2021       | Year 2021 I | Plus Project |
|                             |            | Average     |         | Average     |              | Average     |            | Average     |              |
|                             |            | Delay       |         | Delay       |              | Delay       |            | Delay       |              |
| Location                    | Control    | (sec / veh) | LOS     | (sec/veh)   | LOS          | (sec / veh) | LOS        | (sec/veh)   | LOS          |
| SR 132 / McCracken Road     |            |             |         |             |              |             |            |             |              |
| NB left+thru+right turn     | NB/SB Stop | 14          | В       | 44          | E            | 13          | В          | 30          | D            |
| SB left+thru+right turn     |            | 11          | В       | 48          | E            | 10          | В          | 32          | D            |
| SR 132 / Project Driveway   | CD Ctom    |             |         | 22          | С            |             |            | 18          | C            |
| SB left+right turn          | SB Stop    | -           | -       | 22          | C            | -           | -          | 18          | C            |
| McCracken Rd / Project Drwy | NB Stop    |             |         |             |              |             |            |             |              |
| EB left+right turn          | ND Stop    | -           | -       | 3           | A            | -           | 1          | 4           | A            |
|                             | •          | •           |         |             | ·            | ·           |            |             | ·            |

**Bold** values indicate conditions in excess of the County's LOS D minimum

#### TABLE 7 2021 PLUS PROJECT PEAK HOUR 95th % QUEUES

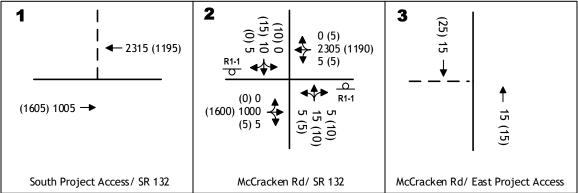
|                  |             |                 |         | AM Pe              | ak Hour           |                    |         | PM Pe              | ak Hour    |                    |
|------------------|-------------|-----------------|---------|--------------------|-------------------|--------------------|---------|--------------------|------------|--------------------|
| Intersection     | Lane        | Storage         | Exi     | sting              | <b>Existing P</b> | lus Project        | Ex      | isting             | Existing P | lus Project        |
| intersection     | Lunc        | (feet)          | Volume  | 95 <sup>th</sup> % | Volume            | 95 <sup>th</sup> % | Volume  | 95 <sup>th</sup> % | Volume     | 95 <sup>th</sup> % |
|                  |             |                 | (vph)   | Queue (ft)         | (vph)             | Queue (ft)         | (vph)   | Queue (ft)         | (vph)      | Queue (ft)         |
| SR 132 /         | NB approach | n.a             | 18      | 55                 | 32                | 95                 | 19      | 45                 | 35         | 80                 |
| McCracken Road   | SB approach | $260^{1}$       | 10      | 40                 | 55                | 155                | 21      | 50                 | 87         | 135                |
|                  | EB approach | n.a.            | $0^{2}$ | <25                | $7^{2}$           | 95                 | $0^{2}$ | <25                | $18^{2}$   | 90                 |
|                  | WB approach | n.a             | 62      | 25                 | $6^{2}$           | 30                 | $1^{2}$ | <25                | $1^{2}$    | <25                |
| SR 132 /         | EB approach | n.a.            | -       | -                  | $22^{2}$          | 110                | -       | -                  | 56         | 135                |
| Project Driveway | SB approach | 80              | -       | -                  | 73                | 90                 | -       | -                  | 53         | 80                 |
| McCracken Road / | NB approach | 75 <sup>2</sup> | -       | -                  | 65 <sup>1</sup>   | <25                | -       | -                  | $52^{2}$   | <25                |
| Project Driveway | EB approach | 100             | _       | -                  | 54                | 65                 | -       | -                  | 77         | 75                 |

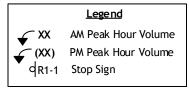
**BOLD** is 95<sup>th</sup> % queue that exceeds storage by 20 feet or more



<sup>&</sup>lt;sup>1</sup> distance to driveway <sup>2</sup> number of left turns made from through lane



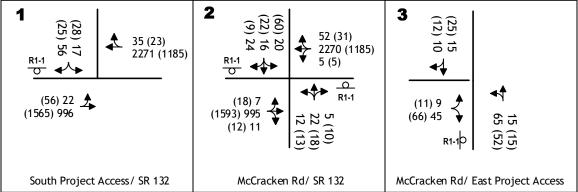


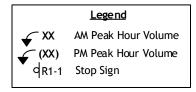




2046 TRAFFIC VOLUMES AND LANE CONFIGURATIONS









2046 PLUS PROJECT TRAFFIC VOLUMES AND LANE CONFIGURATIONS

### TABLE 9 YEAR 2046 PLUS PROJECT PEAK HOUR INTERSECTION LEVELS OF SERVICE WITHOUT IMPROVEMENTS

|   |            |                                 | AM Pe | ak Hour                       |              |                                 | PM Pea | ak Hour                       |              |
|---|------------|---------------------------------|-------|-------------------------------|--------------|---------------------------------|--------|-------------------------------|--------------|
|   |            | Year                            | 2046  | Year 2046 I                   | Plus Project | Year                            | 2046   | Year 2046 I                   | Plus Project |
| Location  | Control    | Average<br>Delay<br>(sec / veh) | LOS   | Average<br>Delay<br>(sec/veh) | LOS          | Average<br>Delay<br>(sec / veh) | LOS    | Average<br>Delay<br>(sec/veh) | LOS          |
| SR 132 / McCracken Road                           |            |                                 |       |                               |              |                                 |        |                               |              |
| NB left+thru+right turn                           | NB/SB Stop | 96                              | F     | >300                          | F            | >300                            | F      | >300                          | F            |
| SB left+thru+right turn                           |            | 51                              | F     | >300                          | F            | >300                            | F      | >300                          | F            |
| SR 132 / Project Driveway<br>SB left+right turn   | SB Stop    | -                               | -     | >300                          | F            | -                               | -      | >300                          | F            |
| McCracken Rd / Project Drwy<br>EB left+right turn | NB Stop    | -                               | -     | >300                          | F            | -                               | -      | >300                          | F            |

**Bold** values indicate conditions in excess of the County's LOS D minimum

### TABLE 6 YEAR 2021 PLUS PROJECT PEAK HOUR INTERSECTION LEVELS OF SERVICE

|   |            |                                 | AM Peak | K Hour                        |              |                                 | PM Pea | ak Hour                       |              |
|---|------------|---------------------------------|---------|-------------------------------|--------------|---------------------------------|--------|-------------------------------|--------------|
|   |            | Year 2                          | 021     | Year 2021 I                   | Plus Project | Year                            | 2021   | Year 2021 I                   | Plus Project |
| Location  | Control    | Average<br>Delay<br>(sec / veh) | LOS     | Average<br>Delay<br>(sec/veh) | LOS          | Average<br>Delay<br>(sec / veh) | LOS    | Average<br>Delay<br>(sec/veh) | LOS          |
| SR 132 / McCracken Road                           |            |                                 |         |                               |              |                                 |        |                               |              |
| NB left+thru+right turn                           | NB/SB Stop | 14                              | В       | 44                            | ${f E}$      | 13                              | В      | 30                            | D            |
| SB left+thru+right turn                           |            | 11                              | В       | 48                            | E            | 10                              | В      | 32                            | D            |
| SR 132 / Project Driveway<br>SB left+right turn   | SB Stop    | -                               | -       | 22                            | С            | -                               | -      | 18                            | С            |
| McCracken Rd / Project Drwy<br>EB left+right turn | NB Stop    | -                               | -       | 3                             | A            | -                               | -      | 4                             | A            |

**Bold** values indicate conditions in excess of the County's LOS D minimum

#### TABLE 7 2021 PLUS PROJECT PEAK HOUR 95th % QUEUES

|                  |             |                 |         | AM Pe              | ak Hour           |                    |         | PM Pe              | ak Hour    |                    |
|------------------|-------------|-----------------|---------|--------------------|-------------------|--------------------|---------|--------------------|------------|--------------------|
| Intersection     | Lane        | Storage         | Exi     | sting              | <b>Existing P</b> | lus Project        | Ex      | isting             | Existing P | lus Project        |
| intersection     | Lunc        | (feet)          | Volume  | 95 <sup>th</sup> % | Volume            | 95 <sup>th</sup> % | Volume  | 95 <sup>th</sup> % | Volume     | 95 <sup>th</sup> % |
|                  |             |                 | (vph)   | Queue (ft)         | (vph)             | Queue (ft)         | (vph)   | Queue (ft)         | (vph)      | Queue (ft)         |
| SR 132 /         | NB approach | n.a             | 18      | 55                 | 32                | 95                 | 19      | 45                 | 35         | 80                 |
| McCracken Road   | SB approach | $260^{1}$       | 10      | 40                 | 55                | 155                | 21      | 50                 | 87         | 135                |
|                  | EB approach | n.a.            | $0^{2}$ | <25                | $7^{2}$           | 95                 | $0^2$   | <25                | $18^{2}$   | 90                 |
|                  | WB approach | n.a             | 62      | 25                 | $6^{2}$           | 30                 | $1^{2}$ | <25                | $1^2$      | <25                |
| SR 132 /         | EB approach | n.a.            | -       | -                  | $22^{2}$          | 110                | i       | -                  | 56         | 135                |
| Project Driveway | SB approach | 80              | -       | -                  | 73                | 90                 | -       | -                  | 53         | 80                 |
| McCracken Road / | NB approach | 75 <sup>2</sup> | _       | -                  | 65 <sup>1</sup>   | <25                | -       | -                  | $52^{2}$   | <25                |
| Project Driveway | EB approach | 100             | -       | -                  | 54                | 65                 | -       | -                  | 77         | 75                 |

**BOLD** is 95<sup>th</sup> % queue that exceeds storage by 20 feet or more

<sup>&</sup>lt;sup>1</sup> distance to driveway <sup>2</sup> number of left turns made from through lane

#### TABLE 7 2021 PLUS PROJECT PEAK HOUR 95th % QUEUES

|                  |             |                 |         | AM Pe              | ak Hour           |                    |         | PM Pe              | ak Hour    |                    |
|------------------|-------------|-----------------|---------|--------------------|-------------------|--------------------|---------|--------------------|------------|--------------------|
| Intersection     | Lane        | Storage         | Exi     | sting              | <b>Existing P</b> | lus Project        | Ex      | isting             | Existing P | lus Project        |
| intersection     | Lunc        | (feet)          | Volume  | 95 <sup>th</sup> % | Volume            | 95 <sup>th</sup> % | Volume  | 95 <sup>th</sup> % | Volume     | 95 <sup>th</sup> % |
|                  |             |                 | (vph)   | Queue (ft)         | (vph)             | Queue (ft)         | (vph)   | Queue (ft)         | (vph)      | Queue (ft)         |
| SR 132 /         | NB approach | n.a             | 18      | 55                 | 32                | 95                 | 19      | 45                 | 35         | 80                 |
| McCracken Road   | SB approach | $260^{1}$       | 10      | 40                 | 55                | 155                | 21      | 50                 | 87         | 135                |
|                  | EB approach | n.a.            | $0^{2}$ | <25                | $7^{2}$           | 95                 | $0^2$   | <25                | $18^{2}$   | 90                 |
|                  | WB approach | n.a             | 62      | 25                 | $6^{2}$           | 30                 | $1^{2}$ | <25                | $1^2$      | <25                |
| SR 132 /         | EB approach | n.a.            | -       | -                  | $22^{2}$          | 110                | i       | -                  | 56         | 135                |
| Project Driveway | SB approach | 80              | -       | -                  | 73                | 90                 | -       | -                  | 53         | 80                 |
| McCracken Road / | NB approach | 75 <sup>2</sup> | _       | -                  | 65 <sup>1</sup>   | <25                | -       | -                  | $52^{2}$   | <25                |
| Project Driveway | EB approach | 100             | -       | -                  | 54                | 65                 | -       | -                  | 77         | 75                 |

**BOLD** is 95<sup>th</sup> % queue that exceeds storage by 20 feet or more

<sup>&</sup>lt;sup>1</sup> distance to driveway <sup>2</sup> number of left turns made from through lane

### TABLE 9 YEAR 2046 PLUS PROJECT PEAK HOUR INTERSECTION LEVELS OF SERVICE WITHOUT IMPROVEMENTS

|   |            |                                 | AM Pe | ak Hour                       |              |                                 | PM Pea | ak Hour                       |              |
|---|------------|---------------------------------|-------|-------------------------------|--------------|---------------------------------|--------|-------------------------------|--------------|
|   |            | Year                            | 2046  | Year 2046 I                   | Plus Project | Year                            | 2046   | Year 2046 I                   | Plus Project |
| Location  | Control    | Average<br>Delay<br>(sec / veh) | LOS   | Average<br>Delay<br>(sec/veh) | LOS          | Average<br>Delay<br>(sec / veh) | LOS    | Average<br>Delay<br>(sec/veh) | LOS          |
| SR 132 / McCracken Road                           |            |                                 |       |                               |              |                                 |        |                               |              |
| NB left+thru+right turn                           | NB/SB Stop | 96                              | F     | >300                          | F            | >300                            | F      | >300                          | F            |
| SB left+thru+right turn                           |            | 51                              | F     | >300                          | F            | >300                            | F      | >300                          | F            |
| SR 132 / Project Driveway<br>SB left+right turn   | SB Stop    | -                               | -     | >300                          | F            | -                               | -      | >300                          | F            |
| McCracken Rd / Project Drwy<br>EB left+right turn | NB Stop    | -                               | -     | >300                          | F            | -                               | -      | >300                          | F            |

**Bold** values indicate conditions in excess of the County's LOS D minimum

## TABLE 10 2046 PLUS PROJECT PEAK HOUR 95th % QUEUES WITHOUT IMPROVEMENTS

|                  |             |                 |                | AM Po              | eak Hour        |                    |         | PM Pe              | ak Hour         |                    |
|------------------|-------------|-----------------|----------------|--------------------|-----------------|--------------------|---------|--------------------|-----------------|--------------------|
| Intersection     | Lane        | Storage         | Year           | r 2046             | Year 2046       | Plus Project       | Yea     | r 2046             | Year 2046 I     | Plus Project       |
|                  |             | (feet)          | Volume         | 95 <sup>th</sup> % | Volume          | 95 <sup>th</sup> % | Volume  | 95 <sup>th</sup> % | Volume          | 95 <sup>th</sup> % |
|                  |             |                 | (vph)          | Queue (ft)         | (vph)           | Queue (ft)         | (vph)   | Queue (ft)         | (vph)           | Queue (ft)         |
| SR 132 /         | NB approach | n.a.            | 25             | 100                | 39              | >1,000             | 25      | 280                | 41              | 790                |
| McCracken Road   | SB approach | $260^{1}$       | 15             | 55                 | 60              | 390                | 25      | 320                | 91              | 400                |
|                  | EB approach | n.a.            | $0^{2}$        | >25                | $7^{2}$         | 575                | $0^2$   | <25                | 18 <sup>2</sup> | 535                |
|                  | WB approach | n.a.            | 5 <sup>2</sup> | 90                 | $5^{2}$         | >1,000             | $5^{2}$ | 415                | $5^{2}$         | <1,000             |
| SR 132 /         | EB approach | -               | -              | -                  | 222             | >1,000             | -       | -                  | 56              | <1,000             |
| Project Driveway | SB approach | -               | -              | -                  | 73              | 700                | -       | -                  | 53              | 695                |
| McCracken Road / | NB approach | 75 <sup>2</sup> | -              | -                  | 65 <sup>2</sup> |                    | -       | 1                  | 52 <sup>2</sup> | <25                |
| Project Driveway | EB approach | $140^{3}$       | -              | -                  | 54              | 685                | -       | -                  | 77              | 725                |

distance to driveway

**BOLD** is 95<sup>th</sup> % queue that exceeds storage by 20 feet or more



<sup>&</sup>lt;sup>2</sup> number of left turns made from through lane

## TABLE 10 2046 PLUS PROJECT PEAK HOUR 95th % QUEUES WITHOUT IMPROVEMENTS

|                  |             |                 |                | AM Po              | eak Hour        |                    |         | PM Pe              | ak Hour         |                    |
|------------------|-------------|-----------------|----------------|--------------------|-----------------|--------------------|---------|--------------------|-----------------|--------------------|
| Intersection     | Lane        | Storage         | Year           | r 2046             | Year 2046       | Plus Project       | Yea     | r 2046             | Year 2046 I     | Plus Project       |
|                  |             | (feet)          | Volume         | 95 <sup>th</sup> % | Volume          | 95 <sup>th</sup> % | Volume  | 95 <sup>th</sup> % | Volume          | 95 <sup>th</sup> % |
|                  |             |                 | (vph)          | Queue (ft)         | (vph)           | Queue (ft)         | (vph)   | Queue (ft)         | (vph)           | Queue (ft)         |
| SR 132 /         | NB approach | n.a.            | 25             | 100                | 39              | >1,000             | 25      | 280                | 41              | 790                |
| McCracken Road   | SB approach | $260^{1}$       | 15             | 55                 | 60              | 390                | 25      | 320                | 91              | 400                |
|                  | EB approach | n.a.            | $0^{2}$        | >25                | $7^{2}$         | 575                | $0^2$   | <25                | 18 <sup>2</sup> | 535                |
|                  | WB approach | n.a.            | 5 <sup>2</sup> | 90                 | $5^{2}$         | >1,000             | $5^{2}$ | 415                | $5^{2}$         | <1,000             |
| SR 132 /         | EB approach | -               | -              | -                  | 222             | >1,000             | -       | -                  | 56              | <1,000             |
| Project Driveway | SB approach | -               | -              | -                  | 73              | 700                | -       | -                  | 53              | 695                |
| McCracken Road / | NB approach | 75 <sup>2</sup> | -              | -                  | 65 <sup>2</sup> |                    | -       | 1                  | 52 <sup>2</sup> | <25                |
| Project Driveway | EB approach | $140^{3}$       | -              | -                  | 54              | 685                | -       | -                  | 77              | 725                |

<sup>&</sup>lt;sup>1</sup> distance to driveway

**BOLD** is 95<sup>th</sup> % queue that exceeds storage by 20 feet or more

<sup>&</sup>lt;sup>2</sup> number of left turns made from through lane

#### Year 2046 Conditions with Proposed Project and 4-Lane SR 132

**Assumptions**. The extent to which traffic operations would improve with implementation of the 4-lane SR 132 identified in the TCR has been assessed. This analysis assumes the following improvements would also be made:

- Two travel lanes in each direction on SR 132
- Center TWLT lane
- Separate southbound right turn lane on McCracken Road
- Separate westbound right turn lane at the project access on SR 132
- Width available on the SR 132 driveway to allow separate southbound right turns

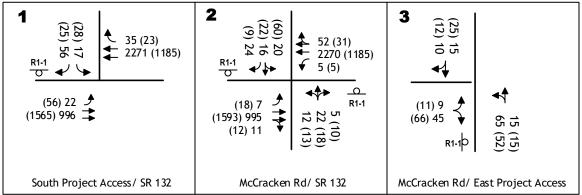
Figure 9 presents the traffic volumes and lane configurations under this scenario.

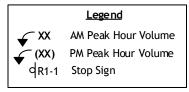
**Intersection Level of Service.** Table 11 identifies peak hour Levels of Service at study locations with the proposed project if improvements are made to SR 132 by 2046. As shown, if the highway is widened as assumed very long delays will still occur for traffic waiting on the McCracken Road approaches to SR 132 and on the project driveways (i.e., LOS F).

**95**<sup>th</sup> **Percentile Queues.** As noted in Table 12, if the project proceeds with a 4-lane SR 132 then relatively long queues will still occur on the McCracken Road approaches and in the p.m. peak hour traffic waiting to turn left onto southbound McCracken Road will reach the driveway and cause a very long queue in the westbound through lane on SR 132.



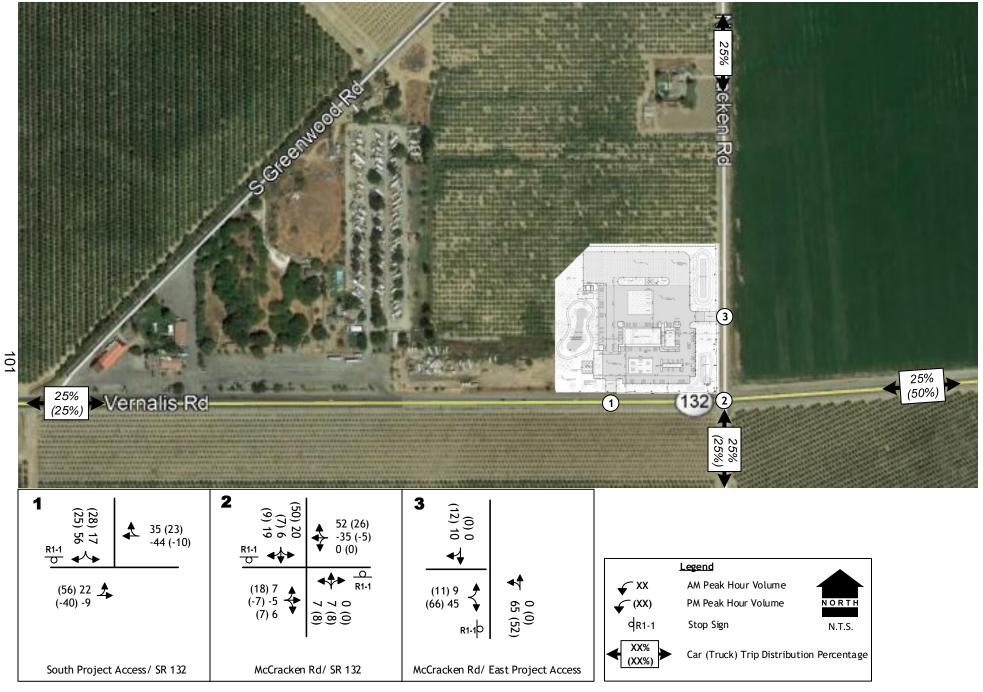








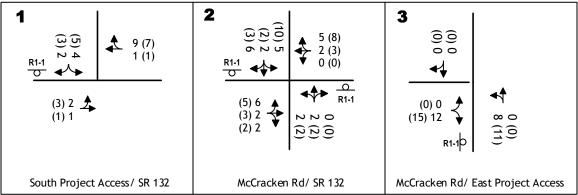
2046 PLUS PROJECT 4 LANE STOP SIGN CONTROL TRAFFIC VOLUMES AND LANE CONFIGURATIONS

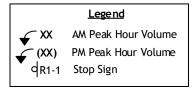


PROJECT ONLY TRAFFIC VOLUMES AND LANE CONFIGURATIONS

0045-01 RA 6/3/2021



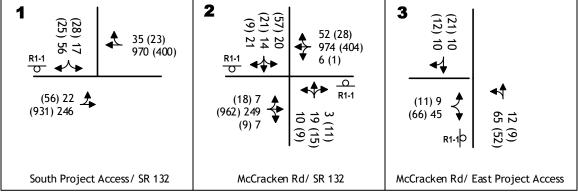


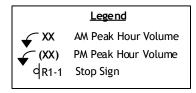




PROJECT ONLY (TRUCK) TRAFFIC VOLUMES AND LANE CONFIGURATIONS



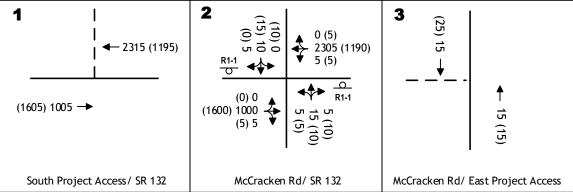


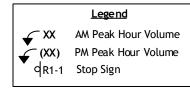




EXISTING PLUS PROJECT TRAFFIC VOLUMES AND LANE CONFIGURATIONS



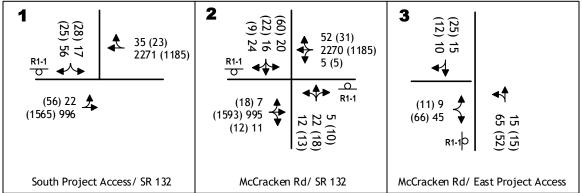


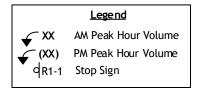




2046 TRAFFIC VOLUMES AND LANE CONFIGURATIONS



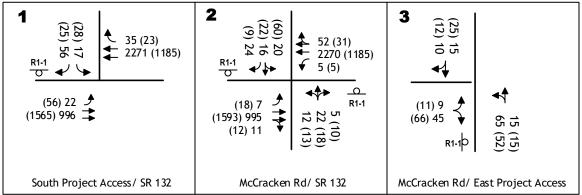


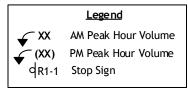




2046 PLUS PROJECT TRAFFIC VOLUMES AND LANE CONFIGURATIONS









2046 PLUS PROJECT 4 LANE STOP SIGN CONTROL TRAFFIC VOLUMES AND LANE CONFIGURATIONS

### TABLE 11 YEAR 2046 PLUS PROJECT PEAK HOUR INTERSECTION LEVELS OF SERVICE WITH FOUR LANE SR 132

|  |            | Year 204                        | 46 Plus Pro | ject AM Peak I                | Iour | Year 204                        | 6 Plus Pro | ject PM Peak H                | our |
|--|------------|---------------------------------|-------------|-------------------------------|------|---------------------------------|------------|-------------------------------|-----|
|  |            | 4 Lane Si                       | R 132       | 4 Lane SR Traffic S           |      | 4 Lane SR                       | 132        | 4 Lane SR 13<br>Traffic Sig   |     |
| Location   | Control    | Average<br>Delay<br>(sec / veh) | LOS         | Average<br>Delay<br>(sec/veh) | LOS  | Average<br>Delay<br>(sec / veh) | LOS        | Average<br>Delay<br>(sec/veh) | LOS |
| SR 132 / McCracken Road<br>NB left+thru+right turn | NB/SB Stop | >300                            | F           | -                             | -    | >263                            | F          | -                             | -   |
| SB left+thru+right turn                            |            | >300                            | F           |                               |      | >289                            | F          |                               |     |
|  | Signal     | -                               | -           | 22                            | С    | -                               | -          | 12                            | В   |
|  | Roundabout | -                               | -           | 31                            | D    | -                               | -          | 12                            | В   |
| SR 132 / Project Driveway<br>SB left+right turn    | SB Stop    | 218                             | F           | 31                            | D    | 27                              | D          | 10                            | В   |
| McCracken Rd / Project Drwy<br>EB left+right turn  | NB Stop    | >300                            | F           | 3                             | A    | 228                             | F          | 4                             | A   |

**Bold** values indicate conditions in excess of the County's LOS D minimum

## TABLE 12 2046 PLUS PROJECT PEAK HOUR 95th % QUEUES WITH FOUR LANE SR 132

|                         |               |                  | Year 2          | 046 Plus Pro                     | oject AM Po     | eak Hour                         | Year            | 2046 Plus Pro                    | oject PM Pea    | ak Hour                          |
|-------------------------|---------------|------------------|-----------------|----------------------------------|-----------------|----------------------------------|-----------------|----------------------------------|-----------------|----------------------------------|
| Intersection            | Lane          | Storage (feet)   | 4 Lane          | e SR 132                         |                 | R 132 and<br>Signal              | 4 Lan           | e SR 132                         |                 | R 132 and<br>Signal              |
|                         |               | (ICCL)           | Volume<br>(vph) | 95 <sup>th</sup> %<br>Queue (ft) |
| SR 132 / McCracken Rd w | NB approach   | n.a.             | 39              | 610                              | 39              | 75                               | 41              | 310                              | 41              | 80                               |
| Stop Signs              | SB left+thru  | 2601             | 36              | 405                              | 53              | 100                              | 82              | 410                              | 111             | 175                              |
|                         | SB right turn | 260¹             | 24              | 200                              | 24              | 60                               | 9               | 135                              | 9               | 55                               |
|                         | EB left turn  | n.a.             | 7               | 75                               | $7^{1}$         | 50                               | 18              | 45                               | 18              | <25                              |
|                         | EB thru       | n.a.             |                 |                                  |                 |                                  |                 |                                  | 1577            | 250                              |
|                         | WB left turn  | n.a.             | 5               | <25                              | 5 <sup>1</sup>  | 25                               | 5               | <25                              | 5               | <25                              |
|                         | WB thru       | n.a.             |                 |                                  |                 |                                  |                 |                                  | 1,216           | 215                              |
| SR 132 /                | EB left turn  | n.a.             | 22              | 90                               | 22              | 60                               | 56              | 60                               | 56              | 60                               |
| Project Driveway        | SB left turn  | n.a.             | 17              | 280                              | 0               | -                                | 28              | 65                               | 0               | -                                |
|                         | SB right turn | n.a.             | 56              | 170                              | 56              | 70                               | 25              | 45                               | 25              | 45                               |
| McCracken Road /        | NB approach   | 260 <sup>1</sup> | 65 <sup>1</sup> | <25                              | 65 <sup>1</sup> | <25                              | 52 <sup>1</sup> | <25                              | 52 <sup>1</sup> | <25                              |
| Project Driveway        | EB approach   | n.a.             | 54              | 465                              | 71              | 70                               | 77              | 495                              | 106             | 80                               |

<sup>&</sup>lt;sup>1</sup> distance to driveway

**BOLD** is 95<sup>th</sup> % queue that exceeds storage by 20 feet or more

#### Year 2046 Conditions with the Proposed Project, 4-lane SR 132 and Traffic Signal

**Assumptions.** This scenario assumes that Caltrans will elect to permit a traffic signal to be constructed at the SR 132 / McCracken Road intersection with the balance of the improvements noted above also being constructed. As noted earlier, Caltrans considers the relative merits of alternative traffic controls when it becomes necessary to stop traffic on state highways. Roundabouts are the default intersection control, but traffic signals are to be considered. The policy directive requires preparation of an *Intersection Control Evaluation (ICE)* to determine the preferred traffic control. This issue would be revisited if/when Caltrans proceeds with the environmental documents for widening SR 132 in this area.

This analysis assumes the following improvements would also be made:

- Two travel lanes in each direction on SR 132
- Center TWLT lane
- Separate southbound right turn lane on McCracken Road
- Separate westbound right turn lane at the project access on SR 132
- Left turns prohibited from the project driveway onto SR 132 due to distance to signal or roundabout

Figure 10 presents the traffic volumes and lane configurations under this scenario.

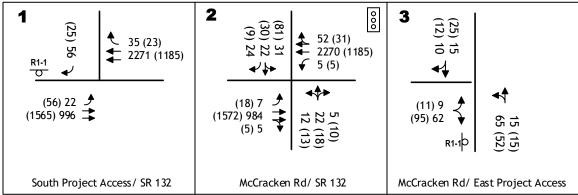
**Intersection Level of Service.** Table 11 also identifies the Level of Services at study intersections and driveways if the proposed project proceeds, SR 132 is widened, and a traffic signal is installed at the SR 132 / McCracken Road intersection. As shown all approaches to the state highway will operate with acceptable LOS (i.e., LOS D or better), as would the traffic signal.

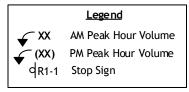
As a comparison, the Level of Service was also determined for the SR 132 / McCracken Road intersection assuming a two-lane roundabout was installed. A roundabout would yield LOS C as well.

**95**<sup>th</sup> **Percentile Queue Lengths.** As shown in Table 12, relatively short queues will occur at all locations based on SimTraffic simulation under Year 2046 conditions with the assumed improvements.











2046 PLUS PROJECT 4 LANE SIGNAL CONTROL TRAFFIC VOLUMES AND LANE CONFIGURATIONS

#### **ACCESS / INTERNAL CIRCULATION**

The adequacy of the site Access and Internal Circulation layout is based on consideration of these factors under long term conditions:

- 1. Conflicts created by queues extending back from the SR 132 / McCracken Road intersection.
- 2. Availability of adequate driveway throat depths.
- 3. Truck Access / Circulation.

#### **McCracken Road Conflicts at Driveway**

Under short term conditions (i.e., Existing plus project) the queue of southbound traffic on McCracken Road approaching SR 132 is projected to reach 155 feet. This is about 100 feet short of the driveway, so access is feasible. Under Year 2046 conditions with a traffic signal, that queue is 160 feet and access remains feasible.

#### **Queue Length / Driveway Throats**

The projected queues in the two driveways were compared to the available throat depth in the current plan. At the *SR 132 driveway* there is roughly 80 feet of driveway depth and another 100 feet of open area where additional queueing could occur. Under short term conditions the 95<sup>th</sup> percentile queue will reach 155 feet if only a single lane is provided, and it will be necessary to provide two exit lanes. Under long term conditions when a traffic signal is installed and the access is limited to right-turns-only the queue is 70 feet.

At the *McCracken Road driveway* the short term queue is projected to reach 75 feet, and the 100 foot throat is adequate. The queue is 80 feet in the future with the traffic signal.

#### **Truck Access and Circulation**

As noted earlier, the project will cause slow moving trucks to turn off of and onto SR 132 at the McCracken Road intersection and at the new driveway. Mitigations were prescribed, including creating an acceleration / deceleration area beginning east of the McCracken Road intersection and continuing westerly beyond the project driveway in the form of dedicated turn lanes or a widened shoulder constructed to the standard travel lane section.

The site layout will also need to be designed to accommodate the turning requirement of STAA trucks. This should include providing the driveway width for inbound truck turns outside of the location of exiting vehicles McCracken Road will need to be designated by Caltrans to allow STAA trucks to use the new driveway, and a formal application through Stanislaus County to Caltrans with supporting drawings will be required.



#### **Drive-Thru Lane**

The site plan includes a drive-thru lane for the food court that is roughly 150 feet long and shows storage for seven vehicles. The adequacy of this depth will depend on the nature of the actual food service provide, as a "nationally" recognized brand name would generate more demand than can be accommodated, particularly if a coffee related use was proposed. However, while the drive-thru queue could extend beyond the designated aisle, the queue would have to extend for another 100 feet before it reached the McCracken Road driveway and 200 feet before it reached McCracken Road.

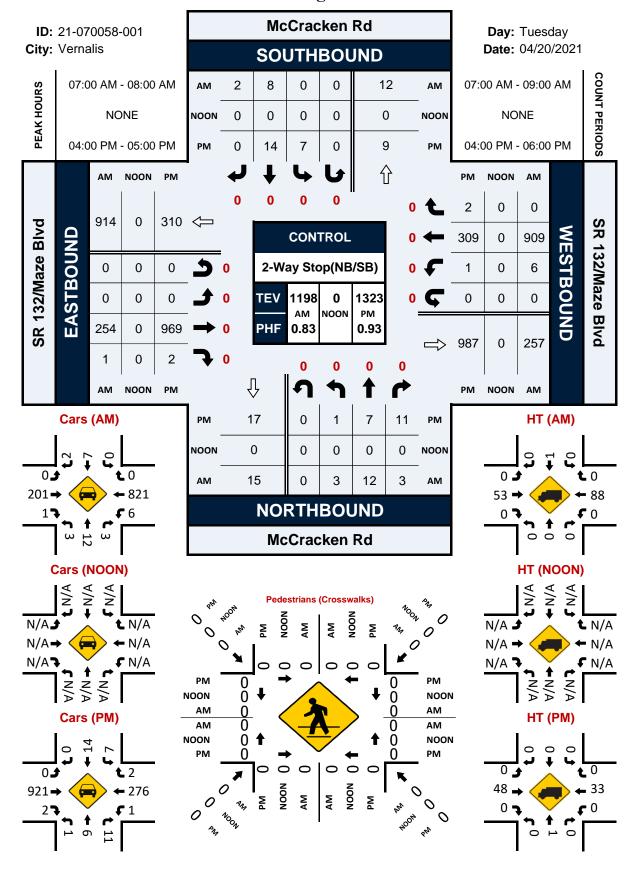
#### **APPENDIX**

Traffic counts Synchro reports Simtraffic results



#### McCracken Rd & SR 132/Maze Blvd

#### **Peak Hour Turning Movement Count**



Intersection Turning Movement Count

City: Vernalis
Control: 2-Way Stop(NB/SB) Project ID: 21-070058-001 Date: 4/20/2021

| _   |   |   |   |  |  |   |   |  | tai                                      |   |  |  |  |  |   |  |   |
|---|---|---|---|--|--|---|---|--|--|---|--|--|--|--|---|--|---|
| NS/EW Streets:  |   | McCrack   | en Rd   |  |  | McCrack   | en Rd   |  |  | SR 132/M  | aze Blvd   |  |  | SR 132/Ma  | aze Blvd  |  |   |
|   |   | NORTH   | BOUND   |  |  | SOUTH   | BOUND   |  |  | EASTB   | OUND   |  |  | WESTE  | BOUND   |  |   |
| AM  | 0   | 0   | 0   | 0  | 0  | 0   | 0   | 0  | 0  | 0   | 0  | 0  | 0  | 0  | 0   | 0  |   |
|   | NL  | NT  | NR  | NU                                       | SL   | ST  | SR  | SU                                       | EL                                       | ET  | ER   | EU                                       | WL   | WT   | WR  | WU                                       | TOTAL   |
| 7:00 AM   | 0   | 1   | 1   | 0  | 0  | 1   | 1   | 0  | 0  | 67  | 0  | 0  | 0  | 289  | 0   | 0  | 360   |
| 7:15 AM   | 0   | 4   | 0   | 0  | 0  | 4   | 0   | 0  | 0  | 68  | 0  | 0  | 3  | 237  | 0   | 0  | 316   |
| 7:30 AM   | 1   | 3   | 2   | 0  | 0  | 2   | 1   | 0  | 0  | 63  | 1  | 0  | 0  | 195  | 0   | 0  | 268   |
| 7:45 AM   | 2   | 4   | 0   | 0  | 0  | 1   | 0   | 0  | 0  | 56  | 0  | 0  | 3  | 188  | 0   | 0  | 254   |
| 8:00 AM   | 0   | 2   | 0   | 0  | 0  | 1   | 0   | 0  | 0  | 63  | 0  | 0  | 0  | 161  | 0   | 0  | 227   |
| 8:15 AM   | 1   | 2   | 2   | 0  | 0  | 0   | 0   | 0  | 0  | 57  | 0  | 0  | 1  | 180  | 0   | 0  | 243   |
| 8:30 AM   | 0   | 3   | 0   | 0  | 0  | 0   | 0   | 0  | 1  | 54  | 1  | 0  | 0  | 139  | 0   | 0  | 198   |
| 8:45 AM   | 1   | 0   | 0   | 0  | 0  | 0   | 2   | 0  | 0  | 51  | 0  | 0  | 1  | 126  | 1   | 0  | 182   |
|   | NL  | NT  | NR  | NU                                       | SL   | ST  | SR  | SU                                       | EL                                       | ET  | ER   | EU                                       | WL   | WT   | WR  | WU                                       | TOTAL   |
| TOTAL VOLUMES:  | 5   | 19  | 5   | 0  | 0  | 9   | 4   | 0  | 1  | 479   | 2  | 0  | 8  | 1515   | 1   | 0  | 2048  |
| APPROACH %'s:   | 17.24%  | 65.52%  | 17.24%  | 0.00%                                    | 0.00%  | 69.23%  | 30.77%  | 0.00%                                    | 0.21%                                    | 99.38%  | 0.41%  | 0.00%                                    | 0.52%  | 99.41%   | 0.07%   | 0.00%                                    |   |
| PEAK HR :   | (   | 7:00 AM -   | 08:00 AM  |  |  |   |   |  |  |   |  |  |  |  |   |  | TOTAL   |
| PEAK HR VOL:  | 3   | 12  | 3   | 0  | 0  | 8   | 2   | 0  | 0  | 254   | 1  | 0  | 6  | 909  | 0   | 0  | 1198  |
| PEAK HR FACTOR:   | 0.375   | 0.750   | 0.375   | 0.000                                    | 0.000  | 0.500   | 0.500   | 0.000                                    | 0.000                                    | 0.934   | 0.250  | 0.000                                    | 0.500  | 0.786  | 0.000   | 0.000                                    | 0.832   |
|   |   | 0.7   | 50  |  |  | 0.62  | 25  |  |  | 0.93  | 38   |  |  | 0.79   | 92  |  | 0.052   |
|   |   | NORTH   | POLIND  |  |  | COLITU  | BOUND   |  |  | EASTB   | OLIND  |  |  |  | OLIND   | 1  |   |
|   |   |   |   |  |  |   |   |  |  |   |  |  |  |  |   |  |   |
| PM  | 0   |   |   | 0  | 0  |   |   | 0  | 0  |   |  | 0  | 0  | WESTE  |   | 0  |   |
| PM  | 0<br>NI   | 0   | 0   | 0<br>NH                                  | 0<br>SI  | 0   | 0   | 0<br>SU                                  | 0<br>FI                                  | 0   | 0  | 0<br>FU                                  | 0<br>WI  | 0  | 0   | 0<br>WII                                 | TOTAL   |
|   | 0<br>NL<br>0  | 0<br>NT   | 0<br>NR   | NU                                       | 0<br>SL<br>1   |   |   | SU                                       | EL                                       | 0<br>ET   |  | 0<br>EU<br>0                             | 0<br>WL  | 0<br>WT  |   | WU                                       | TOTAL<br>329  |
| PM<br>4:00 PM<br>4:15 PM  | NL  | 0   | 0   |  | SL   | 0<br>ST   | 0<br>SR   |  |  | 0   | 0<br>ER  | EU                                       | WL   | 0  | 0<br>WR   |  | TOTAL<br>329<br>306   |
| 4:00 PM   | NL<br>0   | 0<br>NT<br>2  | 0<br>NR<br>6  | NU<br>0                                  | SL<br>1  | 0<br>ST<br>2  | O<br>SR<br>O  | SU<br>0                                  | EL<br>0                                  | 0<br>ET<br>242  | 0<br>ER  | EU<br>0                                  | WL<br>0  | 0<br>WT<br>76  | 0<br>WR<br>0  | WU<br>0                                  | 329   |
| 4:00 PM<br>4:15 PM<br>4:30 PM<br>4:45 PM  | NL<br>0<br>0  | 0<br>NT<br>2<br>2   | 0<br>NR<br>6<br>3   | NU<br>0<br>0                             | SL<br>1<br>4<br>2<br>0   | 0<br>ST<br>2<br>7<br>4<br>1                                 | 0<br>SR<br>0<br>0   | SU<br>0<br>0                             | 0<br>0                                   | 0<br>ET<br>242<br>205<br>271<br>251   | 0<br>ER<br>0<br>1  | 0<br>0                                   | WL<br>0<br>1   | 0<br>WT<br>76<br>81<br>76<br>76  | 0<br>WR<br>0<br>2   | WU<br>0<br>0                             | 329<br>306<br>354<br>334  |
| 4:00 PM<br>4:15 PM<br>4:30 PM   | NL<br>0<br>0  | 0<br>NT<br>2<br>2<br>0  | 0<br>NR<br>6<br>3   | NU<br>0<br>0<br>0                        | SL<br>1<br>4<br>2  | 0<br>ST<br>2<br>7   | 0<br>SR<br>0<br>0   | SU<br>0<br>0                             | 0<br>0<br>0                              | 0<br>ET<br>242<br>205<br>271  | 0<br>ER<br>0<br>1  | 0<br>0<br>0                              | WL<br>0<br>1<br>0  | 0<br>WT<br>76<br>81<br>76  | 0<br>WR<br>0<br>2<br>0  | WU<br>0<br>0<br>0                        | 329<br>306<br>354   |
| 4:00 PM<br>4:15 PM<br>4:30 PM<br>4:45 PM<br>5:00 PM<br>5:15 PM  | NL<br>0<br>0<br>0<br>1  | 0<br>NT<br>2<br>2<br>0<br>3<br>0<br>1   | 0<br>NR<br>6<br>3<br>1  | NU<br>0<br>0<br>0                        | SL<br>1<br>4<br>2<br>0<br>3<br>0                                 | 0<br>ST<br>2<br>7<br>4<br>1                                 | 0<br>SR<br>0<br>0<br>0  | SU<br>0<br>0<br>0                        | EL<br>0<br>0<br>0<br>0                   | 0<br>ET<br>242<br>205<br>271<br>251<br>231<br>227                                       | 0<br>ER<br>0<br>1<br>0<br>1  | 0<br>0<br>0<br>0                         | WL<br>0<br>1<br>0  | 0<br>WT<br>76<br>81<br>76<br>76<br>53<br>90                                    | 0<br>WR<br>0<br>2<br>0  | WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 329<br>306<br>354<br>334<br>292<br>323                                |
| 4:00 PM<br>4:15 PM<br>4:30 PM<br>4:45 PM<br>5:00 PM<br>5:15 PM<br>5:30 PM   | NL<br>0<br>0<br>0<br>1<br>0<br>0<br>0   | 0<br>NT<br>2<br>2<br>0<br>3<br>0<br>1<br>2  | 0<br>NR<br>6<br>3<br>1<br>1<br>1<br>0<br>0  | NU<br>0<br>0<br>0<br>0<br>0              | SL<br>1<br>4<br>2<br>0<br>3<br>0                                 | 0<br>ST<br>2<br>7<br>4<br>1<br>3<br>3                       | 0<br>SR<br>0<br>0<br>0<br>0<br>0<br>2                               | SU<br>0<br>0<br>0<br>0<br>0              | EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 0<br>ET<br>242<br>205<br>271<br>251<br>231<br>227<br>244                                | 0<br>ER<br>0<br>1<br>0<br>1<br>0<br>0<br>0<br>0  | EU<br>0<br>0<br>0<br>0<br>0              | WL<br>0<br>1<br>0<br>0<br>0                                    | 0<br>WT<br>76<br>81<br>76<br>76<br>53<br>90<br>84                              | 0<br>WR<br>0<br>2<br>0<br>0<br>0  | WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 329<br>306<br>354<br>334<br>292<br>323<br>332                         |
| 4:00 PM<br>4:15 PM<br>4:30 PM<br>4:45 PM<br>5:00 PM<br>5:15 PM  | NL<br>0<br>0<br>0<br>1<br>0<br>0  | 0<br>NT<br>2<br>2<br>0<br>3<br>0<br>1   | 0<br>NR<br>6<br>3<br>1<br>1<br>1  | NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | SL<br>1<br>4<br>2<br>0<br>3<br>0                                 | 0<br>ST<br>2<br>7<br>4<br>1<br>3<br>3                       | 0<br>SR<br>0<br>0<br>0<br>0<br>0                                    | SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 0<br>ET<br>242<br>205<br>271<br>251<br>231<br>227                                       | 0<br>ER<br>0<br>1<br>0<br>1<br>0<br>0  | EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | WL 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0                       | 0<br>WT<br>76<br>81<br>76<br>76<br>53<br>90                                    | 0<br>WR<br>0<br>2<br>0<br>0<br>0  | WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 329<br>306<br>354<br>334<br>292<br>323                                |
| 4:00 PM<br>4:15 PM<br>4:30 PM<br>4:45 PM<br>5:00 PM<br>5:15 PM<br>5:30 PM<br>5:45 PM  | NL<br>0<br>0<br>0<br>1<br>0<br>0<br>0<br>0<br>0                                   | 0<br>NT<br>2<br>2<br>0<br>3<br>0<br>1<br>1<br>2<br>2                                      | 0<br>NR<br>6<br>3<br>1<br>1<br>1<br>0<br>0  | NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | SL 1 4 2 0 3 0 0 0 0 SL  | 0<br>ST<br>2<br>7<br>4<br>1<br>3<br>3<br>1<br>2             | 0<br>SR<br>0<br>0<br>0<br>0<br>0<br>2<br>1<br>0                     | SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 0<br>ET 242<br>205<br>271<br>251<br>231<br>227<br>244<br>276                            | 0<br>ER<br>0<br>1<br>0<br>1<br>0<br>0<br>0<br>0<br>0   | EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | WL 0 1 0 0 0 1 0 0 0 1 1 0 0 0 1 1 WL                          | 0<br>WT<br>76<br>81<br>76<br>76<br>53<br>90<br>84<br>67                        | 0<br>WR<br>0<br>2<br>0<br>0<br>0<br>0<br>0  | WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 329<br>306<br>354<br>334<br>292<br>323<br>332<br>348                  |
| 4:00 PM<br>4:15 PM<br>4:30 PM<br>4:45 PM<br>5:00 PM<br>5:15 PM<br>5:30 PM<br>5:45 PM  | NL<br>0<br>0<br>0<br>1<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>NL<br>1              | 0<br>NT<br>2<br>2<br>0<br>3<br>0<br>1<br>2<br>2<br>2<br>NT<br>12                          | 0<br>NR<br>6<br>3<br>1<br>1<br>1<br>0<br>0<br>0   | NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | SL<br>1<br>4<br>2<br>0<br>3<br>0<br>0<br>0<br>SL<br>10           | 0<br>ST<br>2<br>7<br>4<br>1<br>3<br>3<br>1<br>2<br>ST<br>23 | 0<br>SR<br>0<br>0<br>0<br>0<br>0<br>2<br>1<br>0                     | SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 0<br>ET<br>242<br>205<br>271<br>251<br>231<br>227<br>244<br>276<br>ET<br>1947           | 0<br>ER<br>0<br>1<br>0<br>1<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | WL 0 1 0 0 0 1 0 0 0 1 1 0 0 1 1 WL 3                          | 0<br>WT<br>76<br>81<br>76<br>76<br>53<br>90<br>84<br>67<br>WT<br>603           | 0<br>WR<br>0<br>2<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0   | WU<br>0<br>0<br>0<br>0<br>0<br>0<br>0    | 329<br>306<br>354<br>334<br>292<br>323<br>332<br>348                  |
| 4:00 PM<br>4:15 PM<br>4:30 PM<br>4:30 PM<br>5:00 PM<br>5:15 PM<br>5:30 PM<br>5:30 PM<br>5:45 PM                                     | NL<br>0<br>0<br>1<br>0<br>0<br>0<br>0<br>0<br>0<br>NL<br>1<br>4.00%               | 0<br>NT<br>2<br>2<br>0<br>3<br>0<br>1<br>2<br>2<br>2<br>NT<br>12<br>48.00%                | 0<br>NR<br>6<br>3<br>1<br>1<br>1<br>0<br>0<br>0<br>NR<br>12<br>48.00%                                 | NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | SL 1 4 2 0 3 0 0 0 0 SL  | 0<br>ST<br>2<br>7<br>4<br>1<br>3<br>3<br>1<br>2             | 0<br>SR<br>0<br>0<br>0<br>0<br>0<br>2<br>1<br>0                     | SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 0<br>ET 242<br>205<br>271<br>251<br>231<br>227<br>244<br>276                            | 0<br>ER<br>0<br>1<br>0<br>1<br>0<br>0<br>0<br>0<br>0   | EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | WL 0 1 0 0 0 1 0 0 0 1 1 0 0 0 1 1 WL                          | 0<br>WT<br>76<br>81<br>76<br>76<br>53<br>90<br>84<br>67                        | 0<br>WR<br>0<br>2<br>0<br>0<br>0<br>0<br>0  | WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 329<br>306<br>354<br>334<br>292<br>323<br>332<br>348<br>TOTAL<br>2618 |
| 4:00 PM<br>4:15 PM<br>4:30 PM<br>4:45 PM<br>5:00 PM<br>5:15 PM<br>5:30 PM<br>5:45 PM<br>TOTAL VOLUMES:<br>APPROACH %'s:<br>PEAK HR: | NL 0 0 0 1 0 0 0 0 0 0 NL 1 4.00%   | 0<br>NT<br>2<br>2<br>0<br>3<br>0<br>1<br>2<br>2<br>2<br>NT<br>12<br>48.00%                | 0<br>NR<br>6<br>3<br>1<br>1<br>1<br>0<br>0<br>0<br>0<br>NR<br>12<br>48.00%                            | NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | SL<br>1<br>4<br>2<br>0<br>3<br>0<br>0<br>0<br>SL<br>10<br>27.78% | OT ST 2 7 4 1 3 3 1 2 2 ST 23 63.89%                        | 0<br>SR<br>0<br>0<br>0<br>0<br>0<br>2<br>1<br>0<br>SR<br>3<br>8.33% | SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 0<br>ET<br>242<br>205<br>271<br>251<br>231<br>227<br>244<br>276<br>ET<br>1947<br>99.90% | 0<br>ER<br>0<br>1<br>0<br>1<br>0<br>0<br>0<br>0<br>0<br>0  | EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | WL<br>0<br>1<br>0<br>0<br>1<br>0<br>0<br>1<br>WL<br>3<br>0.49% | 0<br>WT<br>76<br>81<br>76<br>76<br>53<br>90<br>84<br>67<br>WT<br>603<br>99.18% | 0<br>WR<br>0<br>2<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>WR<br>2<br>0.0<br>0.0                     | WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 329<br>306<br>354<br>334<br>292<br>323<br>332<br>348<br>TOTAL<br>2618 |
| 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM  TOTAL VOLUMES: APPROACH %'s: PEAK HR:                              | NL<br>0<br>0<br>0<br>1<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>1<br>1<br>4.00% | 0<br>NT<br>2<br>2<br>0<br>3<br>0<br>1<br>2<br>2<br>2<br>NT<br>12<br>48.00%<br>044.00 PM - | 0<br>NR<br>6<br>3<br>1<br>1<br>0<br>0<br>0<br>0<br>0<br>NR<br>12<br>48.00%<br>05:00 PM                | NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | SL<br>1<br>4<br>2<br>0<br>3<br>0<br>0<br>0<br>SL<br>10<br>27.78% | OT ST 2 7 4 1 3 3 1 2 2 ST 23 63.89%                        | 0<br>SR<br>0<br>0<br>0<br>0<br>0<br>2<br>1<br>0<br>SR<br>3<br>8.33% | SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 0<br>ET 242<br>205<br>271<br>251<br>231<br>227<br>244<br>276<br>ET 1947<br>99.90%       | 0<br>ER<br>0<br>1<br>0<br>1<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>ER<br>2<br>0.10%                | EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | WL<br>0<br>1<br>0<br>0<br>1<br>0<br>0<br>1<br>WL<br>3<br>0.49% | 0<br>WT<br>76<br>81<br>76<br>76<br>53<br>90<br>84<br>67<br>WT<br>603<br>99.18% | 0<br>WR<br>0<br>2<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0      | WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 329<br>306<br>354<br>334<br>292<br>323<br>332<br>348<br>TOTAL<br>2618 |
| 4:00 PM<br>4:15 PM<br>4:30 PM<br>4:45 PM<br>5:00 PM<br>5:15 PM<br>5:30 PM<br>5:45 PM<br>TOTAL VOLUMES:<br>APPROACH %'s:<br>PEAK HR: | NL 0 0 0 1 0 0 0 0 0 0 NL 1 4.00%   | 0<br>NT<br>2<br>2<br>0<br>3<br>0<br>1<br>2<br>2<br>2<br>NT<br>12<br>48.00%                | 0<br>NR<br>6<br>3<br>1<br>1<br>1<br>0<br>0<br>0<br>0<br>WR<br>12<br>48.00%<br>D5:00 PM<br>11<br>0.458 | NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | SL<br>1<br>4<br>2<br>0<br>3<br>0<br>0<br>0<br>SL<br>10<br>27.78% | OT ST 2 7 4 1 3 3 1 2 2 ST 23 63.89%                        | O SR O O O O O O O O O O O O O O O O O O                            | SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 0<br>ET<br>242<br>205<br>271<br>251<br>231<br>227<br>244<br>276<br>ET<br>1947<br>99.90% | O ER O 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | WL<br>0<br>1<br>0<br>0<br>1<br>0<br>0<br>1<br>WL<br>3<br>0.49% | 0<br>WT<br>76<br>81<br>76<br>76<br>53<br>90<br>84<br>67<br>WT<br>603<br>99.18% | O<br>WR<br>O<br>2<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 329<br>306<br>354<br>334<br>292<br>323<br>332<br>348<br>TOTAL<br>2618 |

### **Intersection Turning Movement Count**

Location: McCracken Rd & SR 132/Maze Blvd City: Vernalis Control: 2-Way Stop(NB/SB)

**Project ID:** 21-070058-001 **Date:** 4/20/2021

| Date: | 4/20/202 |
|-------|----------|
|-------|----------|

| Control:  | 2-Way Stop        | o(NB/SB)                         |                    |                  |                    |                    |                       | Ca               | re               |                            |                       |                  |                  | Date:                           | 1/20/2021             |                  |                                 |
|---|-------------------|----------------------------------|--------------------|------------------|--------------------|--------------------|-----------------------|------------------|------------------|----------------------------|-----------------------|------------------|------------------|---------------------------------|-----------------------|------------------|---------------------------------|
| NS/EW Streets:                                      |                   | McCracl                          | ken Rd             |                  |                    | McCrac             | ken Rd                |                  |                  | SR 132/M                   | aze Blvd              |                  |                  | SR 132/M                        | aze Blvd              |                  |                                 |
| AM  | 0<br>NL           | NORTH<br>0<br>NT                 | IBOUND<br>0<br>NR  | 0<br>NU          | 0<br>SL            | SOUTH<br>0<br>ST   | BOUND<br>0<br>SR      | 0<br>SU          | 0<br>EL          | EASTE<br>0<br>ET           | BOUND<br>0<br>ER      | 0<br>FU          | 0<br>WL          | WESTE<br>0<br>WT                | O WR                  | 0<br>WU          | TOTAL                           |
| 7:00 AM<br>7:15 AM<br>7:30 AM                       | 0<br>0<br>1       | 1<br>4<br>3<br>4                 | 1<br>0<br>2        | 0<br>0<br>0<br>0 | 0 0                | 1<br>4<br>1        | 1<br>0<br>1<br>0      | 0<br>0<br>0      | 0 0              | 54<br>55<br>51             | 0<br>0<br>1           | 0 0              | 0<br>3<br>0<br>3 | 262<br>212<br>182               | 0<br>0<br>0           | 0<br>0<br>0      | 320<br>278<br>242               |
| 7:45 AM<br>8:00 AM<br>8:15 AM<br>8:30 AM<br>8:45 AM | 0<br>1<br>0<br>1  | 2<br>2<br>3<br>0                 | 0<br>2<br>0<br>0   | 0<br>0<br>0<br>0 | 0<br>0<br>0<br>0   | 1<br>0<br>0<br>0   | 0<br>0<br>0<br>0<br>2 | 0<br>0<br>0<br>0 | 0<br>0<br>1<br>0 | 41<br>54<br>39<br>43<br>34 | 0<br>0<br>0<br>1<br>0 | 0<br>0<br>0<br>0 | 0<br>1<br>0<br>1 | 165<br>146<br>160<br>121<br>105 | 0<br>0<br>0<br>0<br>1 | 0<br>0<br>0<br>0 | 216<br>203<br>205<br>169<br>144 |
| TOTAL VOLUMES :<br>APPROACH %'s :                   | NL<br>5<br>17.24% | NT<br>19<br>65.52%               | NR<br>5<br>17.24%  | NU<br>0<br>0.00% | SL<br>0<br>0.00%   | ST<br>8<br>66.67%  | SR<br>4<br>33.33%     | SU<br>0<br>0.00% | EL<br>1<br>0.27% | ET<br>371<br>99.20%        | ER<br>2<br>0.53%      | EU<br>0<br>0.00% | WL<br>8<br>0.59% | WT<br>1353<br>99.34%            | WR<br>1<br>0.07%      | WU<br>0<br>0.00% | TOTAL<br>1777                   |
| PEAK HR :<br>PEAK HR VOL :<br>PEAK HR FACTOR :      | 3<br>0.38         | 07:00 AM -<br>12<br>0.750<br>0.7 | 3<br>0.375         | 0<br>0.000       | 0<br>0.000         | 7<br>0.438<br>0.5  | 2<br>0.500<br>63      | 0<br>0.000       | 0<br>0.000       | 201<br>0.914<br>0.9        | 1<br>0.250<br>18      | 0<br>0.000       | 6<br>0.500       | 821<br>0.783<br>0.78            | 0<br>0.000<br>39      | 0<br>0.000       | TOTAL<br>1056<br>0.825          |
| PM  | 0<br>NL           | NORTH<br>0<br>NT                 | IBOUND<br>0<br>NR  | 0<br>NU          | 0<br>SL            | SOUTH<br>0<br>ST   | BOUND<br>0<br>SR      | 0<br>SU          | 0<br>EL          | EASTE<br>0<br>ET           | BOUND<br>0<br>ER      | 0<br>EU          | 0<br>WL          | WESTE<br>0<br>WT                | SOUND<br>0<br>WR      | 0<br>WU          | TOTAL                           |
| 4:00 PM<br>4:15 PM<br>4:30 PM<br>4:45 PM            | 0<br>0<br>0<br>0  | 2<br>1<br>0                      | 6<br>3<br>1        | 0<br>0<br>0<br>0 | 1<br>4<br>2<br>0   | 2<br>7<br>4        | 0<br>0<br>0<br>0      | 0<br>0<br>0      | 0 0              | 231<br>198<br>259<br>233   | 0<br>1<br>0           | 0 0              | 0<br>1<br>0      | 66<br>69<br>72<br>69            | 0<br>2<br>0<br>0      | 0<br>0<br>0<br>0 | 308<br>286<br>338<br>309        |
| 5:00 PM<br>5:15 PM<br>5:30 PM<br>5:45 PM            | 0<br>0<br>0<br>0  | 0<br>1<br>2<br>2                 | 1<br>0<br>0<br>0   | 0<br>0<br>0<br>0 | 3<br>0<br>0        | 3<br>3<br>1<br>2   | 0<br>2<br>1<br>0      | 0<br>0<br>0<br>0 | 0<br>0<br>0<br>0 | 217<br>215<br>230<br>265   | 0<br>0<br>0<br>0      | 0<br>0<br>0<br>0 | 1<br>0<br>0      | 49<br>86<br>77<br>65            | 0<br>0<br>0<br>0      | 0<br>0<br>0<br>0 | 274<br>307<br>311<br>335        |
| TOTAL VOLUMES :<br>APPROACH %'s :                   | NL<br>1<br>4.17%  | NT<br>11<br>45.83%               | NR<br>12<br>50.00% | NU<br>0<br>0.00% | SL<br>10<br>27.78% | ST<br>23<br>63.89% | SR<br>3<br>8.33%      | SU<br>0<br>0.00% | EL<br>0<br>0.00% | ET<br>1848<br>99.89%       | ER<br>2<br>0.11%      | EU<br>0<br>0.00% | WL<br>3<br>0.54% | WT<br>553<br>99.10%             | WR<br>2<br>0.36%      | WU<br>0<br>0.00% | TOTAL<br>2468                   |
| PEAK HR :<br>PEAK HR VOL :<br>PEAK HR FACTOR :      | 1<br>0.25         | 04:00 PM -<br>6<br>0.500<br>0.5  | 11<br>0.458        | 0<br>0.000       | 7<br>0.438         | 14<br>0.500<br>0.4 | 0<br>0.000<br>77      | 0<br>0.000       | 0<br>0.000       | 921<br>0.889<br>0.8        | 2<br>0.500<br>91      | 0<br>0.000       | 1<br>0.250       | 276<br>0.958<br>0.9             | 2<br>0.250<br>59      | 0<br>0.000       | TOTAL<br>1241<br>0.918          |

### **Intersection Turning Movement Count**

Location: McCracken Rd & SR 132/Maze Blvd City: Vernalis Control: 2-Way Stop(NB/SB)

Project ID: 21-070058-001

| <u>_</u>           |       |            |          |          |       |         |       | <u>H</u> | T     |          |          |       |       |          |          |       |          |
|--------------------|-------|------------|----------|----------|-------|---------|-------|----------|-------|----------|----------|-------|-------|----------|----------|-------|----------|
| NS/EW Streets:     |       | McCrack    | ken Rd   |          |       | McCracl | en Rd |          |       | SR 132/M | aze Blvd |       |       | SR 132/M | aze Blvd |       |          |
|                    |       | NORTH      | IBOUND   | <u> </u> |       | SOUTH   | BOUND |          |       | EASTB    | OUND     |       |       | WEST     | BOUND    |       |          |
| AM                 | 0     | 0          | 0        | 0        | 0     | 0       | 0     | 0        | 0     | 0        | 0        | 0     | 0     | 0        | 0        | 0     |          |
|                    | NL    | NT         | NR       | NU       | SL    | ST      | SR    | SU       | EL    | ET       | ER       | EU    | WL    | WT       | WR       | WU    | TOTAL    |
| 7:00 AM            | 0     | 0          | 0        | 0        | 0     | 0       | 0     | 0        | 0     | 13       | 0        | 0     | 0     | 27       | 0        | 0     | 40       |
| 7:15 AM            | 0     | 0          | 0        | 0        | 0     | 0       | 0     | 0        | 0     | 13       | 0        | 0     | 0     | 25       | 0        | 0     | 38       |
| 7:30 AM            | 0     | 0          | 0        | 0        | 0     | 1       | 0     | 0        | 0     | 12       | 0        | 0     | 0     | 13       | 0        | 0     | 26       |
| 7:45 AM            | 0     | 0          | 0        | 0        | 0     | 0       | 0     | 0        | 0     | 15       | 0        | 0     | 0     | 23       | 0        | 0     | 38       |
| 8:00 AM            | 0     | 0          | 0        | 0        | 0     | 0       | 0     | 0        | 0     | 9        | 0        | 0     | 0     | 15       | 0        | 0     | 24       |
| 8:15 AM            | 0     | 0          | 0        | 0        | 0     | 0       | 0     | 0        | 0     | 18       | 0        | 0     | 0     | 20       | 0        | 0     | 38       |
| 8:30 AM            | 0     | 0          | 0        | 0        | 0     | 0       | 0     | 0        | 0     | 11       | 0        | 0     | 0     | 18       | 0        | 0     | 29       |
| 8:45 AM            | 0     | 0          | 0        | 0        | 0     | 0       | 0     | 0        | 0     | 17       | 0        | 0     | 0     | 21       | 0        | 0     | 38       |
|                    | NL    | NT         | NR       | NU       | SL    | ST      | SR    | SU       | EL    | ET       | ER       | EU    | WL    | WT       | WR       | WU    | TOTAL    |
| TOTAL VOLUMES:     | 0     | 0          | 0        | 0        | 0     | 1       | 0     | 0        | 0     | 108      | 0        | 0     | 0     | 162      | 0        | 0     | 271      |
| APPROACH %'s:      |       |            |          | •        | 0.00% | 100.00% | 0.00% | 0.00%    | 0.00% | 100.00%  | 0.00%    | 0.00% | 0.00% | 100.00%  | 0.00%    | 0.00% |          |
| PEAK HR :          |       | 07:00 AM - | 08:00 AM |          |       |         |       |          |       |          |          |       |       |          |          |       | TOTAL    |
| PEAK HR VOL :      | 0     | 0          | 0        | 0        | 0     | 1       | 0     | 0        | 0     | 53       | 0        | 0     | 0     | 88       | 0        | 0     | 142      |
| PEAK HR FACTOR:    | 0.000 | 0.000      | 0.000    | 0.000    | 0.000 | 0.250   | 0.000 | 0.000    | 0.000 | 0.883    | 0.000    | 0.000 | 0.000 | 0.815    | 0.000    | 0.000 | 0.888    |
|                    |       |            |          |          |       | 0.2     | 50    |          |       | 0.8      | 33       |       |       | 0.8      | 15       |       | 0.000    |
|                    |       |            |          |          |       |         |       |          |       |          |          |       |       |          |          |       |          |
| 200                |       | NORTH      |          |          |       | SOUTH   |       |          |       | EASTB    |          |       |       | WESTI    |          |       |          |
| PM                 | 0     | 0          | 0        | 0        | 0     | 0       | 0     | 0        | 0     | 0        | 0        | 0     | 0     | 0        | 0        | 0     |          |
|                    | NL    | NT         | NR       | NU       | SL    | ST      | SR    | SU       | EL    | ET       | ER       | EU    | WL    | WT       | WR       | WU    | TOTAL    |
| 4:00 PM            | 0     | 0          | 0        | 0        | 0     | 0       | 0     | 0        | 0     | 11       | 0        | 0     | 0     | 10       | 0        | 0     | 21       |
| 4:15 PM            | 0     | 1          | 0        | 0        | 0     | 0       | 0     | 0        | 0     | 7        | 0        | 0     | 0     | 12       | 0        | 0     | 20       |
| 4:30 PM            | 0     | 0          | 0        | 0        | 0     | 0       | 0     | 0        | 0     | 12       | 0        | 0     | 0     | 4        | 0        | 0     | 16       |
| 4:45 PM            | 0     | 0          | 0        | 0        | 0     | 0       | 0     | 0        | 0     | 18       | 0        | 0     | 0     | <u>7</u> | 0        | 0     | 25<br>18 |
| 5:00 PM<br>5:15 PM | 0     | 0          | 0        | 0        | 0     | 0<br>0  | 0     | 0        | 0     | 14<br>12 | 0        | 0     | 0     | 4        | 0        | 0     | 18<br>16 |
| 5:30 PM            | 0     | 0          | 0        | 0        | 0     | 0       | 0     | 0        | 0     |          | 0        | 0     | 0     | 7        | 0        | 0     | 21       |
| 5:30 PM<br>5:45 PM | 0     | 0          | 0        | 0        | 0     | 0       | 0     | 0        | 0     | 14<br>11 | 0        | 0     | 0     | 2        | 0        | 0     | 13       |
| 5:45 PM            | U     |            |          |          | U     |         |       | ŭ        | O     | 11       |          | U     | b     |          |          |       |          |
|                    | NL    | NT         | NR       | NU       | SL    | ST      | SR    | SU       | EL    | ET       | ER       | EU    | WL    | WT       | WR       | WU    | TOTAL    |
| TOTAL VOLUMES:     | 0     | 1          | 0        | 0        | 0     | 0       | 0     | 0        | 0     | 99       | 0        | 0     | 0     | 50       | 0        | 0     | 150      |
| APPROACH %'s:      | 0.00% |            | 0.00%    | 0.00%    |       |         |       |          | 0.00% | 100.00%  | 0.00%    | 0.00% | 0.00% | 100.00%  | 0.00%    | 0.00% |          |
| PEAK HR :          |       | 04:00 PM - |          |          |       |         |       |          |       |          |          |       |       |          |          |       | TOTAL    |
| PEAK HR VOL :      | 0     | 1          | 0        | 0        | 0     | 0       | 0     | 0        | 0     | 48       | 0        | 0     | 0     | 33       | 0        | 0     | 82       |
| PEAK HR FACTOR:    | 0.00  | 0.250      | 0.000    | 0.000    | 0.000 | 0.000   | 0.000 | 0.000    | 0.000 | 0.667    | 0.000    | 0.000 | 0.000 | 0.688    | 0.000    | 0.000 | 0.820    |
|                    |       | 0.2        | 50       |          |       |         |       |          |       | 0.60     | 57       |       |       | 0.6      | 88       |       | 0.020    |

### **Intersection Turning Movement Count**

Location: McCracken Rd & SR 132/Maze Blvd City: Vernalis Control: 2-Way Stop(NB/SB)

Project ID: 21-070058-001 Date: 4/20/2021

| Control          | z-way su | )p(IND/3D) |            |       |       |        |        |       |            |          |           |       |       | Date:    | 4/20/2021 |       |       |
|------------------|----------|------------|------------|-------|-------|--------|--------|-------|------------|----------|-----------|-------|-------|----------|-----------|-------|-------|
|                  |          |            |            |       |       |        |        | Bil   | <b>ces</b> |          |           |       |       |          |           |       | _     |
| NS/EW Streets:   |          | McCrac     | ken Rd     |       |       | McCrac | ken Rd |       |            | SR 132/N | Maze Blvd |       |       | SR 132/N | 1aze Blvd |       |       |
|                  |          | NORTH      | HBOUND     |       |       | SOUTI  | HBOUND |       |            | EAST     | BOUND     |       |       | WEST     | BOUND     |       |       |
| AM               | 0        | 0          | 0          | 0     | 0     | 0      | 0      | 0     | 0          | 0        | 0         | 0     | 0     | 0        | 0         | 0     |       |
|                  | NL       | NT         | NR         | NU    | SL    | ST     | SR     | SU    | EL         | ET       | ER        | EU    | WL    | WT       | WR        | WU    | TOTAL |
| 7:00 AM          | 0        | 0          | 0          | 0     | 0     | 0      | 0      | 0     | 0          | 0        | 0         | 0     | 0     | 0        | 0         | 0     | 0     |
| 7:15 AM          | 0        | 0          | 0          | 0     | 0     | 0      | 0      | 0     | 0          | 0        | 0         | 0     | 0     | 0        | 0         | 0     | 0     |
| 7:30 AM          | 0        | 0          | 0          | 0     | 0     | 0      | 0      | 0     | 0          | 0        | 0         | 0     | 0     | 0        | 0         | 0     | 0     |
| 7:45 AM          | 0        | 0          | 0          | 00    | 0     | 0      | 0      | 0     | 0          | 0        | 0         | 0     | 0     | 0        | 00        | 0     | 0     |
| 8:00 AM          | 0        | 0          | 0          | 0     | 0     | 0      | 0      | 0     | 0          | 0        | 0         | 0     | 0     | 0        | 0         | 0     | 0     |
| 8:15 AM          | 0        | 0          | 0          | 0     | 0     | 0      | 0      | 0     | 0          | 0        | 0         | 0     | 0     | 0        | 0         | 0     | 0     |
| 8:30 AM          | 0        | 0          | 0          | 0     | 0     | 0      | 0      | 0     | 0          | 0        | 0         | 0     | 0     | 0        | 0         | 0     | 0     |
| 8:45 AM          | 0        | 0          | 0          | 0     | 0     | 0      | 0      | 0     | 0          | 0        | 0         | 0     | 0     | 0        | 0         | 0     | 0     |
|                  |          |            |            |       |       |        |        |       |            |          |           |       |       |          |           |       |       |
|                  | NL       | NT         | NR         | NU    | SL    | ST     | SR     | SU    | EL         | ET       | ER        | EU    | WL    | WT       | WR        | WU    | TOTAL |
| TOTAL VOLUMES :  | 0        | 0          | 0          | 0     | 0     | 0      | 0      | 0     | 0          | 0        | 0         | 0     | 0     | 0        | 0         | 0     | 0     |
| APPROACH %'s:    |          |            |            |       |       |        |        |       |            |          |           |       |       |          |           |       |       |
| PEAK HR :        |          | 07:00 AM   | - 08:00 AM |       |       |        |        |       |            |          |           |       |       |          |           |       | TOTAL |
| PEAK HR VOL:     | 0        | 0          | 0          | 0     | 0     | 0      | 0      | 0     | 0          | 0        | 0         | 0     | 0     | 0        | 0         | 0     | 0     |
| PEAK HR FACTOR : | 0.000    | 0.000      | 0.000      | 0.000 | 0.000 | 0.000  | 0.000  | 0.000 | 0.000      | 0.000    | 0.000     | 0.000 | 0.000 | 0.000    | 0.000     | 0.000 |       |
|                  |          |            |            |       |       |        |        |       |            |          |           |       |       |          |           |       | II F  |

|                 |      | NORT     | HBOUND     |       |       | SOUT  | HBOUND |       |       | EAST  | BOUND |       |       | WEST  | BOUND |       |       |
|-----------------|------|----------|------------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| PM              | 0    | 0        | 0          | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       |
|                 | NL   | NT       | NR         | NU    | SL    | ST    | SR     | SU    | EL    | ET    | ER    | EU    | WL    | WT    | WR    | WU    | TOTAL |
| 4:00 PM         | 0    | 0        | 0          | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 4:15 PM         | 0    | 0        | 0          | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 4:30 PM         | 0    | 0        | 0          | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 4:45 PM         | 0    | 0        | 0          | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 5:00 PM         | 0    | 0        | 0          | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 5:15 PM         | 0    | 0        | 0          | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 5:30 PM         | 0    | 0        | 0          | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 5:45 PM         | 0    | 0        | 0          | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
|                 |      |          |            |       |       |       |        |       |       |       |       |       |       |       |       |       |       |
|                 | NL   | NT       | NR         | NU    | SL    | ST    | SR     | SU    | EL    | ET    | ER    | EU    | WL    | WT    | WR    | WU    | TOTAL |
| TOTAL VOLUMES:  | 0    | 0        | 0          | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| APPROACH %'s:   |      |          |            |       |       |       |        |       |       |       |       |       |       |       |       |       |       |
| PEAK HR:        |      | 04:00 PM | - 05:00 PM |       |       |       |        |       |       |       |       |       |       |       |       |       | TOTAL |
| PEAK HR VOL :   | 0    | 0        | 0          | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| PEAK HR FACTOR: | 0.00 | 0.000    | 0.000      | 0.000 | 0.000 | 0.000 | 0.000  | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |       |
|                 |      |          |            |       |       |       |        |       |       |       |       |       |       |       |       |       |       |

# Location: McCracken Rock Skip Maze BlvC urning Movement Count City: Vernalis Date: 4/20/2021

### **Pedestrians (Crosswalks)**

| NS/EW Streets:                    | McCrac     | ken Rd      | McCra      | cken Rd      | SR 132/N   | laze Blvd   | SR 132/M   | 1aze Blvd   |       |
|-----------------------------------|------------|-------------|------------|--------------|------------|-------------|------------|-------------|-------|
| AM                                | NORT<br>EB | H LEG<br>WB | SOUT<br>EB | TH LEG<br>WB | EAST<br>NB | Γ LEG<br>SB | WEST<br>NB | T LEG<br>SB | TOTAL |
| 7:00 AM                           |            | 0           | 0          | 0            | 0          | 0           | 0          | 0           | 0     |
| 7:15 AM                           |            | 0           | 0          | 0            | 0          | 0           | 0          | 0           | 0     |
| 7:30 AM                           |            | 0           | 0          | 0            | 0          | 0           | 0          | 0           | 0     |
| 7:45 AM                           | 0          | 0           | 0          | 0            | 0          | 0           | 0          | 0           | 0     |
| 8:00 AM                           |            | 0           | 0          | 0            | 0          | 0           | 0          | 0           | 0     |
| 8:15 AM                           | 0          | 0           | 0          | 0            | 0          | 0           | 0          | 0           | 0     |
| 8:30 AM                           | 0          | 0           | 0          | 0            | 0          | 0           | 0          | 0           | 0     |
| 8:45 AM                           | 0          | 0           | 0          | 0            | 0          | 0           | 0          | 0           | 0     |
|                                   | EB         | WB          | EB         | WB           | NB         | SB          | NB         | SB          | TOTAL |
| TOTAL VOLUMES : APPROACH %'s :    | 0          | 0           | 0          | 0            | 0          | 0           | 0          | 0           | 0     |
| PEAK HR:                          | 07:00 AM   | - 08:00 AM  |            |              |            |             |            |             | TOTAL |
| PEAK HR VOL :<br>PEAK HR FACTOR : | 0          | 0           | 0          | 0            | 0          | 0           | 0          | 0           | 0     |

| PM                                | NORT     | 'H LEG     | SOUT | TH LEG | EAST | Γ LEG | WES | Γ LEG |       |
|-----------------------------------|----------|------------|------|--------|------|-------|-----|-------|-------|
| PIVI                              | EB       | WB         | EB   | WB     | NB   | SB    | NB  | SB    | TOTAL |
| 4:00 PM                           | 0        | 0          | 0    | 0      | 0    | 0     | 0   | 0     | 0     |
| 4:15 PM                           | 0        | 0          | 0    | 0      | 0    | 0     | 0   | 0     | 0     |
| 4:30 PM                           | 0        | 0          | 0    | 0      | 0    | 0     | 0   | 0     | 0     |
| 4:45 PM                           | 0        | 0          | 0    | 0      | 0    | 0     | 0   | 0     | 0     |
| 5:00 PM                           | 0        | 0          | 0    | 0      | 0    | 0     | 0   | 0     | 0     |
| 5:15 PM                           | 0        | 0          | 0    | 0      | 0    | 0     | 0   | 0     | 0     |
| 5:30 PM                           | 0        | 0          | 0    | 0      | 0    | 0     | 0   | 0     | 0     |
| 5:45 PM                           | 0        | 0          | 0    | 0      | 0    | 0     | 0   | 0     | 0     |
|                                   |          |            |      |        |      |       |     |       |       |
|                                   | EB       | WB         | EB   | WB     | NB   | SB    | NB  | SB    | TOTAL |
| TOTAL VOLUMES :<br>APPROACH %'s : | 0        | 0          | 0    | 0      | 0    | 0     | 0   | 0     | 0     |
| PEAK HR :                         | 04:00 PM | - 05:00 PM |      |        |      |       |     |       | TOTAL |
| PEAK HR VOL :<br>PEAK HR FACTOR : |          | 0          | 0    | 0      | 0    | 0     | 0   | 0     | 0     |
|                                   |          |            |      |        |      |       |     |       |       |

### 2: SR 132/MAZE BLVD & MCCRACKEN RD Performance by approach

| Approach           | EB  | WB   | NB   | SB   | All |
|--------------------|-----|------|------|------|-----|
| Denied Del/Veh (s) | 0.0 | 1.2  | 0.1  | 0.0  | 1.0 |
| Total Del/Veh (s)  | 0.7 | 11.2 | 14.4 | 10.9 | 9.2 |

### Intersection: 2: SR 132/MAZE BLVD & MCCRACKEN RD

| Movement              | EB  | WB   | NB   | SB  |
|-----------------------|-----|------|------|-----|
| Directions Served     | LTR | LTR  | LTR  | LTR |
| Maximum Queue (ft)    | 5   | 56   | 70   | 54  |
| Average Queue (ft)    | 0   | 2    | 18   | 10  |
| 95th Queue (ft)       | 4   | 25   | 53   | 38  |
| Link Distance (ft)    | 427 | 4564 | 2033 | 329 |
| Upstream Blk Time (%) |     |      |      |     |
| Queuing Penalty (veh) |     |      |      |     |
| Storage Bay Dist (ft) |     |      |      |     |
| Storage Blk Time (%)  |     |      |      |     |
| Queuing Penalty (veh) |     |      |      |     |

| Intersection           |        |       |      |        |      |       |        |       |       |        |       |       |
|------------------------|--------|-------|------|--------|------|-------|--------|-------|-------|--------|-------|-------|
| Int Delay, s/veh       | 1      |       |      |        |      |       |        |       |       |        |       |       |
| Movement               | EBL    | EBT   | EBR  | WBL    | WBT  | WBR   | NBL    | NBT   | NBR   | SBL    | SBT   | SBR   |
| Lane Configurations    |        | 4     |      |        | 4    |       |        | 4     |       |        | 4     |       |
| Traffic Vol, veh/h     | 0      | 254   | 1    | 6      | 1009 | 0     | 3      | 12    | 3     | 0      | 8     | 2     |
| Future Vol, veh/h      | 0      | 254   | 1    | 6      | 1009 | 0     | 3      | 12    | 3     | 0      | 8     | 2     |
| Conflicting Peds, #/hr | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0     | 0     | 0      | 0     | 0     |
| Sign Control           | Free   | Free  | Free | Free   | Free | Free  | Stop   | Stop  | Stop  | Stop   | Stop  | Stop  |
| RT Channelized         | -      | -     | None | -      | -    | None  | -      | -     | None  | -      | -     | None  |
| Storage Length         | -      | -     | -    | -      | -    | -     | -      | -     | -     | -      | -     | -     |
| Veh in Median Storage  | ,# -   | 0     | -    | -      | 0    | -     | -      | 0     | -     | -      | 0     | -     |
| Grade, %               | -      | 0     | -    | -      | 0    | -     | -      | 0     | -     | -      | 0     | -     |
| Peak Hour Factor       | 94     | 94    | 94   | 79     | 79   | 79    | 75     | 75    | 75    | 80     | 80    | 80    |
| Heavy Vehicles, %      | 85     | 22    | 29   | 2      | 10   | 10    | 20     | 11    | 2     | 25     | 14    | 29    |
| Mvmt Flow              | 0      | 270   | 1    | 8      | 1277 | 0     | 4      | 16    | 4     | 0      | 10    | 3     |
|                        |        |       |      |        |      |       |        |       |       |        |       |       |
| Major/Minor N          | Major1 |       | N    | Major2 |      | ľ     | Minor1 |       |       | Minor2 |       |       |
| Conflicting Flow All   | 1277   | 0     | 0    | 271    | 0    | 0     | 1571   | 1564  | 271   | 1574   | 1564  | 1277  |
| Stage 1                | -      | -     | -    |        | -    | -     | 271    | 271   |       | 1293   | 1293  | -     |
| Stage 2                | _      | -     | _    | _      | _    | _     | 1300   | 1293  | _     | 281    | 271   | _     |
| Critical Hdwy          | 4.95   | -     | -    | 4.12   | -    | -     | 7.3    | 6.61  | 6.22  | 7.35   | 6.64  | 6.49  |
| Critical Hdwy Stg 1    | -      | _     | _    | -      | _    | -     | 6.3    | 5.61  | -     | 6.35   | 5.64  | -     |
| Critical Hdwy Stg 2    | _      | -     | -    | -      | _    | -     | 6.3    | 5.61  | _     | 6.35   | 5.64  | _     |
| Follow-up Hdwy         | 2.965  | _     | _    | 2.218  | _    | -     | 3.68   | 4.099 | 3.318 | 3.725  | 4.126 | 3.561 |
| Pot Cap-1 Maneuver     | 339    | -     | -    | 1292   | _    | -     | 81     | 106   | 768   | 79     | 105   | 178   |
| Stage 1                | -      | _     | _    | -      | _    | -     | 697    | 669   | -     | 179    | 221   | -     |
| Stage 2                | -      | -     | -    | -      | -    | -     | 182    | 224   | -     | 678    | 664   | -     |
| Platoon blocked, %     |        | _     | _    |        | _    | _     | .02    |       |       | 0.0    | 001   |       |
| Mov Cap-1 Maneuver     | 339    | -     | -    | 1292   | -    | -     | 73     | 104   | 768   | 68     | 103   | 178   |
| Mov Cap-2 Maneuver     | -      | -     | _    | -      | _    | -     | 73     | 104   | -     | 68     | 103   | -     |
| Stage 1                | -      | -     | _    | _      | -    | -     | 697    | 669   | -     | 179    | 216   | -     |
| Stage 2                | -      | -     | -    | -      | -    | -     | 168    | 219   | -     | 658    | 664   | -     |
|                        |        |       |      |        |      |       |        |       |       |        |       |       |
| Approach               | EB     |       |      | WB     |      |       | NB     |       |       | SB     |       |       |
| HCM Control Delay, s   | 0      |       |      | 0      |      |       | 45.7   |       |       | 41.1   |       |       |
| HCM LOS                | U      |       |      | U      |      |       |        |       |       |        |       |       |
| HCIVI LUS              |        |       |      |        |      |       | E      |       |       | E      |       |       |
|                        |        |       |      |        |      |       |        |       |       |        |       |       |
| Minor Lane/Major Mvm   | t N    | NBLn1 | EBL  | EBT    | EBR  | WBL   | WBT    | WBR:  |       |        |       |       |
| Capacity (veh/h)       |        | 112   | 339  | -      | -    | 1292  | -      | -     | 112   |        |       |       |
| HCM Lane V/C Ratio     |        | 0.214 | -    | -      | -    | 0.006 | -      | -     | 0.112 |        |       |       |
| HCM Control Delay (s)  |        | 45.7  | 0    | -      | -    | 7.8   | 0      | -     | 41.1  |        |       |       |
| HCM Lane LOS           |        | Е     | Α    | -      | -    | Α     | Α      | -     | Е     |        |       |       |
| HCM 95th %tile Q(veh)  |        | 8.0   | 0    | -      | -    | 0     | -      | -     | 0.4   |        |       |       |
|                        |        |       |      |        |      |       |        |       |       |        |       |       |

### 2: SR 132/MAZE BLVD & MCCRACKEN RD Performance by approach

| Approach           | EB  | WB  | NB   | SB   | All |
|--------------------|-----|-----|------|------|-----|
| Denied Del/Veh (s) | 0.0 | 0.3 | 0.1  | 0.0  | 0.1 |
| Total Del/Veh (s)  | 1.5 | 5.9 | 12.6 | 10.4 | 3.2 |

# Intersection: 2: SR 132/MAZE BLVD & MCCRACKEN RD

| Movement              | EB  | WB   | NB   | SB  |
|-----------------------|-----|------|------|-----|
| Directions Served     | LTR | LTR  | LTR  | LTR |
| Maximum Queue (ft)    | 5   | 20   | 55   | 59  |
| Average Queue (ft)    | 0   | 1    | 16   | 19  |
| 95th Queue (ft)       | 5   | 12   | 45   | 50  |
| Link Distance (ft)    | 427 | 4564 | 2033 | 329 |
| Upstream Blk Time (%) |     |      |      |     |
| Queuing Penalty (veh) |     |      |      |     |
| Storage Bay Dist (ft) |     |      |      |     |
| Storage Blk Time (%)  |     |      |      |     |
| Queuing Penalty (veh) |     |      |      |     |

| Intersection           |          |           |      |        |          |           |        |       |           |        |      |       |
|------------------------|----------|-----------|------|--------|----------|-----------|--------|-------|-----------|--------|------|-------|
| Int Delay, s/veh       | 1.4      |           |      |        |          |           |        |       |           |        |      |       |
| Movement               | EBL      | EBT       | EBR  | WBL    | WBT      | WBR       | NBL    | NBT   | NBR       | SBL    | SBT  | SBR   |
| Lane Configurations    |          | 4         |      |        | 4        |           |        | 4     |           |        | 4    |       |
| Traffic Vol, veh/h     | 0        | 969       | 2    | 1      | 409      | 2         | 1      | 7     | 11        | 7      | 14   | 0     |
| Future Vol, veh/h      | 0        | 969       | 2    | 1      | 409      | 2         | 1      | 7     | 11        | 7      | 14   | 0     |
| Conflicting Peds, #/hr | 0        | 0         | 0    | 0      | 0        | 0         | 0      | 0     | 0         | 0      | 0    | 0     |
| Sign Control           | Free     | Free      | Free | Free   | Free     | Free      | Stop   | Stop  | Stop      | Stop   | Stop | Stop  |
| RT Channelized         | -        | -         | None | -      | -        | None      | -      | -     | None      | -      | -    | None  |
| Storage Length         | -        | -         | -    | -      | -        | -         | -      | -     | -         | -      | -    | -     |
| Veh in Median Storage, | # -      | 0         | -    | -      | 0        | -         | -      | 0     | -         | -      | 0    | -     |
| Grade, %               | -        | 0         | -    | -      | 0        | -         | -      | 0     | -         | -      | 0    | -     |
| Peak Hour Factor       | 90       | 90        | 90   | 93     | 93       | 93        | 59     | 59    | 59        | 92     | 92   | 92    |
| Heavy Vehicles, %      | 28       | 5         | 22   | 2      | 11       | 29        | 22     | 13    | 2         | 18     | 10   | 33    |
| Mvmt Flow              | 0        | 1077      | 2    | 1      | 440      | 2         | 2      | 12    | 19        | 8      | 15   | 0     |
|                        |          |           |      |        |          |           |        |       |           |        |      |       |
| Major/Minor N          | 1ajor1   |           | ľ    | Major2 |          | 1         | Minor1 |       |           | Minor2 |      |       |
| Conflicting Flow All   | 442      | 0         | 0    | 1079   | 0        | 0         | 1529   | 1522  | 1078      | 1537   | 1522 | 441   |
| Stage 1                | -        | -         | -    | -      | -        | -         | 1078   | 1078  | -         | 443    | 443  | -     |
| Stage 2                | -        | -         | -    | -      | -        | -         | 451    | 444   | -         | 1094   | 1079 | -     |
| Critical Hdwy          | 4.38     | -         | -    | 4.12   | -        | -         | 7.32   | 6.63  | 6.22      | 7.28   | 6.6  | 6.53  |
| Critical Hdwy Stg 1    | -        | -         | -    | -      | -        | -         | 6.32   | 5.63  | -         | 6.28   | 5.6  | -     |
| Critical Hdwy Stg 2    | -        | -         | -    | -      | -        | -         | 6.32   | 5.63  | -         | 6.28   | 5.6  | -     |
| Follow-up Hdwy         | 2.452    | -         | -    | 2.218  | -        | -         | 3.698  | 4.117 | 3.318     | 3.662  | 4.09 | 3.597 |
| Pot Cap-1 Maneuver     | 993      | -         | -    | 646    | -        | -         | 86     | 112   | 266       | 87     | 114  | 556   |
| Stage 1                | -        | -         | -    | -      | -        | -         | 243    | 282   | -         | 564    | 562  | -     |
| Stage 2                | -        | -         | -    | -      | -        | -         | 551    | 557   | -         | 242    | 285  | -     |
| Platoon blocked, %     |          | -         | -    |        | -        | -         |        |       |           |        |      |       |
| Mov Cap-1 Maneuver     | 993      | -         | -    | 646    | -        | -         | 77     | 112   | 266       | 74     | 114  | 556   |
| Mov Cap-2 Maneuver     | -        | -         | -    | -      | -        | -         | 77     | 112   | -         | 74     | 114  | -     |
| Stage 1                | -        | -         | -    | -      | -        | -         | 243    | 282   | -         | 564    | 561  | -     |
| Stage 2                | -        | -         | -    | -      | -        | -         | 535    | 556   | -         | 216    | 285  | -     |
|                        |          |           |      |        |          |           |        |       |           |        |      |       |
| Approach               | EB       |           |      | WB     |          |           | NB     |       |           | SB     |      |       |
| HCM Control Delay, s   | 0        |           |      | 0      |          |           | 32.4   |       |           | 53.2   |      |       |
| HCM LOS                |          |           |      |        |          |           | D      |       |           | F      |      |       |
|                        |          |           |      |        |          |           |        |       |           | •      |      |       |
| Minor Lane/Major Mvmt  | <u> </u> | NBLn1     | EBL  | EBT    | EBR      | WBL       | WBT    | WBR:  | SRI n1    |        |      |       |
| Capacity (veh/h)       | I        | 163       | 993  | LDI    | LDK<br>- | 646       | -      | WDK . | 97        |        |      |       |
| HCM Lane V/C Ratio     |          | 0.198     | 773  |        |          | 0.002     | -      |       | 0.235     |        |      |       |
| HCM Control Delay (s)  |          | 32.4      | 0    | -      | -        | 10.6      | 0      | -     | 53.2      |        |      |       |
| HCM Lane LOS           |          | 32.4<br>D | A    | -      | -        | 10.6<br>B | A      | -     | 55.2<br>F |        |      |       |
| HCM 95th %tile Q(veh)  |          | 0.7       | 0    | -      | -        | 0         | - A    | _     | 0.8       |        |      |       |
| HOW FOUT FOUTE Q(VEII) |          | 0.7       | U    | _      | _        | U         |        | _     | 0.0       |        |      |       |

| Approach           | EB  | WB  | SB   | All |
|--------------------|-----|-----|------|-----|
| Denied Del/Veh (s) | 0.2 | 0.0 | 0.1  | 0.1 |
| Total Del/Veh (s)  | 7.0 | 2.5 | 22.2 | 4.4 |

### 2: SR 132/MAZE BLVD & MCCRACKEN RD Performance by approach

| Approach           | EB  | WB   | NB   | SB   | All  |
|--------------------|-----|------|------|------|------|
| Denied Del/Veh (s) | 0.0 | 1.4  | 0.1  | 0.1  | 1.1  |
| Total Del/Veh (s)  | 2.1 | 13.0 | 44.2 | 47.8 | 13.0 |

#### 3: MCCRACKEN RD & EAST PROJECT ACCESS Performance by approach

| Approach           |
|--------------------|
| Denied Del/Veh (s) |
| Total Del/Veh (s)  |

| Denied Del/Veh (s) | 1.0  |  |
|--------------------|------|--|
| Total Del/Veh (s)  | 26.7 |  |

| Movement              | EB   | WB  | SB  |
|-----------------------|------|-----|-----|
| Directions Served     | LT   | TR  | LR  |
| Maximum Queue (ft)    | 148  | 14  | 119 |
| Average Queue (ft)    | 30   | 1   | 45  |
| 95th Queue (ft)       | 109  | 8   | 90  |
| Link Distance (ft)    | 5016 | 427 | 541 |
| Upstream Blk Time (%) |      |     |     |
| Queuing Penalty (veh) |      |     |     |
| Storage Bay Dist (ft) |      |     |     |
| Storage Blk Time (%)  |      |     |     |
| Queuing Penalty (veh) |      |     |     |

### Intersection: 2: SR 132/MAZE BLVD & MCCRACKEN RD

| Movement              | EB  | WB   | NB   | SB  |
|-----------------------|-----|------|------|-----|
| Directions Served     | LTR | LTR  | LTR  | LTR |
| Maximum Queue (ft)    | 180 | 59   | 129  | 179 |
| Average Queue (ft)    | 14  | 4    | 34   | 59  |
| 95th Queue (ft)       | 92  | 27   | 94   | 152 |
| Link Distance (ft)    | 427 | 4564 | 2033 | 329 |
| Upstream Blk Time (%) | 0   |      |      | 0   |
| Queuing Penalty (veh) | 0   |      |      | 0   |
| Storage Bay Dist (ft) |     |      |      |     |
| Storage Blk Time (%)  |     |      |      |     |
| Queuing Penalty (veh) |     |      |      |     |

### Intersection: 3: MCCRACKEN RD & EAST PROJECT ACCESS

| Movement              | EB  | NB  |
|-----------------------|-----|-----|
| Directions Served     | LR  | LT  |
| Maximum Queue (ft)    | 73  | 40  |
| Average Queue (ft)    | 30  | 2   |
| 95th Queue (ft)       | 65  | 14  |
| Link Distance (ft)    | 534 | 329 |
| Upstream Blk Time (%) |     |     |
| Queuing Penalty (veh) |     |     |
| Storage Bay Dist (ft) |     |     |
| Storage Blk Time (%)  |     |     |
| Queuing Penalty (veh) |     |     |

# **Network Summary**

| Intersection           |        |       |      |        |      |       |           |       |        |        |       |       |
|------------------------|--------|-------|------|--------|------|-------|-----------|-------|--------|--------|-------|-------|
| Int Delay, s/veh       | 6.8    |       |      |        |      |       |           |       |        |        |       |       |
| Movement               | EBL    | EBT   | EBR  | WBL    | WBT  | WBR   | NBL       | NBT   | NBR    | SBL    | SBT   | SBR   |
| Lane Configurations    |        | 4     |      |        | 4    |       |           | 4     |        |        | 4     |       |
| Traffic Vol, veh/h     | 7      | 249   | 7    | 6      | 974  | 52    | 10        | 19    | 3      | 20     | 14    | 21    |
| Future Vol, veh/h      | 7      | 249   | 7    | 6      | 974  | 52    | 10        | 19    | 3      | 20     | 14    | 21    |
| Conflicting Peds, #/hr | 0      | 0     | 0    | 0      | 0    | 0     | 0         | 0     | 0      | 0      | 0     | 0     |
| Sign Control           | Free   | Free  | Free | Free   | Free | Free  | Stop      | Stop  | Stop   | Stop   | Stop  | Stop  |
| RT Channelized         | -      | -     | None | -      | -    | None  | -         | -     | None   | -      | -     | None  |
| Storage Length         | -      | -     | -    | -      | -    | -     | -         | -     | -      | -      | -     | -     |
| Veh in Median Storage  | 2,# -  | 0     | -    | -      | 0    | -     | -         | 0     | -      | -      | 0     | -     |
| Grade, %               | -      | 0     | -    | -      | 0    | -     | -         | 0     | -      | -      | 0     | -     |
| Peak Hour Factor       | 94     | 94    | 94   | 79     | 79   | 79    | 75        | 75    | 75     | 80     | 80    | 80    |
| Heavy Vehicles, %      | 85     | 22    | 29   | 2      | 10   | 10    | 20        | 11    | 2      | 25     | 14    | 29    |
| Mvmt Flow              | 7      | 265   | 7    | 8      | 1233 | 66    | 13        | 25    | 4      | 25     | 18    | 26    |
|                        |        |       |      |        |      |       |           |       |        |        |       |       |
| Major/Minor N          | Major1 |       |      | Major2 |      | I     | Minor1    |       |        | Minor2 |       |       |
| Conflicting Flow All   | 1299   | 0     | 0    | 272    | 0    | 0     | 1587      | 1598  | 269    | 1579   | 1568  | 1266  |
| Stage 1                | -      | -     | -    |        | -    | -     | 283       | 283   | -      | 1282   | 1282  | -     |
| Stage 2                | -      | -     | -    | -      | -    | -     | 1304      | 1315  | -      | 297    | 286   | -     |
| Critical Hdwy          | 4.95   | -     | -    | 4.12   | -    | -     | 7.3       | 6.61  | 6.22   | 7.35   | 6.64  | 6.49  |
| Critical Hdwy Stg 1    | -      | _     | _    | -      | -    | -     | 6.3       | 5.61  |        | 6.35   | 5.64  | -     |
| Critical Hdwy Stg 2    | -      | -     | -    | _      | -    | -     | 6.3       | 5.61  | -      | 6.35   | 5.64  | _     |
| Follow-up Hdwy         | 2.965  | -     | -    | 2.218  | -    | -     | 3.68      | 4.099 | 3.318  | 3.725  | 4.126 | 3.561 |
| Pot Cap-1 Maneuver     | 331    | -     | -    | 1291   | -    | -     | 79        | 101   | 770    | 78     | 104   | 181   |
| Stage 1                |        | _     | -    | -      | -    | -     | 687       | 661   | -      | 182    | 223   | -     |
| Stage 2                | -      | -     | -    | _      | -    | -     | 181       | 218   | -      | 665    | 654   | -     |
| Platoon blocked, %     |        | _     | _    |        | -    | -     |           |       |        |        |       |       |
| Mov Cap-1 Maneuver     | 331    | -     | -    | 1291   | -    | -     | 56        | 96    | 770    | 60     | 99    | 181   |
| Mov Cap-2 Maneuver     | -      | -     | -    | -      | -    | -     | 56        | 96    | -      | 60     | 99    | -     |
| Stage 1                | -      | -     | -    | -      | -    | -     | 670       | 644   | -      | 177    | 218   | -     |
| Stage 2                | -      | _     | -    | -      | -    | -     | 139       | 213   | -      | 620    | 638   | -     |
| <b>.</b>               |        |       |      |        |      |       |           |       |        |        |       |       |
| Approach               | EB     |       |      | WB     |      |       | NB        |       |        | SB     |       |       |
| HCM Control Delay, s   | 0.4    |       |      | 0      |      |       | 85.6      |       |        | 112.8  |       |       |
| HCM LOS                | J.7    |       |      |        |      |       | 65.6<br>F |       |        | F      |       |       |
|                        |        |       |      |        |      |       | •         |       |        | ,      |       |       |
| Minor Lane/Major Mvm   | \t     | NBLn1 | EDI  | EBT    | EBR  | \M/DI | WDT       | WBR:  | CDI n1 |        |       |       |
|                        | it l   |       | EBL  |        |      | WBL   | WBT       |       |        |        |       |       |
| Capacity (veh/h)       |        | 84    | 331  | -      | -    | 1291  | -         | -     | 93     |        |       |       |
| HCM Control Polov (c)  |        | 0.508 |      | -      | -    | 0.006 | -         |       | 0.739  |        |       |       |
| HCM Long LOS           |        | 85.6  | 16.1 | 0      | -    | 7.8   | 0         |       | 112.8  |        |       |       |
| HCM Lane LOS           | \      | F     | C    | A      | -    | A     | А         | -     | F      |        |       |       |
| HCM 95th %tile Q(veh)  | )      | 2.2   | 0.1  | -      | -    | 0     | -         | -     | 3.8    |        |       |       |

| Approach           | EB   | WB  | SB   | All  |
|--------------------|------|-----|------|------|
| Denied Del/Veh (s) | 1.1  | 0.0 | 0.1  | 0.7  |
| Total Del/Veh (s)  | 13.6 | 1.3 | 17.6 | 10.3 |

# 2: SR 132/MAZE BLVD & MCCRACKEN RD Performance by approach

| Approach           | EB WB   | NB S    | B All  |
|--------------------|---------|---------|--------|
| Denied Del/Veh (s) | 0.1 0.4 | 0.1     | .0 0.2 |
| Total Del/Veh (s)  | 2.5 6.0 | 29.8 31 |        |

#### 3: MCCRACKEN RD & EAST PROJECT ACCESS Performance by approach

| Approach           |
|--------------------|
| Denied Del/Veh (s) |
| Total Del/Veh (s)  |

| Denied Del/Veh (s) | 0.8  |  |
|--------------------|------|--|
| Total Del/Veh (s)  | 24.5 |  |

| Movement              | EB   | WB  | SB  |
|-----------------------|------|-----|-----|
| Directions Served     | LT   | TR  | LR  |
| Maximum Queue (ft)    | 202  | 16  | 105 |
| Average Queue (ft)    | 42   | 1   | 37  |
| 95th Queue (ft)       | 136  | 8   | 79  |
| Link Distance (ft)    | 5016 | 427 | 541 |
| Upstream Blk Time (%) |      |     |     |
| Queuing Penalty (veh) |      |     |     |
| Storage Bay Dist (ft) |      |     |     |
| Storage Blk Time (%)  |      |     |     |
| Queuing Penalty (veh) |      |     |     |

### Intersection: 2: SR 132/MAZE BLVD & MCCRACKEN RD

| Movement              | EB  | WB   | NB   | SB  |
|-----------------------|-----|------|------|-----|
| Directions Served     | LTR | LTR  | LTR  | LTR |
| Maximum Queue (ft)    | 182 | 24   | 99   | 172 |
| Average Queue (ft)    | 16  | 1    | 32   | 65  |
| 95th Queue (ft)       | 91  | 12   | 79   | 134 |
| Link Distance (ft)    | 427 | 4564 | 2033 | 329 |
| Upstream Blk Time (%) | 0   |      |      |     |
| Queuing Penalty (veh) | 0   |      |      |     |
| Storage Bay Dist (ft) |     |      |      |     |
| Storage Blk Time (%)  |     |      |      |     |
| Queuing Penalty (veh) |     |      |      |     |

### Intersection: 3: MCCRACKEN RD & EAST PROJECT ACCESS

| Movement              | EB  | NB  |
|-----------------------|-----|-----|
| Directions Served     | LR  | LT  |
| Maximum Queue (ft)    | 82  | 31  |
| Average Queue (ft)    | 40  | 2   |
| 95th Queue (ft)       | 72  | 14  |
| Link Distance (ft)    | 534 | 329 |
| Upstream Blk Time (%) |     |     |
| Queuing Penalty (veh) |     |     |
| Storage Bay Dist (ft) |     |     |
| Storage Blk Time (%)  |     |     |
| Queuing Penalty (veh) |     |     |

# **Network Summary**

| Int Delay, s/veh  Movement  Lane Configurations  Traffic Vol, veh/h  Future Vol, veh/h | 1.8<br>EBL |          |          |      |          |       |
|--|------------|----------|----------|------|----------|-------|
| Lane Configurations<br>Traffic Vol, veh/h  | EBL        |          |          |      |          |       |
| Lane Configurations<br>Traffic Vol, veh/h  | LDL        | EBT      | WBT      | WBR  | SBL      | SBR   |
| Traffic Vol, veh/h   |            |          |          | אטוע |          | אוטכ  |
|  | Γ/         | <b>4</b> | <b>}</b> | 22   | <b>\</b> | ۵E    |
| FUTURE VAL VEN/N   | 56         | 931      | 400      | 23   | 28       | 25    |
|  | 56         | 931      | 400      | 23   | 28       | 25    |
| Conflicting Peds, #/h  |            | 0        | 0        | 0    | 0        | 0     |
| Sign Control   | Free       | Free     | Free     | Free | Stop     | Stop  |
| RT Channelized   | -          | None     | -        | None | -        | None  |
| Storage Length   | -          | -        | -        | -    | 0        | -     |
| Veh in Median Storag   | ge,# -     | 0        | 0        | -    | 0        | -     |
| Grade, %   | -          | 0        | 0        | -    | 0        | -     |
| Peak Hour Factor   | 92         | 90       | 93       | 92   | 92       | 92    |
| Heavy Vehicles, %  | 5          | 5        | 11       | 30   | 18       | 12    |
| Mvmt Flow  | 61         | 1034     | 430      | 25   | 30       | 27    |
| IVIVIIIL I IOVV  | 01         | 1034     | 430      | 23   | 30       | 21    |
|  |            |          |          |      |          |       |
| Major/Minor  | Major1     | N        | Major2   | N    | Minor2   |       |
| Conflicting Flow All   | 455        | 0        |          | 0    | 1599     | 443   |
| Stage 1  | -          | -        | _        | -    | 443      | -     |
| Stage 2  | -          | _        | _        | -    | 1156     | -     |
| Critical Hdwy  | 4.15       | _        | _        | _    | 6.58     | 6.32  |
| Critical Hdwy Stg 1  |            | _        | _        | _    | 5.58     | 0.52  |
|  |            | -        | -        |      | 5.58     |       |
| Critical Hdwy Stg 2  | - 2.45     | -        | -        | -    |          | 2 400 |
| Follow-up Hdwy   | 2.245      | -        | -        |      | 3.662    |       |
| Pot Cap-1 Maneuver   | 1090       | -        | -        | -    | 107      | 594   |
| Stage 1  | -          | -        | -        | -    | 615      | -     |
| Stage 2  | -          | -        | -        | -    | 279      | -     |
| Platoon blocked, %   |            | -        | -        | -    |          |       |
| Mov Cap-1 Maneuve  | r 1090     | -        | -        | -    | 93       | 594   |
| Mov Cap-2 Maneuve  |            | -        | -        | -    | 93       | -     |
| Stage 1  | _          | _        | _        | _    | 534      | _     |
| Stage 2  | -          | _        | _        | _    | 279      | _     |
| Stage 2  |            |          |          |      | 217      |       |
|  |            |          |          |      |          |       |
| Approach   | EB         |          | WB       |      | SB       |       |
| HCM Control Delay,   | s 0.5      |          | 0        |      | 41.7     |       |
| HCM LOS  |            |          |          |      | Е        |       |
|  |            |          |          |      |          |       |
|  |            |          |          |      |          |       |
| Minor Lane/Major My  | /mt        | EBL      | EBT      | WBT  | WBR S    | SBLn1 |
| Capacity (veh/h)   |            | 1090     | -        | -    | -        | 154   |
| HCM Lane V/C Ratio   | )          | 0.056    | -        | -    | -        | 0.374 |
| HCM Control Delay (  |            | 8.5      | 0        | -    | -        | 41.7  |
| HCM Lane LOS   | -/         | A        | A        | -    | _        | E     |
|  | -h)        | 0.2      | -        | -    | _        | 1.6   |
| HCM 95th %tile Q(ve  | /11/       | 0.2      |          |      |          | 1.0   |

| Intersection           |        |       |          |         |      |          |          |         |         |             |        |          |              |
|------------------------|--------|-------|----------|---------|------|----------|----------|---------|---------|-------------|--------|----------|--------------|
| Int Delay, s/veh       | 20.5   |       |          |         |      |          |          |         |         |             |        |          |              |
| Movement               | EBL    | EBT   | EBR      | WBL     | WBT  | WBR      | NBL      | NBT     | NBR     | SBL         | SBT    | SBR      |              |
| Lane Configurations    |        | 4     |          |         | 4    |          |          | 4       |         |             | 4      |          |              |
| Traffic Vol, veh/h     | 18     | 962   | 9        | 1       | 404  | 28       | 9        | 15      | 11      | 57          | 21     | 9        |              |
| Future Vol, veh/h      | 18     | 962   | 9        | 1       | 404  | 28       | 9        | 15      | 11      | 57          | 21     | 9        |              |
| Conflicting Peds, #/hr | 0      | 0     | 0        | 0       | 0    | 0        | 0        | 0       | 0       | 0           | 0      | 0        |              |
| Sign Control           | Free   | Free  | Free     | Free    | Free | Free     | Stop     | Stop    | Stop    | Stop        | Stop   | Stop     |              |
| RT Channelized         | -      | -     | None     | -       | -    | None     | -        | -       | None    | -           | -      | None     |              |
| Storage Length         | -      | -     | -        | -       | -    | -        | -        | -       | -       | -           | -      | -        |              |
| eh in Median Storage   | e,# -  | 0     | -        | -       | 0    | -        | -        | 0       | -       | -           | 0      | -        |              |
| Grade, %               | -      | 0     | -        | -       | 0    | -        | -        | 0       | -       | -           | 0      | -        |              |
| eak Hour Factor        | 90     | 90    | 90       | 93      | 93   | 93       | 59       | 59      | 59      | 92          | 92     | 92       |              |
| leavy Vehicles, %      | 28     | 5     | 22       | 2       | 11   | 29       | 22       | 13      | 2       | 18          | 10     | 33       |              |
| /lvmt Flow             | 20     | 1069  | 10       | 1       | 434  | 30       | 15       | 25      | 19      | 62          | 23     | 10       |              |
|                        |        |       |          |         |      |          |          |         |         |             |        |          |              |
| ajor/Minor N           | Major1 |       | <u> </u> | Major2  |      |          | Minor1   |         |         | Minor2      |        |          |              |
| Conflicting Flow All   | 464    | 0     | 0        | 1079    | 0    | 0        | 1582     | 1580    | 1074    | 1587        | 1570   | 449      |              |
| Stage 1                | -      | -     | -        | -       | -    | -        | 1114     | 1114    | -       | 451         | 451    | -        |              |
| Stage 2                | -      | -     | -        | -       | -    | -        | 468      | 466     | -       | 1136        | 1119   | -        |              |
| ritical Hdwy           | 4.38   | -     | -        | 4.12    | -    | -        | 7.32     | 6.63    | 6.22    | 7.28        | 6.6    | 6.53     |              |
| ritical Hdwy Stg 1     | -      | -     | -        | -       | -    | -        | 6.32     | 5.63    | -       | 6.28        | 5.6    | -        |              |
| itical Hdwy Stg 2      | -      | -     | -        | -       | -    | -        | 6.32     | 5.63    | -       | 6.28        | 5.6    | -        |              |
| ollow-up Hdwy          | 2.452  | -     | -        | 2.218   | -    | -        | 3.698    | 4.117   | 3.318   | 3.662       | 4.09   | 3.597    |              |
| ot Cap-1 Maneuver      | 974    | -     | -        | 646     | -    | -        | 79       | 103     | 267     | 80          | 106    | 550      |              |
| Stage 1                | -      | -     | -        | -       | -    | -        | 231      | 271     | -       | 558         | 558    | -        |              |
| Stage 2                | -      | -     | -        | -       | -    | -        | 539      | 544     | -       | 229         | 273    | -        |              |
| latoon blocked, %      |        | -     | -        |         | -    | -        |          |         |         |             |        |          |              |
| ov Cap-1 Maneuver      | 974    | -     | -        | 646     | -    | -        | 61       | 98      | 267     | ~ 57        | 100    | 550      |              |
| ov Cap-2 Maneuver      | -      | -     | -        | -       | -    | -        | 61       | 98      | -       | ~ 57        | 100    | -        |              |
| Stage 1                | -      | -     | -        | -       | -    | -        | 219      | 257     | -       | 530         | 557    | -        |              |
| Stage 2                | -      | -     | -        | -       | -    | -        | 507      | 543     | -       | 182         | 259    | -        |              |
|                        |        |       |          |         |      |          |          |         |         |             |        |          |              |
| pproach                | EB     |       |          | WB      |      |          | NB       |         |         | SB          |        |          |              |
| CM Control Delay, s    | 0.2    |       |          | 0       |      |          | 80.7     |         |         | \$ 320      |        |          |              |
| ICM LOS                |        |       |          |         |      |          | F        |         |         | F           |        |          |              |
|                        |        |       |          |         |      |          |          |         |         |             |        |          |              |
| linor Lane/Major Mvm   | nt ſ   | VBLn1 | EBL      | EBT     | EBR  | WBL      | WBT      | WBR :   | SBLn1   |             |        |          |              |
| Capacity (veh/h)       |        | 102   | 974      | -       | -    | 646      | -        | -       | 71      |             |        |          |              |
| ICM Lane V/C Ratio     |        | 0.582 |          | _       |      | 0.002    | _        |         | 1.332   |             |        |          |              |
| CM Control Delay (s)   |        | 80.7  | 8.8      | 0       | -    | 10.6     | 0        |         | \$ 320  |             |        |          |              |
| CM Lane LOS            |        | F     | A        | A       | _    | В        | A        | -       | F       |             |        |          |              |
| ICM 95th %tile Q(veh)  | )      | 2.8   | 0.1      | -       | -    | 0        | -        | -       | 7.6     |             |        |          |              |
| lotes                  |        |       |          |         |      |          |          |         |         |             |        |          |              |
| : Volume exceeds cap   | nacity | \$ D  | elay exc | pade 21 | nns. | +: Com   | nutatio  | n Not D | ofinod  | *. <b>\</b> | maiory | volumo   | in platoon   |
| . Volume exceeds cap   | pacity | φ. Dt | ciay exc | CCU3 31 | JU3  | ⊤. CUIII | pulaliul | וווטנט  | ciiiieu | . All       | majur  | volullie | iii piatuuii |

| Intersection           |          |       |        |              |            |      |
|------------------------|----------|-------|--------|--------------|------------|------|
| Int Delay, s/veh       | 5.7      |       |        |              |            |      |
| Movement               | EBL      | EBR   | NDI    | NDT          | CDT        | SBR  |
|                        |          | EBK   | NBL    | NBT          | SBT        | SBK  |
| Lane Configurations    | <b>Y</b> | //    | Γĵ     | <del>ન</del> | <b>}</b>   | 10   |
| Traffic Vol, veh/h     | 11       | 66    | 52     | 9            | 21         | 12   |
| Future Vol, veh/h      | 11       | 66    | 52     | 9            | 21         | 12   |
| Conflicting Peds, #/hr | 0        | 0     | 0      | 0            | 0          | 0    |
| Sign Control           | Stop     | Stop  | Free   | Free         | Free       | Free |
| RT Channelized         | -        | None  | -      | None         | -          | None |
| Storage Length         | 0        | -     | -      | -            | -          | -    |
| Veh in Median Storage  |          | -     | -      | 0            | 0          | -    |
| Grade, %               | 0        | -     | -      | 0            | 0          | -    |
| Peak Hour Factor       | 92       | 92    | 92     | 59           | 48         | 92   |
| Heavy Vehicles, %      | 2        | 23    | 21     | 2            | 2          | 2    |
| Mvmt Flow              | 12       | 72    | 57     | 15           | 44         | 13   |
|                        |          |       |        |              |            |      |
| Major/Minor I          | Minor2   | 1     | Major1 | N            | Major2     |      |
| Conflicting Flow All   | 180      | 51    | 57     | 0            | - viajoi 2 | 0    |
| Stage 1                | 51       | -     | -      | -            | _          | -    |
| Stage 2                | 129      | _     | _      | _            |            |      |
| Critical Hdwy          | 6.42     | 6.43  | 4.31   |              | -          | _    |
| Critical Hdwy Stg 1    | 5.42     | 0.43  | 4.31   | -            | -          | -    |
| Critical Hdwy Stg 2    | 5.42     | -     | _      | _            | -          | _    |
|                        |          |       | 2 200  | -            | -          | -    |
| Follow-up Hdwy         | 3.518    |       | 2.389  | _            | -          | _    |
| Pot Cap-1 Maneuver     | 810      | 961   | 1434   | -            | -          | -    |
| Stage 1                | 971      | -     |        |              | _          | -    |
| Stage 2                | 897      | -     | -      | -            | -          | -    |
| Platoon blocked, %     | 770      | 0/4   | 1.10.1 | -            | -          | -    |
| Mov Cap-1 Maneuver     | 778      | 961   | 1434   | -            | -          | -    |
| Mov Cap-2 Maneuver     | 778      | -     | -      | -            | -          | -    |
| Stage 1                | 932      | -     | -      | -            | -          | -    |
| Stage 2                | 897      | -     | -      | -            | -          | -    |
|                        |          |       |        |              |            |      |
| Approach               | EB       |       | NB     |              | SB         |      |
| HCM Control Delay, s   | 9.3      |       | 6      |              | 0          |      |
| HCM LOS                | 7.3<br>A |       | U      |              | U          |      |
| FICIVI LOS             | A        |       |        |              |            |      |
|                        |          |       |        |              |            |      |
| Minor Lane/Major Mvm   | nt       | NBL   | NBT F  | EBLn1        | SBT        | SBR  |
| Capacity (veh/h)       |          | 1434  | -      | 930          | -          | -    |
| HCM Lane V/C Ratio     |          | 0.039 | -      | 0.09         | -          | -    |
| HCM Control Delay (s)  |          | 7.6   | 0      | 9.3          | -          | -    |
| HCM Lane LOS           |          | Α     | Α      | Α            | -          | -    |
|                        |          |       |        |              |            |      |
| HCM 95th %tile Q(veh)  | )        | 0.1   | -      | 0.3          | -          | -    |

# 2: SR 132/MAZE BLVD & MCCRACKEN RD Performance by approach

| Approach           | EB  | WB   | NB   | SB   | All  |
|--------------------|-----|------|------|------|------|
| Denied Del/Veh (s) | 0.0 | 2.6  | 0.1  | 0.0  | 1.6  |
| Total Del/Veh (s)  | 1.9 | 15.0 | 96.3 | 50.7 | 11.6 |

# Intersection: 2: SR 132/MAZE BLVD & MCCRACKEN RD

| Movement              | EB  | WB   | NB   | SB  |
|-----------------------|-----|------|------|-----|
| Directions Served     | LTR | LTR  | LTR  | LTR |
| Maximum Queue (ft)    | 3   | 183  | 115  | 78  |
| Average Queue (ft)    | 0   | 12   | 35   | 18  |
| 95th Queue (ft)       | 2   | 91   | 101  | 56  |
| Link Distance (ft)    | 427 | 4564 | 2033 | 330 |
| Upstream Blk Time (%) |     |      |      |     |
| Queuing Penalty (veh) |     |      |      |     |
| Storage Bay Dist (ft) |     |      |      |     |
| Storage Blk Time (%)  |     |      |      |     |
| Queuing Penalty (veh) |     |      |      |     |

| Intersection           |        |       |      |        |      |          |        |        |        |        |       |       |
|------------------------|--------|-------|------|--------|------|----------|--------|--------|--------|--------|-------|-------|
| Int Delay, s/veh       | 3.4    |       |      |        |      |          |        |        |        |        |       |       |
| Movement               | EBL    | EBT   | EBR  | WBL    | WBT  | WBR      | NBL    | NBT    | NBR    | SBL    | SBT   | SBR   |
| Lane Configurations    |        | 4     |      |        | 4    |          |        | 4      |        |        | 4     |       |
| Traffic Vol, veh/h     | 0      | 750   | 5    | 5      | 1295 | 0        | 5      | 15     | 5      | 0      | 10    | 5     |
| Future Vol, veh/h      | 0      | 750   | 5    | 5      | 1295 | 0        | 5      | 15     | 5      | 0      | 10    | 5     |
| Conflicting Peds, #/hr | 0      | 0     | 0    | 0      | 0    | 0        | 0      | 0      | 0      | 0      | 0     | 0     |
| Sign Control           | Free   | Free  | Free | Free   | Free | Free     | Stop   | Stop   | Stop   | Stop   | Stop  | Stop  |
| RT Channelized         | -      | -     | None | -      | -    | None     | -      | -      | None   | -      | -     | None  |
| Storage Length         | -      | -     | -    | -      | -    | -        | -      | -      | -      | -      | -     | -     |
| Veh in Median Storage  | e, # - | 0     | -    | -      | 0    | -        | -      | 0      | -      | -      | 0     | -     |
| Grade, %               | -      | 0     | -    | -      | 0    | -        | -      | 0      | -      | -      | 0     | -     |
| Peak Hour Factor       | 92     | 92    | 92   | 92     | 92   | 92       | 92     | 92     | 92     | 92     | 92    | 92    |
| Heavy Vehicles, %      | 85     | 22    | 29   | 2      | 10   | 10       | 20     | 11     | 2      | 25     | 14    | 29    |
| Mvmt Flow              | 0      | 815   | 5    | 5      | 1408 | 0        | 5      | 16     | 5      | 0      | 11    | 5     |
|                        |        |       |      |        |      |          |        |        |        |        |       |       |
| Major/Minor N          | Major1 |       | ľ    | Major2 |      | ľ        | Minor1 |        | ľ      | Minor2 |       |       |
| Conflicting Flow All   | 1408   | 0     | 0    | 820    | 0    | 0        | 2244   | 2236   | 818    | 2246   | 2238  | 1408  |
| Stage 1                | -      | -     | -    | -      | -    | -        | 818    | 818    | -      | 1418   | 1418  | -     |
| Stage 2                | -      | -     | -    | -      | -    | -        | 1426   | 1418   | -      | 828    | 820   | -     |
| Critical Hdwy          | 4.95   | -     | -    | 4.12   | -    | -        | 7.3    | 6.61   | 6.22   | 7.35   | 6.64  | 6.49  |
| Critical Hdwy Stg 1    | -      | -     | -    | -      | -    | -        | 6.3    | 5.61   | -      | 6.35   | 5.64  | -     |
| Critical Hdwy Stg 2    | -      | -     | -    | -      | -    | -        | 6.3    | 5.61   | -      | 6.35   | 5.64  | -     |
| Follow-up Hdwy         | 2.965  | -     | -    | 2.218  | -    | -        | 3.68   | 4.099  | 3.318  | 3.725  | 4.126 | 3.561 |
| Pot Cap-1 Maneuver     | 296    | -     | -    | 809    | -    | -        | 26     | 40     | 376    | 25     | 39    | 148   |
| Stage 1                | -      | -     | -    | -      | -    | -        | 345    | 377    | -      | 151    | 191   | -     |
| Stage 2                | -      | -     | -    | -      | -    | -        | 153    | 194    | -      | 334    | 372   | -     |
| Platoon blocked, %     |        | -     | -    |        | -    | -        |        |        |        |        |       |       |
| Mov Cap-1 Maneuver     | 296    | -     | -    | 809    | -    | -        | 19     | 39     | 376    | 16     | 38    | 148   |
| Mov Cap-2 Maneuver     | -      | -     | -    | -      | -    | -        | 19     | 39     | -      | 16     | 38    | -     |
| Stage 1                | -      | -     | -    | -      | -    | -        | 345    | 377    | -      | 151    | 186   | -     |
| Stage 2                | -      | -     | -    | -      | -    | -        | 135    | 189    | -      | 315    | 372   | -     |
|                        |        |       |      |        |      |          |        |        |        |        |       |       |
| Approach               | EB     |       |      | WB     |      |          | NB     |        |        | SB     |       |       |
| HCM Control Delay, s   | 0      |       |      | 0      |      |          | 221.6  |        |        | 105.8  |       |       |
| HCM LOS                |        |       |      |        |      |          | F      |        |        | F      |       |       |
|                        |        |       |      |        |      |          |        |        |        |        |       |       |
| Minor Lane/Major Mvm   | nt N   | NBLn1 | EBL  | EBT    | EBR  | WBL      | WBT    | WBR:   | SBI n1 |        |       |       |
| Capacity (veh/h)       | . 1    | 38    | 296  | -      | LDIX | 809      | -      | - 1001 |        |        |       |       |
| HCM Lane V/C Ratio     |        | 0.715 | 290  | -      |      | 0.007    | -      | -      | 0.32   |        |       |       |
| HCM Control Delay (s)  |        | 221.6 | 0    | -      | -    | 9.5      | 0      |        | 105.8  |        |       |       |
| HCM Lane LOS           |        | F     | A    | -      | -    | 7.5<br>A | A      | -      | F      |        |       |       |
| HCM 95th %tile Q(veh)  | )      | 2.6   | 0    | _      | _    | 0        | -      | -      | 1.1    |        |       |       |
| 110W 75W 70W Q(VCH)    |        | 2.0   |      |        |      | 0        |        |        | 1.1    |        |       |       |

# 2: SR 132/MAZE BLVD & MCCRACKEN RD Performance by approach

| Approach           | EB  | WB   | NB    | SB    | All  |
|--------------------|-----|------|-------|-------|------|
| Denied Del/Veh (s) | 0.0 | 1.9  | 0.1   | 60.6  | 1.4  |
| Total Del/Veh (s)  | 2.3 | 15.6 | 667.5 | 775.6 | 20.8 |

# Intersection: 2: SR 132/MAZE BLVD & MCCRACKEN RD

| Movement              | EB  | WB   | NB   | SB  |
|-----------------------|-----|------|------|-----|
| Directions Served     | LTR | LTR  | LTR  | LTR |
| Maximum Queue (ft)    | 3   | 760  | 263  | 296 |
| Average Queue (ft)    | 0   | 75   | 120  | 155 |
| 95th Queue (ft)       | 2   | 412  | 280  | 317 |
| Link Distance (ft)    | 427 | 4564 | 2033 | 329 |
| Upstream Blk Time (%) |     |      |      | 6   |
| Queuing Penalty (veh) |     |      |      | 1   |
| Storage Bay Dist (ft) |     |      |      |     |
| Storage Blk Time (%)  |     |      |      |     |
| Queuing Penalty (veh) |     |      |      |     |

| Intersection           |        |        |          |          |      |        |          |         |        |        |         |           |            |
|------------------------|--------|--------|----------|----------|------|--------|----------|---------|--------|--------|---------|-----------|------------|
| Int Delay, s/veh       | 0      |        |          |          |      |        |          |         |        |        |         |           |            |
| Movement               | EBL    | EBT    | EBR      | WBL      | WBT  | WBR    | NBL      | NBT     | NBR    | SBL    | SBT     | SBR       |            |
| Lane Configurations    |        | 4      |          |          | 4    |        |          | 4       |        |        | 4       |           |            |
| Traffic Vol, veh/h     | 0      | 1600   | 5        | 5        | 1190 | 5      | 5        | 10      | 10     | 10     | 15      | 0         |            |
| uture Vol, veh/h       | 0      | 1600   | 5        | 5        | 1190 | 5      | 5        | 10      | 10     | 10     | 15      | 0         |            |
| Conflicting Peds, #/hr | 0      | 0      | 0        | 0        | 0    | 0      | 0        | 0       | 0      | 0      | 0       | 0         |            |
| Sign Control           | Free   | Free   | Free     | Free     | Free | Free   | Stop     | Stop    | Stop   | Stop   | Stop    | Stop      |            |
| RT Channelized         | -      | -      | None     | -        | -    | None   | -        | -       | None   | -      | -       | None      |            |
| Storage Length         | -      | -      | -        | -        | -    | -      | -        | -       | -      | -      | -       | -         |            |
| /eh in Median Storage  | e,# -  | 0      | -        | -        | 0    | -      | -        | 0       | -      | -      | 0       | -         |            |
| Grade, %               | -      | 0      | -        | -        | 0    | -      | -        | 0       | -      | _      | 0       | -         |            |
| Peak Hour Factor       | 92     | 92     | 92       | 92       | 92   | 92     | 92       | 92      | 92     | 92     | 92      | 92        |            |
| leavy Vehicles, %      | 28     | 5      | 22       | 2        | 11   | 29     | 22       | 13      | 2      | 18     | 10      | 33        |            |
| Nymt Flow              | 0      | 1739   | 5        | 5        | 1293 | 5      | 5        | 11      | 11     | 11     | 16      | 0         |            |
| WWW. Tiow              | U      | 1737   | 5        | <u> </u> | 1270 | J      | J .      |         |        |        | 10      | U         |            |
| Major/Minor I          | Major1 |        | N        | Major2   |      | ı      | Minor1   |         | ı      | Minor2 |         |           |            |
|                        | 1298   | 0      | 0        | 1744     | 0    | 0      | 3056     | 3050    | 1742   | 3059   | 3050    | 1296      |            |
| Conflicting Flow All   |        |        | U        |          |      | U      |          |         |        |        |         |           |            |
| Stage 1                | -      | -      | -        | -        | -    | -      | 1742     | 1742    | -      | 1306   | 1306    | -         |            |
| Stage 2                | 4.20   | -      | -        | -        | -    | -      | 1314     | 1308    | -      | 1753   | 1744    | -<br>/ F2 |            |
| ritical Hdwy           | 4.38   | -      | -        | 4.12     | -    | -      | 7.32     | 6.63    | 6.22   | 7.28   | 6.6     | 6.53      |            |
| Critical Hdwy Stg 1    | -      | -      | -        | -        | -    | -      | 6.32     | 5.63    | -      | 6.28   | 5.6     | -         |            |
| Critical Hdwy Stg 2    | -      | -      | -        | -        | -    | -      | 6.32     | 5.63    | -      | 6.28   | 5.6     | -         |            |
| ollow-up Hdwy          | 2.452  | -      | -        | 2.218    | -    | -      | 3.698    | 4.117   | 3.318  | 3.662  | 4.09    | 3.597     |            |
| ot Cap-1 Maneuver      | 456    | -      | -        | 360      | -    | -      | 6        | 11      | 107    | ~ 7    | ~ 12    | 170       |            |
| Stage 1                | -      | -      | -        | -        | -    | -      | 98       | 132     | -      | 182    | 221     | -         |            |
| Stage 2                | -      | -      | -        | -        | -    | -      | 177      | 218     | -      | 99     | 134     | -         |            |
| Platoon blocked, %     |        | -      | -        |          | -    | -      |          |         |        |        |         |           |            |
| Nov Cap-1 Maneuver     | 456    | -      | -        | 360      | -    | -      | -        | ~ 10    | 107    | -      | ~ 11    | 170       |            |
| Nov Cap-2 Maneuver     | -      | -      | -        | -        | -    | -      | -        | ~ 10    | -      | -      | ~ 11    | -         |            |
| Stage 1                | -      | -      | -        | -        | -    | -      | 98       | 132     | -      | 182    | 210     | -         |            |
| Stage 2                | -      | -      | -        | -        | -    | -      | 155      | 207     | -      | 82     | 134     | -         |            |
|                        |        |        |          |          |      |        |          |         |        |        |         |           |            |
| pproach                | EB     |        |          | WB       |      |        | NB       |         |        | SB     |         |           |            |
| HCM Control Delay, s   | 0      |        |          | 0.1      |      |        |          |         |        |        |         |           |            |
| HCM LOS                |        |        |          |          |      |        | -        |         |        | _      |         |           |            |
|                        |        |        |          |          |      |        |          |         |        |        |         |           |            |
| Minor Lane/Major Mvm   | nt N   | NBLn1  | EBL      | EBT      | EBR  | WBL    | WBT      | WBR:    | SRI n1 |        |         |           |            |
| •                      | it I   | NDLIII |          | LDI      | LDK  |        | VVDI     | WDK.    | ODLIII |        |         |           |            |
| Capacity (veh/h)       |        | -      | 456      | -        | -    | 360    | -        | -       | -      |        |         |           |            |
| ICM Control Polon (a)  |        | -      | -        | -        |      | 0.015  | -        | -       | -      |        |         |           |            |
| ICM Control Delay (s)  |        | -      | 0        | -        | -    | 15.2   | 0        | -       | -      |        |         |           |            |
| ICM Lane LOS           |        | -      | A        | -        | -    | С      | Α        | -       | -      |        |         |           |            |
| HCM 95th %tile Q(veh)  | )      | -      | 0        | -        | -    | 0      | -        | -       | -      |        |         |           |            |
| lotes                  |        |        |          |          |      |        |          |         |        |        |         |           |            |
| : Volume exceeds cap   | pacity | \$: De | elay exc | eeds 3   | 00s  | +: Com | putation | n Not D | efined | *: All | major v | olume i   | in platoon |
|                        |        |        | •        |          |      |        |          |         |        |        | ,       |           |            |

| Approach           | EB WB SB              | All   |
|--------------------|-----------------------|-------|
| Denied Del/Veh (s) | n (s) 781.8 0.1 872.6 | 323.6 |
| Total Del/Veh (s)  | s) 1084.7 5.2 2843.7  | 284.2 |

### 2: SR 132/MAZE BLVD & MCCRACKEN RD Performance by approach

| Approach           | EB   | WB    | NB     | SB     | All   |
|--------------------|------|-------|--------|--------|-------|
| Denied Del/Veh (s) | 10.7 | 602.9 | 0.1    | 336.6  | 529.2 |
| Total Del/Veh (s)  | 98.5 | 63.3  | 1926.3 | 3275.8 | 128.5 |

#### 3: MCCRACKEN RD & EAST PROJECT ACCESS Performance by approach

| Approach           | EB N      | В    | SB    | All   |
|--------------------|-----------|------|-------|-------|
| Denied Del/Veh (s) | 390.1 0.  | 0    | 0.1   | 169.6 |
| Total Del/Veh (s)  | 1733.9 1. | 4 12 | 245.0 | 853.1 |

| Denied Del/Veh (s) | 644.7 |  |
|--------------------|-------|--|
| Total Del/Veh (s)  | 402.0 |  |

| Movement              | EB   | WB  | SB  |
|-----------------------|------|-----|-----|
| Directions Served     | LT   | TR  | LR  |
| Maximum Queue (ft)    | 5067 | 27  | 552 |
| Average Queue (ft)    | 4294 | 2   | 455 |
| 95th Queue (ft)       | 6701 | 15  | 699 |
| Link Distance (ft)    | 5016 | 427 | 541 |
| Upstream Blk Time (%) | 68   |     | 69  |
| Queuing Penalty (veh) | 0    |     | 0   |
| Storage Bay Dist (ft) |      |     |     |
| Storage Blk Time (%)  |      |     |     |
| Queuing Penalty (veh) |      |     |     |

### Intersection: 2: SR 132/MAZE BLVD & MCCRACKEN RD

| Movement              | EB  | WB   | NB   | SB  |
|-----------------------|-----|------|------|-----|
| Directions Served     | LTR | LTR  | LTR  | LTR |
| Maximum Queue (ft)    | 437 | 1771 | 1072 | 334 |
| Average Queue (ft)    | 225 | 187  | 586  | 316 |
| 95th Queue (ft)       | 574 | 1467 | 1128 | 386 |
| Link Distance (ft)    | 427 | 4564 | 2033 | 329 |
| Upstream Blk Time (%) | 50  | 1    |      | 86  |
| Queuing Penalty (veh) | 509 | 0    |      | 53  |
| Storage Bay Dist (ft) |     |      |      |     |
| Storage Blk Time (%)  |     |      |      |     |
| Queuing Penalty (veh) |     |      |      |     |

### Intersection: 3: MCCRACKEN RD & EAST PROJECT ACCESS

| Movement              | EB  | SB   |
|-----------------------|-----|------|
| Directions Served     | LR  | TR   |
| Maximum Queue (ft)    | 544 | 439  |
| Average Queue (ft)    | 356 | 184  |
| 95th Queue (ft)       | 686 | 441  |
| Link Distance (ft)    | 534 | 1659 |
| Upstream Blk Time (%) | 44  |      |
| Queuing Penalty (veh) | 0   |      |
| Storage Bay Dist (ft) |     |      |
| Storage Blk Time (%)  |     |      |
| Queuing Penalty (veh) |     |      |

# **Network Summary**

| ersection                           |            |           |                      |         |          |        |                      |                            |  |
|-------------------------------------|------------|-----------|----------------------|---------|----------|--------|----------------------|----------------------------|--|
| Delay, s/veh                        | 83         |           |                      |         |          |        |                      |                            |  |
| ovement                             | EBL        | EBT       | WBT                  | WBR     | SBL      | SBR    |                      |                            |  |
| ne Configurations                   |            | 4         | <b>1</b>             |         | ¥        | 02.1   |                      |                            |  |
| affic Vol, veh/h                    | 22         | 996       | 2271                 | 35      | 17       | 56     |                      |                            |  |
| ure Vol, veh/h                      | 22         | 996       | 2271                 | 35      | 17       | 56     |                      |                            |  |
| flicting Peds, #/hr                 |            | 0         | 0                    | 0       | 0        | 0      |                      |                            |  |
| n Control                           | Free       | Free      | Free                 | Free    | Stop     | Stop   |                      |                            |  |
| Channelized                         | -          | None      | -                    | None    | -<br>-   | None   |                      |                            |  |
| orage Length                        | _          | -         | _                    | -       | 0        | -      |                      |                            |  |
| h in Median Storag                  |            | 0         | 0                    | -       | 0        | _      |                      |                            |  |
| ade, %                              | go, "<br>- | 0         | 0                    | _       | 0        | _      |                      |                            |  |
| ak Hour Factor                      | 92         | 92        | 92                   | 92      | 92       | 92     |                      |                            |  |
| avy Vehicles, %                     | 9          | 22        | 10                   | 26      | 24       | 4      |                      |                            |  |
| nt Flow                             | 24         | 1083      | 2468                 | 38      | 18       | 61     |                      |                            |  |
| III I IUW                           | 24         | 1003      | 2400                 | - 30    | 10       | UI     |                      |                            |  |
| jor/Minor                           | Major1     | N         | Major2               | N       | Minor2   |        |                      |                            |  |
| flicting Flow All                   | 2506       | 0         | <u>viajoi 2</u><br>- | 0       | 3618     | 2487   |                      |                            |  |
| Stage 1                             | 2300       | -         | _                    | -       | 2487     | 2407   |                      |                            |  |
| Stage 2                             | _          | _         | _                    | -       | 1131     | -      |                      |                            |  |
| ical Hdwy                           | 4.19       | _         | _                    | _       | 6.64     | 6.24   |                      |                            |  |
| ical Hdwy Stg 1                     | 7.17       | _         | _                    | _       | 5.64     | 0.24   |                      |                            |  |
| cal Hdwy Stg 2                      | _          | _         | _                    | _       | 5.64     | _      |                      |                            |  |
| ow-up Hdwy                          | 2.281      | _         | _                    |         | 3.716    | 3.336  |                      |                            |  |
| Cap-1 Maneuver                      |            | _         | _                    | _       | ~ 5      | ~ 37   |                      |                            |  |
| Stage 1                             | 170        | _         | _                    | _       | 55       | - 37   |                      |                            |  |
| Stage 2                             |            |           |                      | _       | 279      | _      |                      |                            |  |
| toon blocked, %                     |            | _         | _                    | _       | 21/      |        |                      |                            |  |
| v Cap-1 Maneuve                     | r 170      | _         | _                    | -       | ~ 3      | ~ 37   |                      |                            |  |
| v Cap-1 Maneuve<br>v Cap-2 Maneuve  |            |           | -                    | -       | ~ 3      | ~ 31   |                      |                            |  |
| Stage 1                             | -          | _         | _                    |         | 36       |        |                      |                            |  |
| Stage 2                             | _          | _         | _                    | _       | 279      | _      |                      |                            |  |
| Stage 2                             | -          | _         |                      | -       | ۷17      |        |                      |                            |  |
| proach                              | EB         |           | WB                   |         | SB       |        |                      |                            |  |
| M Control Delay, s                  |            |           | 0                    | ¢ :     | 3854.1   |        |                      |                            |  |
| M LOS                               | 3 0.0      |           | U                    | Ф       | F        |        |                      |                            |  |
| IVI LUJ                             |            |           |                      |         | r.       |        |                      |                            |  |
| nor Lane/Major Mv                   | ımt .      | EBL       | EBT                  | WBT     | WBR      | SRI n1 |                      |                            |  |
| pacity (veh/h)                      | TIT        | 170       | LDI                  | VVDT    | WDK -    | 10     |                      |                            |  |
| M Lane V/C Ratio                    |            | 0.141     | -                    | -       |          | 7.935  |                      |                            |  |
| M Control Delay (                   |            | 29.6      | 0                    | -       |          | 3854.1 |                      |                            |  |
| vi Contiloi Delay (:<br>Vi Lane LOS | 3)         | 29.0<br>D | A                    |         | ۍ ر<br>- | _      |                      |                            |  |
| M 95th %tile Q(ve                   | h)         | 0.5       | A -                  | -       | -        |        |                      |                            |  |
|                                     | 11)        | 0.5       | _                    | _       | _        | 11.0   |                      |                            |  |
|                                     |            |           |                      |         |          |        |                      |                            |  |
| es<br>'olume exceeds c              |            | 4.5       |                      | eeds 30 | 00       |        | putation Not Defined | *: All major volume in pla |  |

| Intersection           |        |        |          |         |      |          |          |          |        |        |        |          |            |
|------------------------|--------|--------|----------|---------|------|----------|----------|----------|--------|--------|--------|----------|------------|
| Int Delay, s/veh       | 0.1    |        |          |         |      |          |          |          |        |        |        |          |            |
| Movement               | EBL    | EBT    | EBR      | WBL     | WBT  | WBR      | NBL      | NBT      | NBR    | SBL    | SBT    | SBR      |            |
| Lane Configurations    |        | 4      |          |         | 4    |          |          | 4        |        |        | 4      |          |            |
| Traffic Vol, veh/h     | 7      | 995    | 11       | 5       | 2270 | 52       | 12       | 22       | 5      | 20     | 16     | 24       |            |
| Future Vol, veh/h      | 7      | 995    | 11       | 5       | 2270 | 52       | 12       | 22       | 5      | 20     | 16     | 24       |            |
| Conflicting Peds, #/hr | 0      | 0      | 0        | 0       | 0    | 0        | 0        | 0        | 0      | 0      | 0      | 0        |            |
| Sign Control           | Free   | Free   | Free     | Free    | Free | Free     | Stop     | Stop     | Stop   | Stop   | Stop   | Stop     |            |
| RT Channelized         | -      | -      | None     | -       | -    | None     | -        | -        | None   | -      | -      | None     |            |
| Storage Length         | -      | -      | -        | -       | -    | -        | -        | -        | -      | -      | -      | -        |            |
| Veh in Median Storage  | e,# -  | 0      | -        | -       | 0    | -        | -        | 0        | -      | -      | 0      | -        |            |
| Grade, %               | -      | 0      | -        | -       | 0    | -        | -        | 0        | -      | -      | 0      | -        |            |
| Peak Hour Factor       | 92     | 92     | 92       | 92      | 92   | 92       | 92       | 92       | 92     | 92     | 92     | 92       |            |
| Heavy Vehicles, %      | 85     | 22     | 29       | 2       | 10   | 10       | 20       | 11       | 2      | 25     | 14     | 29       |            |
| Mvmt Flow              | 8      | 1082   | 12       | 5       | 2467 | 57       | 13       | 24       | 5      | 22     | 17     | 26       |            |
|                        |        | .002   |          |         | 2.07 | 0.       | .0       |          |        |        | • •    |          |            |
| Major/Minor            | Major1 |        | N        | Major?  |      | N        | Minor1   |          |        | Minor  |        |          |            |
|                        | Major1 | ^      |          | Major2  | 0    |          |          | 2/20     |        | Minor2 | 2/1/   | 2407     |            |
| Conflicting Flow All   | 2524   | 0      | 0        | 1094    | 0    | 0        | 3631     | 3638     | 1088   | 3625   | 3616   | 2496     |            |
| Stage 1                | -      | -      | -        | -       | -    | -        | 1104     | 1104     | -      | 2506   | 2506   | -        |            |
| Stage 2                | 4.05   | -      | -        | -       | -    | -        | 2527     | 2534     | -      | 1119   | 1110   | - ( 10   |            |
| Critical Hdwy          | 4.95   | -      | -        | 4.12    | -    | -        | 7.3      | 6.61     | 6.22   | 7.35   | 6.64   | 6.49     |            |
| Critical Hdwy Stg 1    | -      | -      | -        | -       | -    | -        | 6.3      | 5.61     | -      | 6.35   | 5.64   | -        |            |
| Critical Hdwy Stg 2    | -      | -      | -        | -       | -    | -        | 6.3      | 5.61     | -      | 6.35   | 5.64   | -        |            |
| Follow-up Hdwy         | 2.965  | -      | -        | 2.218   | -    | -        | 3.68     | 4.099    |        | 3.725  | 4.126  | 3.561    |            |
| Pot Cap-1 Maneuver     | 90     | -      | -        | 638     | -    | -        | ~ 2      | ~ 5      | 262    | ~ 2    | ~ 5    | 30       |            |
| Stage 1                | -      | -      | -        | -       | -    | -        | 236      | 276      | -      | 33     | 52     | -        |            |
| Stage 2                | -      | -      | -        | -       | -    | -        | 33       | 52       | -      | 227    | 271    | -        |            |
| Platoon blocked, %     |        | -      | -        |         | -    | -        |          |          |        |        |        |          |            |
| Mov Cap-1 Maneuver     | 90     | -      | -        | 638     | -    | -        | -        | ~ 4      | 262    | -      | ~ 4    | 30       |            |
| Mov Cap-2 Maneuver     | -      | -      | -        | -       | -    | -        | -        | ~ 4      | -      | -      | ~ 4    | -        |            |
| Stage 1                | -      | -      | -        | -       | -    | -        | 182      | 213      | -      | 26     | 52     | -        |            |
| Stage 2                | -      | -      | -        | -       | -    | -        | ~ 3      | 52       | -      | 153    | 209    | -        |            |
|                        |        |        |          |         |      |          |          |          |        |        |        |          |            |
| Approach               | EB     |        |          | WB      |      |          | NB       |          |        | SB     |        |          |            |
| HCM Control Delay, s   | 0.3    |        |          | 0       |      |          | .,,,     |          |        | - 55   |        |          |            |
| HCM LOS                | 0.5    |        |          | U       |      |          | _        |          |        | _      |        |          |            |
| TIOWI LOO              |        |        |          |         |      |          |          |          |        |        |        |          |            |
|                        |        |        |          |         |      |          |          |          |        |        |        |          |            |
| Minor Lane/Major Mvn   | nt N   | VBLn1  | EBL      | EBT     | EBR  | WBL      | WBT      | WBR:     | SBLn1  |        |        |          |            |
| Capacity (veh/h)       |        | -      | 90       | -       | -    | 638      | -        | -        | -      |        |        |          |            |
| HCM Lane V/C Ratio     |        | -      | 0.085    | -       | -    | 0.009    | -        | -        | -      |        |        |          |            |
| HCM Control Delay (s)  | )      | -      | 48.7     | 0       | -    | 10.7     | 0        | -        | -      |        |        |          |            |
| HCM Lane LOS           |        | -      | Е        | Α       | -    | В        | Α        | -        | -      |        |        |          |            |
| HCM 95th %tile Q(veh   | 1)     | -      | 0.3      | -       | -    | 0        | -        | -        | -      |        |        |          |            |
| Notes                  |        |        |          |         |      |          |          |          |        |        |        |          |            |
| ~: Volume exceeds ca   | nacity | \$· Da | elay exc | eeds 31 | nns  | +: Com   | nutation | Not D    | efined | *· ∆II | maiory | volume i | in platoon |
| . Volume exceeds ca    | pacity | ψ. Dt  | Jay CAL  | ccus si | 003  | T. CUIII | putation | ו ואטנ ט | ciiicu | . All  | major  | volume   | η ριαισση  |

| Intersection           |          |       |        |             |           |      |
|------------------------|----------|-------|--------|-------------|-----------|------|
| Int Delay, s/veh       | 6.2      |       |        |             |           |      |
| Movement               | EBL      | EBR   | NIDI   | NDT         | CDT       | SBR  |
|                        |          | EBR   | NBL    | NBT         | SBT       | SBK  |
| Lane Configurations    | <b>Y</b> | 45    | 4.5    | <u>ર્</u> ન | <b>^}</b> | 10   |
| Traffic Vol, veh/h     | 9        | 45    | 65     | 15          | 15        | 10   |
| Future Vol, veh/h      | 9        | 45    | 65     | 15          | 15        | 10   |
| Conflicting Peds, #/hr | 0        | 0     | 0      | 0           | 0         | 0    |
| Sign Control           | Stop     | Stop  | Free   | Free        | Free      | Free |
| RT Channelized         | -        | None  | -      | None        | -         | None |
| Storage Length         | 0        | -     | -      | -           | -         | -    |
| Veh in Median Storage  |          | -     | -      | 0           | 0         | -    |
| Grade, %               | 0        | -     | -      | 0           | 0         | -    |
| Peak Hour Factor       | 92       | 92    | 93     | 92          | 92        | 92   |
| Heavy Vehicles, %      | 2        | 26    | 12     | 2           | 2         | 2    |
| Mvmt Flow              | 10       | 49    | 70     | 16          | 16        | 11   |
|                        |          |       |        |             |           |      |
| Major/Minor I          | Minor2   |       | Major1 | N           | /lajor2   |      |
| Conflicting Flow All   | 178      | 22    | 27     | 0           | -         | 0    |
| Stage 1                | 22       | -     | -      | -           | _         | -    |
| Stage 2                | 156      | _     | _      | _           | _         | _    |
| Critical Hdwy          | 6.42     | 6.46  | 4.22   | -           | -         | -    |
| Critical Hdwy Stg 1    | 5.42     | 0.40  | 4.22   |             | -         | _    |
| Critical Hdwy Stg 2    | 5.42     | -     |        | -           | -         | -    |
|                        |          |       | 2 200  | -           | -         | -    |
| Follow-up Hdwy         | 3.518    | 3.534 | 2.308  | -           | -         | -    |
| Pot Cap-1 Maneuver     | 812      | 990   | 1524   | -           | -         | -    |
| Stage 1                | 1001     | -     | -      | -           | -         | -    |
| Stage 2                | 872      | -     | -      | -           | -         | -    |
| Platoon blocked, %     |          | 000   | 1501   | -           | -         | -    |
| Mov Cap-1 Maneuver     | 775      | 990   | 1524   | -           | -         | -    |
| Mov Cap-2 Maneuver     | 775      | -     | -      | -           | -         | -    |
| Stage 1                | 955      | -     | -      | -           | -         | -    |
| Stage 2                | 872      | -     | -      | -           | -         | -    |
|                        |          |       |        |             |           |      |
| Approach               | EB       |       | NB     |             | SB        |      |
| HCM Control Delay, s   | 9.1      |       | 6.1    |             | 0         |      |
| HCM LOS                | 7. I     |       | 0.1    |             | U         |      |
| FICIVI LOS             | A        |       |        |             |           |      |
|                        |          |       |        |             |           |      |
| Minor Lane/Major Mvm   | nt       | NBL   | NBT I  | EBLn1       | SBT       | SBR  |
| Capacity (veh/h)       |          | 1524  | -      | 946         | -         | -    |
| HCM Lane V/C Ratio     |          | 0.046 | -      | 0.062       | -         | -    |
| HCM Control Delay (s)  |          | 7.5   | 0      | 9.1         | -         | -    |
| HCM Lane LOS           |          | Α     | Α      | Α           | -         | -    |
| HCM 95th %tile Q(veh)  | )        | 0.1   | -      | 0.2         | -         | -    |
|                        |          |       |        |             |           |      |

| Approach           | oach EB WB SB                    | All  |
|--------------------|----------------------------------|------|
| Denied Del/Veh (s) | ed Del/Veh (s) 477.0 0.0 553.1 2 | 81.6 |
| Total Del/Veh (s)  | · · ·                            | 07.9 |

### 2: SR 132/MAZE BLVD & MCCRACKEN RD Performance by approach

| Approach           | EB   | WB   | NB     | SB     | All  |
|--------------------|------|------|--------|--------|------|
| Denied Del/Veh (s) | 4.5  | 5.8  | 0.2    | 0.0    | 5.1  |
| Total Del/Veh (s)  | 22.0 | 52.7 | 1285.4 | 1574.6 | 78.2 |

#### 3: MCCRACKEN RD & EAST PROJECT ACCESS Performance by approach

| Approach           | EB NB SE | S All |
|--------------------|----------|-------|
| Denied Del/Veh (s) |          | 337.4 |
| Total Del/Veh (s)  | • /      | 650.4 |

| Denied Del/Veh (s) | 284.3 |  |
|--------------------|-------|--|
| Total Del/Veh (s)  | 295.3 |  |

| Movement              | EB   | WB  | SB  |
|-----------------------|------|-----|-----|
| Directions Served     | LT   | TR  | LR  |
| Maximum Queue (ft)    | 5068 | 10  | 561 |
| Average Queue (ft)    | 3678 | 1   | 441 |
| 95th Queue (ft)       | 6551 | 7   | 695 |
| Link Distance (ft)    | 5016 | 427 | 541 |
| Upstream Blk Time (%) | 40   |     | 59  |
| Queuing Penalty (veh) | 0    |     | 0   |
| Storage Bay Dist (ft) |      |     |     |
| Storage Blk Time (%)  |      |     |     |
| Queuing Penalty (veh) |      |     |     |

### Intersection: 2: SR 132/MAZE BLVD & MCCRACKEN RD

| Movement              | EB  | WB   | NB   | SB  |
|-----------------------|-----|------|------|-----|
| Directions Served     | LTR | LTR  | LTR  | LTR |
| Maximum Queue (ft)    | 442 | 2938 | 700  | 336 |
| Average Queue (ft)    | 201 | 418  | 379  | 311 |
| 95th Queue (ft)       | 533 | 2128 | 791  | 401 |
| Link Distance (ft)    | 427 | 4564 | 2033 | 329 |
| Upstream Blk Time (%) | 20  | 2    |      | 83  |
| Queuing Penalty (veh) | 325 | 0    |      | 76  |
| Storage Bay Dist (ft) |     |      |      |     |
| Storage Blk Time (%)  |     |      |      |     |
| Queuing Penalty (veh) |     |      |      |     |

### Intersection: 3: MCCRACKEN RD & EAST PROJECT ACCESS

| Movement              | EB  | NB  | SB   |
|-----------------------|-----|-----|------|
| Directions Served     | LR  | LT  | TR   |
| Maximum Queue (ft)    | 545 | 20  | 454  |
| Average Queue (ft)    | 399 | 1   | 201  |
| 95th Queue (ft)       | 725 | 11  | 523  |
| Link Distance (ft)    | 534 | 329 | 1659 |
| Upstream Blk Time (%) | 62  |     |      |
| Queuing Penalty (veh) | 0   |     |      |
| Storage Bay Dist (ft) |     |     |      |
| Storage Blk Time (%)  |     |     |      |
| Queuing Penalty (veh) |     |     |      |

# **Network Summary**

| Intersection           |        |          |          |          |        |          |                      |                                |
|------------------------|--------|----------|----------|----------|--------|----------|----------------------|--------------------------------|
| Int Delay, s/veh       | 8.0    |          |          |          |        |          |                      |                                |
| Movement               | EBL    | EBT      | WBT      | WBR      | SBL    | SBR      |                      |                                |
| Lane Configurations    |        | 4        | <b>1</b> |          | ¥      |          |                      |                                |
| Traffic Vol, veh/h     | 56     | 1565     | 1185     | 23       | 28     | 25       |                      |                                |
| Future Vol, veh/h      | 56     | 1565     | 1185     | 23       | 28     | 25       |                      |                                |
| Conflicting Peds, #/hr | 0      | 0        | 0        | 0        | 0      | 0        |                      |                                |
| Sign Control           | Free   | Free     | Free     | Free     | Stop   | Stop     |                      |                                |
| RT Channelized         | -      | None     | -        | None     | -      | None     |                      |                                |
| Storage Length         | -      | -        | -        | -        | 0      | -        |                      |                                |
| Veh in Median Storage  | 2,# -  | 0        | 0        | -        | 0      | -        |                      |                                |
| Grade, %               | -      | 0        | 0        | -        | 0      | -        |                      |                                |
| Peak Hour Factor       | 92     | 92       | 92       | 92       | 92     | 92       |                      |                                |
| Heavy Vehicles, %      | 5      | 5        | 11       | 30       | 18     | 12       |                      |                                |
| Mvmt Flow              | 61     | 1701     | 1288     | 25       | 30     | 27       |                      |                                |
|                        |        |          |          |          |        |          |                      |                                |
| Major/Minor 1          | Major1 | I        | Major2   | N        | Minor2 |          |                      |                                |
| Conflicting Flow All   | 1313   | 0        | <u> </u> | 0        | 3124   | 1301     |                      |                                |
| Stage 1                | -      | -        | _        | -        | 1301   | -        |                      |                                |
| Stage 2                | _      | _        | _        | _        | 1823   | _        |                      |                                |
| Critical Hdwy          | 4.15   | _        | _        | _        | 6.58   | 6.32     |                      |                                |
| Critical Hdwy Stg 1    | -      | _        | _        | _        | 5.58   | - 0.02   |                      |                                |
| Critical Hdwy Stg 2    | -      | -        | -        | -        | 5.58   | _        |                      |                                |
| Follow-up Hdwy         | 2.245  | _        | _        | _        | 3.662  | 3.408    |                      |                                |
| Pot Cap-1 Maneuver     | 517    | -        | -        | _        | ~ 11   | 187      |                      |                                |
| Stage 1                | -      | _        | -        | _        | 236    | -        |                      |                                |
| Stage 2                | -      | -        | -        | -        | 128    | -        |                      |                                |
| Platoon blocked, %     |        | -        | -        | -        |        |          |                      |                                |
| Mov Cap-1 Maneuver     | 517    | -        | -        | -        | 0      | 187      |                      |                                |
| Mov Cap-2 Maneuver     | -      | -        | -        | -        | 0      | -        |                      |                                |
| Stage 1                | -      | -        | -        | -        | 0      | -        |                      |                                |
| Stage 2                | -      | -        | -        | -        | 128    | -        |                      |                                |
|                        |        |          |          |          |        |          |                      |                                |
| Approach               | EB     |          | WB       |          | SB     |          |                      |                                |
| HCM Control Delay, s   | 0.4    |          | 0        |          | 32.6   |          |                      |                                |
| HCM LOS                | 0.7    |          | U        |          | D      |          |                      |                                |
| TIOW LOO               |        |          |          |          | J      |          |                      |                                |
| Minor Lang/Maior Mary  | \t     | EDI      | EDT      | MDT      | MDD    | CDI n1   |                      |                                |
| Minor Lane/Major Mvm   | Il     | EBL      | EBT      | WBT      |        | SBLn1    |                      |                                |
| Capacity (veh/h)       |        | 517      | -        | -        | -      | 187      |                      |                                |
| HCM Control Doloy (c)  |        | 0.118    | -        | -        |        | 0.308    |                      |                                |
| HCM Long LOS           |        | 12.9     | 0        | -        | -      | 32.6     |                      |                                |
| HCM 05th %tile O(vob)  | ١      | B<br>0.4 | А        | -        | -      | D<br>1.2 |                      |                                |
| HCM 95th %tile Q(veh)  | )      | 0.4      | -        | -        | -      | 1.2      |                      |                                |
| Notes                  |        |          |          |          |        |          |                      |                                |
| ~: Volume exceeds cap  | pacity | \$: De   | elay exc | ceeds 30 | 00s    | +: Com   | putation Not Defined | *: All major volume in platoon |
|                        |        |          |          |          |        |          |                      |                                |

| Intersection           |         |        |          |         |      |        |          |         |        |        |         |          |            |
|------------------------|---------|--------|----------|---------|------|--------|----------|---------|--------|--------|---------|----------|------------|
| Int Delay, s/veh       | 0.1     |        |          |         |      |        |          |         |        |        |         |          |            |
| Movement               | EBL     | EBT    | EBR      | WBL     | WBT  | WBR    | NBL      | NBT     | NBR    | SBL    | SBT     | SBR      |            |
| Lane Configurations    |         | 4      |          |         | 4    |        |          | 4       |        |        | 4       |          |            |
| Traffic Vol, veh/h     | 18      | 1593   | 12       | 5       | 1185 | 31     | 13       | 18      | 10     | 60     | 22      | 9        |            |
| Future Vol., veh/h     | 18      | 1593   | 12       | 5       | 1185 | 31     | 13       | 18      | 10     | 60     | 22      | 9        |            |
| Conflicting Peds, #/hr | 0       | 0      | 0        | 0       | 0    | 0      | 0        | 0       | 0      | 0      | 0       | 0        |            |
| Sign Control           | Free    | Free   | Free     | Free    | Free | Free   | Stop     | Stop    | Stop   | Stop   | Stop    | Stop     |            |
| RT Channelized         | -       | -      | None     | -       | -    | None   | -        | -       | None   | ·-     | -       | None     |            |
| Storage Length         | -       | -      | -        | -       | _    | -      | _        | -       | -      | -      | _       | -        |            |
| eh in Median Storage   | e,# -   | 0      | -        | -       | 0    | -      | -        | 0       | -      | -      | 0       | -        |            |
| Grade, %               | -       | 0      | -        | -       | 0    | -      | -        | 0       | -      | -      | 0       | -        |            |
| eak Hour Factor        | 92      | 92     | 92       | 92      | 92   | 92     | 92       | 92      | 92     | 92     | 92      | 92       |            |
| leavy Vehicles, %      | 28      | 5      | 22       | 2       | 11   | 29     | 22       | 13      | 2      | 18     | 10      | 33       |            |
| 1vmt Flow              | 20      | 1732   | 13       | 5       | 1288 | 34     | 14       | 20      | 11     | 65     | 24      | 10       |            |
|                        |         | ., 02  | .0       |         | .200 | 0.     |          |         |        |        |         |          |            |
| lajor/Minor            | Major1  |        | N        | Major2  |      |        | Minor1   |         | 1      | Minor2 |         |          |            |
| Conflicting Flow All   | 1322    | 0      | 0        | 1745    | 0    | 0      | 3111     | 3111    | 1739   | 3109   | 3100    | 1305     |            |
| Stage 1                | 1322    |        | U        | 1745    |      |        | 1779     | 1779    | 1/39   | 1315   | 1315    | 1305     |            |
|                        | -       | -      | -        | -       | -    | -      | 1332     | 1332    |        | 1794   | 1785    | -        |            |
| Stage 2 ritical Hdwy   | 4.38    |        | -        | 4.12    |      | -      | 7.32     | 6.63    | 6.22   | 7.28   | 6.6     | 6.53     |            |
| <i>y</i>               | 4.38    | -      | -        | 4.12    | -    | -      | 6.32     | 5.63    | 0.22   | 6.28   | 5.6     |          |            |
| ritical Hdwy Stg 1     | -       | -      | -        | -       | -    | -      |          |         |        |        | 5.6     | -        |            |
| ritical Hdwy Stg 2     | - 450   | -      | -        | 2 210   | -    | -      | 6.32     | 5.63    | -      | 6.28   |         | 2 507    |            |
| ollow-up Hdwy          | 2.452   | -      | -        | 2.218   | -    | -      | 3.698    | 4.117   | 3.318  | 3.662  | 4.09    | 3.597    |            |
| ot Cap-1 Maneuver      | 446     | -      | -        | 360     | -    | -      | ~ 6      | ~ 10    | 108    | ~ 6    | ~ 11    | 168      |            |
| Stage 1                | -       | -      | -        | -       | -    | -      | 93       | 127     | -      | 180    | 219     | -        |            |
| Stage 2                | -       | -      | -        | -       | -    | -      | 172      | 212     | -      | 94     | 128     | -        |            |
| latoon blocked, %      | 447     | -      | -        | 2/0     | -    | -      |          | ^       | 100    |        | 0       | 1/0      |            |
| Nov Cap-1 Maneuver     | 446     | -      | -        | 360     | -    | -      | -        | 0       | 108    | -      | 0       | 168      |            |
| lov Cap-2 Maneuver     | -       | -      | -        | -       | -    | -      | -        | 0       | -      | -      | 0       | -        |            |
| Stage 1                | -       | -      | -        | -       | -    | -      | 93       | 0       | -      | 180    | 207     | -        |            |
| Stage 2                | -       | -      | -        | -       | -    | -      | 136      | 201     | -      | -      | 0       | -        |            |
|                        |         |        |          |         |      |        |          |         |        |        |         |          |            |
| pproach                | EB      |        |          | WB      |      |        | NB       |         |        | SB     |         |          |            |
| ICM Control Delay, s   | 0.1     |        |          | 0.1     |      |        |          |         |        |        |         |          |            |
| ICM LOS                |         |        |          |         |      |        | -        |         |        | -      |         |          |            |
|                        |         |        |          |         |      |        |          |         |        |        |         |          |            |
| linor Lane/Major Mvn   | nt N    | NBLn1  | EBL      | EBT     | EBR  | WBL    | WBT      | WBR:    | SBLn1  |        |         |          |            |
| Capacity (veh/h)       |         | -      | 446      | -       | -    | 360    | -        | -       | -      |        |         |          |            |
| CM Lane V/C Ratio      |         | _      | 0.044    | -       | _    | 0.015  | -        | _       | _      |        |         |          |            |
| ICM Control Delay (s)  | )       | -      | 13.4     | 0       | -    | 15.2   | 0        | -       | -      |        |         |          |            |
| CM Lane LOS            |         | _      | В        | A       | -    | С      | A        | -       | -      |        |         |          |            |
| ICM 95th %tile Q(veh   | 1)      | -      | 0.1      | -       | -    | 0      | -        | -       | -      |        |         |          |            |
| lotes                  |         |        |          |         |      |        |          |         |        |        |         |          |            |
|                        | nacity. | ¢. D.  | Nov ove  | anda 24 | 200  | Corr   | nutotic: | a Met D | ofinad | *, AII | malar   | (oluma a | in plotoce |
| : Volume exceeds ca    | pacity  | \$: D6 | elay exc | eeds 30 | JUS  | +: Com | putation | ט זטא ו | elinea | : All  | major v | voiume i | in platoon |

| Intersection  |                                     |                             |                     |                           |                        |                              |
|---|-------------------------------------|-----------------------------|---------------------|---------------------------|------------------------|------------------------------|
| Int Delay, s/veh  | 6.1                                 |                             |                     |                           |                        |                              |
| Movement  | EBL                                 | EBR                         | NDI                 | NDT                       | CDT                    | SBR                          |
|   |                                     | EBK                         | NBL                 | NBT                       | SBT                    | SBK                          |
| Lane Configurations   | <b>\</b>                            | //                          | ΓO                  | <u>ર્</u> ન               | <b>♣</b>               | 10                           |
| Traffic Vol, veh/h  | 11                                  | 66                          | 52                  | 15                        | 25                     | 12                           |
| Future Vol, veh/h   | 11                                  | 66                          | 52                  | 15                        | 25                     | 12                           |
| Conflicting Peds, #/hr  | 0                                   | 0                           | 0                   | 0                         | 0                      | 0                            |
| Sign Control  | Stop                                | Stop                        | Free                | Free                      | Free                   | Free                         |
| RT Channelized  | -                                   | None                        | -                   | None                      | -                      | None                         |
| Storage Length  | 0                                   | -                           | -                   | -                         | -                      | -                            |
| Veh in Median Storage   |                                     | -                           | -                   | 0                         | 0                      | -                            |
| Grade, %  | 0                                   | -                           | -                   | 0                         | 0                      | -                            |
| Peak Hour Factor  | 92                                  | 92                          | 92                  | 92                        | 92                     | 92                           |
| Heavy Vehicles, %   | 2                                   | 23                          | 21                  | 2                         | 2                      | 2                            |
| Mvmt Flow   | 12                                  | 72                          | 57                  | 16                        | 27                     | 13                           |
|   |                                     |                             |                     |                           |                        |                              |
| Major/Minor   | Minor2                              |                             | Major1              | Λ                         | /lajor2                |                              |
| Conflicting Flow All  | 164                                 | 34                          | 40                  | 0                         | - najorz               | 0                            |
| Stage 1   | 34                                  | -                           | -                   | -                         | _                      | -                            |
| Stage 2   | 130                                 | _                           | _                   | _                         | _                      | _                            |
| Critical Hdwy   | 6.42                                | 6.43                        | 4.31                |                           | _                      | -                            |
| Critical Hdwy Stg 1   | 5.42                                | 0.43                        | 4.51                |                           | _                      | _                            |
| Critical Hdwy Stg 2   | 5.42                                | _                           |                     | -                         | -                      | -                            |
| Follow-up Hdwy  | 3.518                               |                             | 2.389               | -                         | -                      | -                            |
| Pot Cap-1 Maneuver  | 827                                 | 982                         | 1456                | -                         | -                      | -                            |
|   | 988                                 |                             | 1430                | -                         | -                      | -                            |
| Stage 1   |                                     | -                           | -                   | -                         | -                      | -                            |
| Stage 2   | 896                                 | -                           | -                   | -                         | -                      | -                            |
| Platoon blocked, %  | 704                                 |                             |                     | -                         | -                      |                              |
| Mov Cap-1 Maneuver  |                                     |                             | 4 4 - 7             |                           |                        |                              |
|   | 794                                 | 982                         | 1456                | -                         | -                      | -                            |
| Mov Cap-2 Maneuver  | 794                                 | 982                         | 1456                | -                         | -                      | -                            |
| Mov Cap-2 Maneuver<br>Stage 1   | 794<br>948                          |                             | 1456                | -                         | -<br>-                 | -<br>-<br>-                  |
| Mov Cap-2 Maneuver  | 794                                 | -                           | 1456<br>-<br>-      | -<br>-<br>-               | -                      | -<br>-<br>-                  |
| Mov Cap-2 Maneuver<br>Stage 1   | 794<br>948                          | -                           | 1456                | -<br>-<br>-<br>-          | -                      | -                            |
| Mov Cap-2 Maneuver<br>Stage 1<br>Stage 2  | 794<br>948<br>896                   | -                           | -<br>-<br>-         | -                         | -<br>-<br>-            | -                            |
| Mov Cap-2 Maneuver<br>Stage 1<br>Stage 2<br>Approach  | 794<br>948<br>896<br>EB             | -                           | -<br>-<br>-<br>NB   | -                         | -<br>-<br>-<br>SB      | -                            |
| Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s   | 794<br>948<br>896<br>EB<br>9.2      | -                           | -<br>-<br>-         | -                         | -<br>-<br>-            | -                            |
| Mov Cap-2 Maneuver<br>Stage 1<br>Stage 2<br>Approach  | 794<br>948<br>896<br>EB             | -                           | -<br>-<br>-<br>NB   | -                         | -<br>-<br>-<br>SB      | -                            |
| Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s HCM LOS   | 794<br>948<br>896<br>EB<br>9.2<br>A |                             | NB 5.9              | -                         | -<br>-<br>-<br>SB<br>0 |                              |
| Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s   | 794<br>948<br>896<br>EB<br>9.2<br>A | -                           | NB 5.9              | -<br>-<br>-<br>-<br>EBLn1 | -<br>-<br>-<br>SB      | -<br>-<br>-<br>-<br>-<br>SBR |
| Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s HCM LOS   | 794<br>948<br>896<br>EB<br>9.2<br>A |                             | NB 5.9              |                           | -<br>-<br>-<br>SB<br>0 | SBR                          |
| Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s HCM LOS  Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio                       | 794<br>948<br>896<br>EB<br>9.2<br>A | NBL<br>1456<br>0.039        | NB 5.9              | 950<br>0.088              | SB 0                   |                              |
| Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s HCM LOS  Minor Lane/Major Mvn Capacity (veh/h)  | 794<br>948<br>896<br>EB<br>9.2<br>A | -<br>-<br>-<br>NBL<br>1456  | NB 5.9              | 950                       | -<br>-<br>-<br>SB<br>0 | -                            |
| Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s HCM LOS  Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio                       | 794<br>948<br>896<br>EB<br>9.2<br>A | NBL<br>1456<br>0.039        | -<br>-<br>NB<br>5.9 | 950<br>0.088              | SB 0 SBT               | -                            |
| Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s HCM LOS  Minor Lane/Major Mvn Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s) | 794<br>948<br>896<br>EB<br>9.2<br>A | NBL<br>1456<br>0.039<br>7.6 | NB 5.9 NBT I        | 950<br>0.088<br>9.2       | SB 0 SBT -             | -<br>-                       |

| Approach           | EB  | WB  | SB    | All |
|--------------------|-----|-----|-------|-----|
| Denied Del/Veh (s) | 0.2 | 0.0 | 3.3   | 0.1 |
| Total Del/Veh (s)  | 7.9 | 1.6 | 217.5 | 8.2 |

## 2: SR 132/MAZE BLVD & MCCRACKEN RD Performance by approach

| Approach           | EB  | WB   | NB    | SB    | All  |
|--------------------|-----|------|-------|-------|------|
| Denied Del/Veh (s) | 0.0 | 0.7  | 0.1   | 18.6  | 0.8  |
| Total Del/Veh (s)  | 1.8 | 13.7 | 864.3 | 608.0 | 29.1 |

## 3: MCCRACKEN RD & EAST PROJECT ACCESS Performance by approach

| Approach           | EB    | NB  | SB   | All   |
|--------------------|-------|-----|------|-------|
| Denied Del/Veh (s) | 34.6  | 0.0 | 0.1  | 11.6  |
| Total Del/Veh (s)  | 365.5 | 2.0 | 76.6 | 132.6 |

| Denied Del/Veh (s) | 1.4  |  |
|--------------------|------|--|
| Total Del/Veh (s)  | 51.9 |  |

| Movement              | EB  | WB  | WB  | WB  | SB  | SB  |  |
|-----------------------|-----|-----|-----|-----|-----|-----|--|
| Directions Served     | L   | Т   | T   | R   | L   | R   |  |
| Maximum Queue (ft)    | 108 | 14  | 17  | 16  | 254 | 173 |  |
| Average Queue (ft)    | 31  | 0   | 1   | 1   | 98  | 62  |  |
| 95th Queue (ft)       | 88  | 7   | 8   | 9   | 281 | 170 |  |
| Link Distance (ft)    |     | 416 | 416 |     | 512 |     |  |
| Upstream Blk Time (%) |     |     |     |     | 0   |     |  |
| Queuing Penalty (veh) |     |     |     |     | 0   |     |  |
| Storage Bay Dist (ft) | 300 |     |     | 200 |     | 200 |  |
| Storage Blk Time (%)  |     |     |     |     | 13  | 2   |  |
| Queuing Penalty (veh) |     |     |     |     | 7   | 0   |  |

### Intersection: 2: SR 132/MAZE BLVD & MCCRACKEN RD

| Movement              | EB  | EB  | WB  | WB   | WB   | NB   | SB  | SB  |  |
|-----------------------|-----|-----|-----|------|------|------|-----|-----|--|
| Directions Served     | L   | TR  | L   | T    | TR   | LTR  | LT  | R   |  |
| Maximum Queue (ft)    | 90  | 14  | 33  | 28   | 57   | 480  | 318 | 225 |  |
| Average Queue (ft)    | 19  | 0   | 3   | 1    | 4    | 259  | 240 | 58  |  |
| 95th Queue (ft)       | 73  | 7   | 18  | 15   | 26   | 609  | 404 | 202 |  |
| Link Distance (ft)    |     | 416 |     | 4564 | 4564 | 2015 | 311 |     |  |
| Upstream Blk Time (%) |     |     |     |      |      |      | 52  |     |  |
| Queuing Penalty (veh) |     |     |     |      |      |      | 31  |     |  |
| Storage Bay Dist (ft) | 200 |     | 200 |      |      |      |     | 200 |  |
| Storage Blk Time (%)  |     |     |     |      |      |      | 66  | 2   |  |
| Queuing Penalty (veh) |     |     |     |      |      |      | 16  | 1   |  |

### Intersection: 3: MCCRACKEN RD & EAST PROJECT ACCESS

| Movement              | EB  | NB  | SB   |
|-----------------------|-----|-----|------|
| Directions Served     | LR  | LT  | TR   |
| Maximum Queue (ft)    | 424 | 35  | 86   |
| Average Queue (ft)    | 172 | 2   | 16   |
| 95th Queue (ft)       | 466 | 16  | 74   |
| Link Distance (ft)    | 534 | 311 | 1659 |
| Upstream Blk Time (%) | 8   |     |      |
| Queuing Penalty (veh) | 0   |     |      |
| Storage Bay Dist (ft) |     |     |      |
| Storage Blk Time (%)  |     |     |      |
| Queuing Penalty (veh) |     |     |      |

# **Network Summary**

| ersection                          |                |          |          |         |              |        |                      |                                |
|------------------------------------|----------------|----------|----------|---------|--------------|--------|----------------------|--------------------------------|
| nt Delay, s/veh                    | 2.3            |          |          |         |              |        |                      |                                |
| Novement                           | EBL            | EBT      | WBT      | WBR     | SBL          | SBR    |                      |                                |
| ane Configurations                 | ች              | <b>^</b> |          | 7       |              | 7      |                      |                                |
| raffic Vol, veh/h                  | 22             | 996      | 2271     | 35      | 17           | 56     |                      |                                |
| uture Vol, veh/h                   | 22             | 996      | 2271     | 35      | 17           | 56     |                      |                                |
| onflicting Peds, #/hr              | 0              | 0        | 0        | 0       | 0            | 0      |                      |                                |
| ign Control                        | Free           | Free     | Free     | Free    | Stop         | Stop   |                      |                                |
| RT Channelized                     | -              | None     | -        | None    | -            |        |                      |                                |
| torage Length                      | 300            | -        | -        | 200     | -            | 200    |                      |                                |
| eh in Median Storage               | e, # -         | 0        | 0        | -       | 1            | -      |                      |                                |
| Grade, %                           | -              | 0        | 0        | -       | 0            | -      |                      |                                |
| eak Hour Factor                    | 92             | 92       | 92       | 92      | 92           | 92     |                      |                                |
| eavy Vehicles, %                   | 9              | 22       | 10       | 26      | 24           | 4      |                      |                                |
| vmt Flow                           | 24             | 1083     | 2468     | 38      | 18           | 61     |                      |                                |
| ior/Minor                          | Maiari         |          | Maisra   |         | Ain c = 2    |        |                      |                                |
|                                    | Major1<br>2506 |          | Major2   |         | Minor2       | 1224   |                      |                                |
| onflicting Flow All                |                | 0        | -        | 0       | 3058         | 1234   |                      |                                |
| Stage 1                            | -              | -        | -        | -       | 2468         | -      |                      |                                |
| Stage 2                            | 4.28           | -        | -        | -       | 590          | 6.98   |                      |                                |
| ritical Hdwy                       |                | -        | -        | -       | 7.28<br>6.28 |        |                      |                                |
| ritical Hdwy Stg 1                 | -              | -        | -        | -       | 6.28         | -      |                      |                                |
| itical Hdwy Stg 2<br>Illow-up Hdwy | 2.29           |          | -        | -       | 3.74         | 3.34   |                      |                                |
| ollow-up Hawy<br>of Cap-1 Maneuver | 160            | -        | -        | -       | 3.74<br>~ 7  | 3.34   |                      |                                |
| Stage 1                            | 100            | -        | -        | -       | 36           | 100    |                      |                                |
| Stage 1                            | -              | -        | -        | -       | 460          | -      |                      |                                |
| atoon blocked, %                   | -              | -        | -        | -       | 400          | -      |                      |                                |
| ov Cap-1 Maneuver                  | 160            | -        | -        | -       | ~ 6          | 165    |                      |                                |
| ov Cap-1 Maneuver                  | 100            | -        | -        | -       | 27           | 100    |                      |                                |
| Stage 1                            | -              | -        | -        | -       | 31           | _      |                      |                                |
| Stage 2                            | -              | _        | _        | -       | 460          | -      |                      |                                |
| Stage 2                            | -              | -        | -        | -       | 400          | -      |                      |                                |
| proach                             | EB             |          | WB       |         | SB           |        |                      |                                |
| CM Control Delay, s                | 0.7            |          | 0        |         | 95.6         |        |                      |                                |
| CM LOS                             |                |          |          |         | F            |        |                      |                                |
|                                    |                |          |          |         |              |        |                      |                                |
| linor Lane/Major Mvm               | nt             | EBL      | EBT      | WBT     | WBR          | SBLn1  | SBLn2                |                                |
| apacity (veh/h)                    |                | 160      | -        | -       | -            | 27     | 165                  |                                |
| CM Lane V/C Ratio                  |                | 0.149    | -        | -       | -            | 0.684  |                      |                                |
| CM Control Delay (s)               |                | 31.4     | -        | -       | -            | 282    | 39                   |                                |
| CM Lane LOS                        |                | D        | -        | -       | -            | F      | E                    |                                |
| CM 95th %tile Q(veh)               | )              | 0.5      | -        | -       | -            | 2.2    | 1.6                  |                                |
| otes                               |                |          |          |         |              |        |                      |                                |
| Volume exceeds car                 | pacity         | \$: De   | elay exc | ceeds 3 | 00s          | +: Com | putation Not Defined | *: All major volume in platoon |
|                                    |                |          | ,        |         |              |        |                      | ,                              |

| Intersection           |        |             |          |         |       |          |          |           |         |             |        |          |              |
|------------------------|--------|-------------|----------|---------|-------|----------|----------|-----------|---------|-------------|--------|----------|--------------|
| Int Delay, s/veh       | 68.9   |             |          |         |       |          |          |           |         |             |        |          |              |
| Movement               | EBL    | EBT         | EBR      | WBL     | WBT   | WBR      | NBL      | NBT       | NBR     | SBL         | SBT    | SBR      |              |
| Lane Configurations    |        | <b>†</b> \$ |          | ሻ       | ħβ    |          |          | 4         |         |             | 4      | 7        |              |
| Traffic Vol, veh/h     | 7      | 995         | 11       | 5       | 2270  | 52       | 12       | 22        | 5       | 20          | 16     | 24       |              |
| Future Vol, veh/h      | 7      | 995         | 11       | 5       | 2270  | 52       | 12       | 22        | 5       | 20          | 16     | 24       |              |
| Conflicting Peds, #/hr | 0      | 0           | 0        | 0       | 0     | 0        | 0        | 0         | 0       | 0           | 0      | 0        |              |
| Sign Control           | Free   | Free        | Free     | Free    | Free  | Free     | Stop     | Stop      | Stop    | Stop        | Stop   | Stop     |              |
| RT Channelized         | _      | -           | None     | _       | -     | None     | -        | -         | None    | _           | -      | None     |              |
| Storage Length         | 200    | _           | -        | 200     | _     | -        | _        | _         | -       | _           | _      | 200      |              |
| /eh in Median Storage  |        | 0           | _        | -       | 0     | _        | _        | 0         | _       | _           | 1      | -        |              |
| Grade, %               | -      | 0           | _        | _       | 0     | _        | _        | 0         | _       | _           | 0      | _        |              |
| Peak Hour Factor       | 92     | 92          | 92       | 92      | 92    | 92       | 92       | 92        | 92      | 92          | 92     | 92       |              |
| leavy Vehicles, %      | 85     | 22          | 29       | 2       | 10    | 10       | 20       | 11        | 2       | 25          | 14     | 29       |              |
| Nymt Flow              | 8      | 1082        | 12       | 5       | 2467  | 57       | 13       | 24        | 5       | 22          | 17     | 26       |              |
| NVIIIL FIOW            | 0      | 1002        | 12       | 5       | 2407  | 37       | 13       | 24        | 5       | 22          | 17     | 20       |              |
| lajor/Minor N          | Major1 |             | N        | Major2  |       |          | Minor1   |           | 1       | Minor2      |        |          |              |
| Conflicting Flow All   | 2524   | 0           | 0        | 1094    | 0     | 0        | 2356     | 3638      | 547     | 3075        | 3616   | 1262     |              |
| Stage 1                | 2524   |             | U        | 1094    |       |          | 1104     | 1104      |         | 2506        | 2506   |          |              |
|                        | -      | -           | -        | -       | -     | -        |          |           | -       |             |        | -        |              |
| Stage 2                | -      | -           | -        | -       | -     | -        | 1252     | 2534      | - / 0.4 | 569         | 1110   | 7.40     |              |
| ritical Hdwy           | 5.8    | -           | -        | 4.14    | -     | -        | 7.9      | 6.72      | 6.94    | 8           | 6.78   | 7.48     |              |
| ritical Hdwy Stg 1     | -      | -           | -        | -       | -     | -        | 6.9      | 5.72      | -       | 7           | 5.78   | -        |              |
| ritical Hdwy Stg 2     | -      | -           | -        | -       | -     | -        | 6.9      | 5.72      | -       | 7           | 5.78   | -        |              |
| ollow-up Hdwy          | 3.05   | -           | -        | 2.22    | -     | -        | 3.7      | 4.11      | 3.32    | 3.75        | 4.14   | 3.59     |              |
| ot Cap-1 Maneuver      | 49     | -           | -        | 634     | -     | -        | 15       | ~ 4       | 481     | ~ 3         | ~ 4    | 128      |              |
| Stage 1                | -      | -           | -        | -       | -     | -        | 196      | 267       | -       | ~ 21        | 47     | -        |              |
| Stage 2                | -      | -           | -        | -       | -     | -        | 157      | 48        | -       | 421         | 259    | -        |              |
| Platoon blocked, %     |        | -           | -        |         | -     | -        |          |           |         |             |        |          |              |
| Nov Cap-1 Maneuver     | 49     | -           | -        | 634     | -     | -        | ~ 7      | ~ 3       | 481     | -           | ~ 3    | 128      |              |
| Nov Cap-2 Maneuver     | -      | -           | -        | -       | -     | -        | ~ 7      | ~ 3       | -       | ~ 15        | 36     | -        |              |
| Stage 1                | -      | -           | -        | -       | -     | -        | 164      | 223       | -       | ~ 18        | 47     | -        |              |
| Stage 2                | -      | -           | -        | -       | -     | -        | 78       | 48        | -       | 311         | 217    | -        |              |
|                        |        |             |          |         |       |          |          |           |         |             |        |          |              |
| Approach               | EB     |             |          | WB      |       |          | NB       |           |         | SB          |        |          |              |
| HCM Control Delay, s   | 0.6    |             |          | 0       |       | \$ 6     | 5057.1   |           |         |             |        |          |              |
| ICM LOS                |        |             |          |         |       |          | F        |           |         | -           |        |          |              |
|                        |        |             |          |         |       |          |          |           |         |             |        |          |              |
| Minor Lane/Major Mvm   | nt N   | NBLn1       | EBL      | EBT     | EBR   | WBL      | WBT      | WBR S     | SBLn1:  | SBLn2       |        |          |              |
| Capacity (veh/h)       |        | 4           | 49       | -       | -     | 634      | _        | _         | _       | 128         |        |          |              |
| ICM Lane V/C Ratio     | 1      | 10.598      | 0.155    | -       | -     | 0.009    | -        | -         | -       | 0.204       |        |          |              |
| HCM Control Delay (s)  |        | 5057.1      | 91.5     | -       | -     | 10.7     | -        | -         | -       |             |        |          |              |
| ICM Lane LOS           |        | F           | F        | -       | -     | В        | -        | -         | -       | E           |        |          |              |
| HCM 95th %tile Q(veh)  | )      | 7.1         | 0.5      | -       | -     | 0        | -        | -         | -       | 0.7         |        |          |              |
| Notes                  |        |             |          |         |       |          |          |           |         |             |        |          |              |
| -: Volume exceeds cap  | nacity | \$. Da      | elay exc | pads 31 | nns - | +: Com   | nutation | Not D     | efined  | *. <b>\</b> | maiory | volume i | in platoon   |
| Volume exceeds cap     | Jacity | φ. Dt       | ciay exc | GCU3 31 | JU3   | ⊤. CUIII | pulaliUl | יט זטאר ד | ciiieu  | . All       | majur  | volullie | ιιι μιαιυυι1 |

| Intersection           |              |       |                                      |                    |          |      |
|------------------------|--------------|-------|--------------------------------------|--------------------|----------|------|
| Int Delay, s/veh       | 6.2          |       |                                      |                    |          |      |
| Movement               | EBL          | EBR   | NBL                                  | NBT                | SBT      | SBR  |
|                        |              | EBK   | INDL                                 |                    |          | SDK  |
| Lane Configurations    | <b>\</b>     | 45    | 65                                   | <del>ન</del><br>15 | <b>}</b> | 10   |
| Traffic Vol, veh/h     |              |       |                                      | 15                 | 15       |      |
| Future Vol, veh/h      | 9            | 45    | 65                                   | 15                 | 15       | 10   |
| Conflicting Peds, #/hr | 0            | 0     | 0                                    | 0                  | 0        | 0    |
| Sign Control           | Stop         | Stop  | Free                                 | Free               | Free     | Free |
| RT Channelized         | -            | None  | -                                    | None               | -        | None |
| Storage Length         | 0            | -     | -                                    | -                  | -        | -    |
| Veh in Median Storage  |              | -     | -                                    | 0                  | 0        | -    |
| Grade, %               | 0            | -     | -                                    | 0                  | 0        | -    |
| Peak Hour Factor       | 92           | 92    | 93                                   | 92                 | 92       | 92   |
| Heavy Vehicles, %      | 2            | 26    | 12                                   | 2                  | 2        | 2    |
| Mvmt Flow              | 10           | 49    | 70                                   | 16                 | 16       | 11   |
|                        |              |       |                                      |                    |          |      |
| Major/Minor            | Minor2       |       | Major1                               | N                  | Major2   |      |
| Conflicting Flow All   | 178          | 22    | 27                                   | 0                  | -        | 0    |
| Stage 1                | 22           | -     | -                                    | -                  | -        | -    |
| Stage 2                | 156          | _     | _                                    | _                  | _        | _    |
| Critical Hdwy          | 6.42         | 6.46  | 4.22                                 | -                  | -        | -    |
| Critical Hdwy Stg 1    | 5.42         | 0.40  | 4.22                                 | _                  | _        | -    |
|                        | 5.42         | -     | -                                    |                    | -        | -    |
| Critical Hdwy Stg 2    |              | 3.534 | 2 200                                | -                  | -        | -    |
| Follow-up Hdwy         | 3.518<br>812 | 990   | <ul><li>2.308</li><li>1524</li></ul> | -                  | -        | -    |
| Pot Cap-1 Maneuver     |              | 990   | 1024                                 | -                  | -        | -    |
| Stage 1                | 1001         | -     | -                                    | -                  | -        | -    |
| Stage 2                | 872          | -     | -                                    | -                  | -        | -    |
| Platoon blocked, %     | 775          | 000   | 4507                                 | -                  | -        | -    |
| Mov Cap-1 Maneuver     | 775          | 990   | 1524                                 | -                  | -        | -    |
| Mov Cap-2 Maneuver     | 775          | -     | -                                    | -                  | -        | -    |
| Stage 1                | 955          | -     | -                                    | -                  | -        | -    |
| Stage 2                | 872          | -     | -                                    | -                  | -        | -    |
|                        |              |       |                                      |                    |          |      |
| Approach               | EB           |       | NB                                   |                    | SB       |      |
| HCM Control Delay, s   | 9.1          |       | 6.1                                  |                    | 0        |      |
| HCM LOS                |              |       | 0.1                                  |                    | U        |      |
| HOW LOS                | А            |       |                                      |                    |          |      |
|                        |              |       |                                      |                    |          |      |
| Minor Lane/Major Mvm   | nt           | NBL   | NBT I                                | EBLn1              | SBT      | SBR  |
| Capacity (veh/h)       |              | 1524  | -                                    |                    | -        | -    |
| HCM Lane V/C Ratio     |              | 0.046 | _                                    | 0.062              | _        | _    |
| HCM Control Delay (s)  |              | 7.5   | 0                                    | 9.1                | -        | _    |
| HCM Lane LOS           |              | Α.    | A                                    | A                  | _        | _    |
| HCM 95th %tile Q(veh   | )            | 0.1   | -                                    | 0.2                | _        | _    |
| 113W 73W 70W Q(VCH     | ,            | 0.1   |                                      | 0.2                |          |      |

| Approach           | EB        | WB  | SB   | All |
|--------------------|-----------|-----|------|-----|
| Denied Del/Veh (s) | h (s) 0.3 | 0.0 | 2.1  | 0.2 |
| Total Del/Veh (s)  | (s) 9.4   | 1.0 | 27.0 | 6.3 |

# 2: SR 132/MAZE BLVD & MCCRACKEN RD Performance by approach

| Approach           | EB  | WB  | NB    | SB    | All  |
|--------------------|-----|-----|-------|-------|------|
| Denied Del/Veh (s) | 0.0 | 0.2 | 0.1   | 199.0 | 6.9  |
| Total Del/Veh (s)  | 1.5 | 6.6 | 262.8 | 286.8 | 16.7 |

#### 3: MCCRACKEN RD & EAST PROJECT ACCESS Performance by approach

| Denied Del/Veh (s) | 7.5  |  |
|--------------------|------|--|
| Total Del/Veh (s)  | 36.9 |  |

| Movement              | EB  | WB  | WB  | WB  | SB  | SB  |
|-----------------------|-----|-----|-----|-----|-----|-----|
| Directions Served     | L   | Т   | T   | R   | L   | R   |
| Maximum Queue (ft)    | 75  | 3   | 2   | 2   | 90  | 60  |
| Average Queue (ft)    | 28  | 0   | 0   | 0   | 25  | 17  |
| 95th Queue (ft)       | 61  | 2   | 2   | 2   | 64  | 45  |
| Link Distance (ft)    |     | 415 | 415 |     |     | 512 |
| Upstream Blk Time (%) |     |     |     |     |     |     |
| Queuing Penalty (veh) |     |     |     |     |     |     |
| Storage Bay Dist (ft) | 300 |     |     | 200 | 200 |     |
| Storage Blk Time (%)  |     |     |     |     |     |     |
| Queuing Penalty (veh) |     |     |     |     |     |     |

### Intersection: 2: SR 132/MAZE BLVD & MCCRACKEN RD

| Movement              | EB  | EB  | EB  | WB  | WB   | WB   | NB   | SB  | SB  |  |
|-----------------------|-----|-----|-----|-----|------|------|------|-----|-----|--|
| Directions Served     | L   | Т   | TR  | L   | T    | TR   | LTR  | LT  | R   |  |
| Maximum Queue (ft)    | 71  | 14  | 24  | 30  | 27   | 60   | 297  | 324 | 225 |  |
| Average Queue (ft)    | 12  | 1   | 1   | 4   | 1    | 2    | 112  | 236 | 27  |  |
| 95th Queue (ft)       | 45  | 6   | 13  | 19  | 11   | 42   | 308  | 408 | 136 |  |
| Link Distance (ft)    |     | 415 | 415 |     | 4564 | 4564 | 2015 | 311 |     |  |
| Upstream Blk Time (%) |     |     |     |     |      |      |      | 43  |     |  |
| Queuing Penalty (veh) |     |     |     |     |      |      |      | 39  |     |  |
| Storage Bay Dist (ft) | 200 |     |     | 200 |      |      |      |     | 200 |  |
| Storage Blk Time (%)  |     |     |     |     |      |      |      | 62  | 0   |  |
| Queuing Penalty (veh) |     |     |     |     |      |      |      | 6   | 0   |  |

### Intersection: 3: MCCRACKEN RD & EAST PROJECT ACCESS

| Movement              | EB  | NB  | SB   |
|-----------------------|-----|-----|------|
| Directions Served     | LR  | LT  | TR   |
| Maximum Queue (ft)    | 425 | 32  | 101  |
| Average Queue (ft)    | 176 | 1   | 15   |
| 95th Queue (ft)       | 494 | 14  | 75   |
| Link Distance (ft)    | 534 | 311 | 1659 |
| Upstream Blk Time (%) | 10  |     |      |
| Queuing Penalty (veh) | 0   |     |      |
| Storage Bay Dist (ft) |     |     |      |
| Storage Blk Time (%)  |     |     |      |
| Queuing Penalty (veh) |     |     |      |

# **Network Summary**

| ntersection            |                |       |        |          |          |         |                      |                                |
|------------------------|----------------|-------|--------|----------|----------|---------|----------------------|--------------------------------|
| nt Delay, s/veh        | 0.8            |       |        |          |          |         |                      |                                |
| Novement               | EBL            | EBT   | WBT    | WBR      | SBL      | SBR     |                      |                                |
| ane Configurations     | ች              |       |        | 7        | <u>ነ</u> | 7       |                      |                                |
| raffic Vol, veh/h      | 56             | 1565  | 1185   | 23       | 28       | 25      |                      |                                |
| uture Vol, veh/h       | 56             | 1565  | 1185   | 23       | 28       | 25      |                      |                                |
| Conflicting Peds, #/hr | . 0            | 0     | 0      | 0        | 0        | 0       |                      |                                |
| ign Control            | Free           | Free  | Free   | Free     | Stop     | Stop    |                      |                                |
| T Channelized          | -              | None  | -      | None     | -        | None    |                      |                                |
| Storage Length         | 300            | -     | -      | 200      | 200      | -       |                      |                                |
| eh in Median Storag    | <b>j</b> e,# - | 0     | 0      | -        | 1        | -       |                      |                                |
| Grade, %               | -              | 0     | 0      | -        | 0        | -       |                      |                                |
| eak Hour Factor        | 92             | 90    | 93     | 92       | 92       | 92      |                      |                                |
| eavy Vehicles, %       | 5              | 5     | 11     | 30       | 18       | 12      |                      |                                |
| lvmt Flow              | 61             | 1739  | 1274   | 25       | 30       | 27      |                      |                                |
|                        |                |       |        |          |          |         |                      |                                |
| ajor/Minor             | Major1         |       | Major2 |          | Minor2   |         |                      |                                |
| onflicting Flow All    | 1299           | 0     | -      | 0        | 2266     | 637     |                      |                                |
| Stage 1                | -              | -     | -      | -        | 1274     | -       |                      |                                |
| Stage 2                | -              | -     | -      | -        | 992      | -       |                      |                                |
| itical Hdwy            | 4.2            | -     | -      | -        | 7.16     | 7.14    |                      |                                |
| itical Hdwy Stg 1      | -              | -     | -      | -        | 6.16     | -       |                      |                                |
| tical Hdwy Stg 2       | -              | -     | -      | -        | 6.16     | -       |                      |                                |
| llow-up Hdwy           | 2.25           | -     | -      | -        | 3.68     | 3.42    |                      |                                |
| t Cap-1 Maneuver       | 513            | -     | -      | -        | ~ 28     | 397     |                      |                                |
| Stage 1                | -              | -     | -      | -        | 198      | -       |                      |                                |
| Stage 2                | -              | -     | -      | -        | 285      | -       |                      |                                |
| atoon blocked, %       | =              | -     | -      | -        | .=       |         |                      |                                |
| ov Cap-1 Maneuver      |                | -     | -      | -        | ~ 25     | 397     |                      |                                |
| ov Cap-2 Maneuver      |                | -     | -      | -        | 109      | -       |                      |                                |
| Stage 1                | -              | -     | -      | -        | 174      | -       |                      |                                |
| Stage 2                | -              | -     | -      | -        | 285      | -       |                      |                                |
| n roo o b              | ED             |       | MD     |          | CD       |         |                      |                                |
| proach                 | EB             |       | WB     |          | SB       |         |                      |                                |
| CM Control Delay, s    | 6 0.4          |       | 0      |          | 33.6     |         |                      |                                |
| CM LOS                 |                |       |        |          | D        |         |                      |                                |
| inor Lang/Major Ma     | mt             | EDI   | EDT    | WDT      | WDD      | CDI 51  | CDI n2               |                                |
| inor Lane/Major Mvi    | IIIL           | EBL   | EBT    | WBT      |          | SBLn1 : |                      |                                |
| apacity (veh/h)        |                | 513   | -      | -        | -        | 109     | 397                  |                                |
| CM Control Doloy (     |                | 0.119 | -      | -        |          | 0.279   |                      |                                |
| CM Control Delay (s    | 5)             | 13    | -      | -        | -        | 50.4    | 14.7                 |                                |
| CM Lane LOS            | h)             | В     | -      | -        | -        | F<br>11 | В                    |                                |
| CM 95th %tile Q(vel    | 11)            | 0.4   | -      | -        | -        | 1.1     | 0.2                  |                                |
| otes                   |                |       |        |          |          |         |                      |                                |
| Volume exceeds ca      |                |       |        | ceeds 30 |          |         | putation Not Defined | *: All major volume in platoon |

| Intersection           |        |        |          |          |      |          |          |            |        |                |           |        |            |
|------------------------|--------|--------|----------|----------|------|----------|----------|------------|--------|----------------|-----------|--------|------------|
| Int Delay, s/veh       | 90     |        |          |          |      |          |          |            |        |                |           |        |            |
| Movement               | EBL    | EBT    | EBR      | WBL      | WBT  | WBR      | NBL      | NBT        | NBR    | SBL            | SBT       | SBR    |            |
| Lane Configurations    | ሻ      | ħβ     |          | ሻ        | ħβ   |          |          | 4          |        |                | र्स       | 7      |            |
| Traffic Vol, veh/h     | 18     | 1593   | 12       | 5        | 1185 | 31       | 13       | 18         | 10     | 60             | 22        | 9      |            |
| Future Vol, veh/h      | 18     | 1593   | 12       | 5        | 1185 | 31       | 13       | 18         | 10     | 60             | 22        | 9      |            |
| Conflicting Peds, #/hr | 0      | 0      | 0        | 0        | 0    | 0        | 0        | 0          | 0      | 0              | 0         | 0      |            |
| Sign Control           | Free   | Free   | Free     | Free     | Free | Free     | Stop     | Stop       | Stop   | Stop           | Stop      | Stop   |            |
| RT Channelized         | -      | -      | None     | -        | -    | None     | -        | -          | None   | -              | -         | None   |            |
| Storage Length         | 200    | -      | -        | 200      | -    | -        | -        | -          | -      | -              | -         | 200    |            |
| /eh in Median Storage  | e, # - | 0      | -        | -        | 0    | -        | -        | 0          | -      | -              | 1         | -      |            |
| Grade, %               | -      | 0      | -        | -        | 0    | -        | -        | 0          | -      | -              | 0         | -      |            |
| Peak Hour Factor       | 90     | 90     | 90       | 93       | 93   | 93       | 59       | 59         | 59     | 48             | 48        | 48     |            |
| Heavy Vehicles, %      | 28     | 5      | 22       | 2        | 11   | 29       | 22       | 13         | 2      | 18             | 10        | 33     |            |
| /lvmt Flow             | 20     | 1770   | 13       | 5        | 1274 | 33       | 22       | 31         | 17     | 125            | 46        | 19     |            |
|                        |        |        |          |          |      |          |          |            |        |                |           |        |            |
| Major/Minor I          | Major1 |        | N        | Major2   |      |          | /linor1  |            | N      | Minor2         |           |        |            |
| Conflicting Flow All   | 1307   | 0      | 0        | 1783     | 0    | 0        | 2487     | 3134       | 892    | 2242           | 3124      | 654    |            |
| Stage 1                | -      | -      | -        | -        | -    | -        | 1817     | 1817       | -      | 1301           | 1301      | -      |            |
| Stage 2                | -      | -      | -        | -        | -    | -        | 670      | 1317       | -      | 941            | 1823      | -      |            |
| Critical Hdwy          | 4.66   | -      | -        | 4.14     | -    | -        | 7.94     | 6.76       | 6.94   | 7.86           | 6.7       | 7.56   |            |
| Critical Hdwy Stg 1    | -      | -      | -        | -        | -    | -        | 6.94     | 5.76       | -      | 6.86           | 5.7       | -      |            |
| Critical Hdwy Stg 2    | -      | -      | -        | -        | -    | -        | 6.94     | 5.76       | -      | 6.86           | 5.7       | -      |            |
| ollow-up Hdwy          | 2.48   | -      | -        | 2.22     | -    | -        | 3.72     | 4.13       | 3.32   | 3.68           | 4.1       | 3.63   |            |
| Pot Cap-1 Maneuver     | 406    | -      | -        | 344      | -    | -        | ~ 11     | ~ 9        | 285    | ~ 19           | ~ 10      | 343    |            |
| Stage 1                | -      | -      | -        | -        | -    | -        | 65       | 113        | -      | 148            | 215       | -      |            |
| Stage 2                | -      | -      | -        | -        | -    | -        | 369      | 205        | -      | 253            | 116       | -      |            |
| Platoon blocked, %     |        | -      | -        |          | -    | -        |          |            |        |                |           |        |            |
| Mov Cap-1 Maneuver     | 406    | -      | -        | 344      | -    | -        | ~ 5      | ~ 8        | 285    | -              | ~ 9       | 343    |            |
| Mov Cap-2 Maneuver     | -      | -      | -        | -        | -    | -        | ~ 5      | ~ 8        | -      | ~ 67           | 68        | -      |            |
| Stage 1                | -      | -      | -        | -        | -    | -        | 62       | 107        | -      | 141            | 212       | -      |            |
| Stage 2                | -      | -      | -        | -        | -    | -        | 269      | 202        | -      | 162            | 110       | -      |            |
| Ü                      |        |        |          |          |      |          |          |            |        |                |           |        |            |
| Approach               | EB     |        |          | WB       |      |          | NB       |            |        | SB             |           |        |            |
| HCM Control Delay, s   | 0.2    |        |          | 0.1      |      | \$ 4     | 363.9    |            |        |                |           |        |            |
| HCM LOS                |        |        |          |          |      |          | F        |            |        | -              |           |        |            |
|                        |        |        |          |          |      |          |          |            |        |                |           |        |            |
| Minor Lane/Major Mvm   | nt I   | NBLn1  | EBL      | EBT      | EBR  | WBL      | WBT      | WBR S      | SBLn1  | SBLn2          |           |        |            |
| Capacity (veh/h)       |        | 8      | 406      | -        | -    | 344      | -        | -          | -      | 343            |           |        |            |
| HCM Lane V/C Ratio     |        | 8.686  |          | -        | -    | 0.016    | -        | -          | -      | 0.055          |           |        |            |
| HCM Control Delay (s)  | \$ 4   | 4363.9 | 14.3     | -        | -    | 15.6     | -        | -          | -      | 16.1           |           |        |            |
| HCM Lane LOS           |        | F      | В        | -        | -    | С        | -        | -          | -      | С              |           |        |            |
| HCM 95th %tile Q(veh)  | )      | 10.2   | 0.2      | -        | -    | 0        | -        | -          | -      | 0.2            |           |        |            |
| Notes                  |        |        |          |          |      |          |          |            |        |                |           |        |            |
| -: Volume exceeds cap  | nacity | \$. D. | elay exc | roods 20 | nne  | +: Com   | nutation | Not D      | ofinad | *. <b>\</b> II | majory    | volumo | in platoon |
| ·. volume exceeds cap  | pacity | φ; D(  | eiay exc | eeus st  | 005  | +. CUIII | pulaliol | ו ווטנו טי | enneu  | . All          | iliajui \ | volume | in platoon |

| Intersection                       |         |                 |        |                |              |      |
|------------------------------------|---------|-----------------|--------|----------------|--------------|------|
| Int Delay, s/veh                   | 5.3     |                 |        |                |              |      |
| Movement                           | EBL     | EBR             | NBL    | NBT            | SBT          | SBR  |
| Lane Configurations                | ₩.      | LDIN            | NDL    | 4              |              | JUK  |
| Traffic Vol, veh/h                 | 11      | 66              | 52     | <b>식</b><br>15 | <b>1</b>     | 12   |
| Future Vol, veh/h                  | 11      | 66              | 52     | 15             | 25           | 12   |
|                                    | 0       | 00              | 0      | 0              | 0            | 0    |
| Conflicting Peds, #/hr             |         |                 |        |                |              |      |
| Sign Control                       | Stop    | Stop            | Free   | Free           | Free         | Free |
| RT Channelized                     | -       | None            | -      |                | -            | None |
| Storage Length                     | 0       | -               | -      | -              | -            | -    |
| Veh in Median Storage,             |         | -               | -      | 0              | 0            | -    |
| Grade, %                           | 0       | -               | -      | 0              | 0            | -    |
| Peak Hour Factor                   | 92      | 92              | 92     | 59             | 48           | 92   |
| Heavy Vehicles, %                  | 2       | 23              | 21     | 2              | 2            | 2    |
| Mvmt Flow                          | 12      | 72              | 57     | 25             | 52           | 13   |
|                                    |         |                 |        |                |              |      |
| Major/Minor N                      | /linor2 | ı               | Major1 | N              | Major2       |      |
| Conflicting Flow All               | 198     | 59              | 65     | 0              | viajuiz<br>- | 0    |
|                                    | 59      |                 | 00     | U              | -            | U    |
| Stage 1                            |         | -               | -      | -              |              | -    |
| Stage 2                            | 139     | - ( 10          | -      | -              | -            | -    |
| Critical Hdwy                      | 6.42    | 6.43            | 4.31   | -              | -            | -    |
| Critical Hdwy Stg 1                | 5.42    | -               | -      | -              | -            | -    |
| Critical Hdwy Stg 2                | 5.42    | -               | -      | -              | -            | -    |
|                                    |         | 3.507           |        | -              | -            | -    |
| Pot Cap-1 Maneuver                 | 791     | 951             | 1424   | -              | -            | -    |
| Stage 1                            | 964     | -               | -      | -              | -            | -    |
| Stage 2                            | 888     | -               | -      | -              | -            | -    |
| Platoon blocked, %                 |         |                 |        | -              | -            | -    |
| Mov Cap-1 Maneuver                 | 759     | 951             | 1424   | -              | -            | -    |
| Mov Cap-2 Maneuver                 | 759     | -               | -      | -              | -            | -    |
| Stage 1                            | 924     | -               | -      | -              | -            | -    |
| Stage 2                            | 888     | -               | -      | -              | -            | -    |
| Ü                                  |         |                 |        |                |              |      |
| Annraach                           | ED      |                 | ND     |                | CD           |      |
| Approach                           | EB      |                 | NB     |                | SB           |      |
| HCM Control Delay, s               | 9.3     |                 | 5.3    |                | 0            |      |
| HCM LOS                            | Α       |                 |        |                |              |      |
|                                    |         |                 |        |                |              |      |
| Minor Lane/Major Mvm               | t       | NBL             | NRT I  | EBLn1          | SBT          | SBR  |
| Capacity (veh/h)                   |         | 1424            | -      |                | 301          | JUIC |
| HCM Lane V/C Ratio                 |         | 0.04            |        | 0.091          | -            | -    |
|                                    |         |                 | 0      | 9.3            |              | -    |
|                                    |         |                 |        |                | -            | -    |
| HCM Lang LOS                       |         | 7.6             |        |                |              |      |
| HCM Lane LOS HCM 95th %tile Q(veh) |         | 7.6<br>A<br>0.1 | A<br>- | A<br>0.3       | -            | -    |

## 1: SR 132 & SOUTH PROJECT ACCESS Performance by approach

| Approach           | EB  | WB  | SB   | All |
|--------------------|-----|-----|------|-----|
| Denied Del/Veh (s) | 0.2 | 0.0 | 0.2  | 0.1 |
| Total Del/Veh (s)  | 7.2 | 3.2 | 31.3 | 4.8 |

## 2: SR 132/MAZE BLVD & MCCRACKEN RD Performance by approach

| Approach           | EB  | WB   | NB   | SB   | All  |
|--------------------|-----|------|------|------|------|
| Denied Del/Veh (s) | 0.0 | 0.7  | 0.1  | 0.0  | 0.5  |
| Total Del/Veh (s)  | 4.8 | 29.1 | 34.2 | 31.5 | 22.2 |

## 3: MCCRACKEN RD & EAST PROJECT ACCESS Performance by approach

| Approach           | EB N      | В | SB  | All |
|--------------------|-----------|---|-----|-----|
| Denied Del/Veh (s) |           | n | 0.1 | 0.1 |
| Total Del/Veh (s)  | (s) 3.2 2 | ۷ | 0.2 | 2.3 |

#### **Total Network Performance**

| Denied Del/Veh (s) | 0.6  |  |
|--------------------|------|--|
| Total Del/Veh (s)  | 36.7 |  |

## Intersection: 1: SR 132 & SOUTH PROJECT ACCESS

| Movement              | EB  | EB   | WB  | WB  | SB  |
|-----------------------|-----|------|-----|-----|-----|
| Directions Served     | L   | Т    | T   | T   | R   |
| Maximum Queue (ft)    | 74  | 4    | 52  | 48  | 87  |
| Average Queue (ft)    | 21  | 0    | 2   | 2   | 32  |
| 95th Queue (ft)       | 60  | 4    | 47  | 44  | 70  |
| Link Distance (ft)    |     | 5010 | 421 | 421 | 511 |
| Upstream Blk Time (%) |     |      | 0   |     |     |
| Queuing Penalty (veh) |     |      | 0   |     |     |
| Storage Bay Dist (ft) | 300 |      |     |     |     |
| Storage Blk Time (%)  |     |      |     |     |     |
| Queuing Penalty (veh) |     |      |     |     |     |

## Intersection: 2: SR 132/MAZE BLVD & MCCRACKEN RD

| Movement              | EB  | EB  | EB  | WB  | WB   | WB   | NB   | SB  | SB  |  |
|-----------------------|-----|-----|-----|-----|------|------|------|-----|-----|--|
| Directions Served     | L   | T   | TR  | L   | T    | TR   | LTR  | LT  | R   |  |
| Maximum Queue (ft)    | 73  | 212 | 242 | 38  | 773  | 818  | 92   | 112 | 76  |  |
| Average Queue (ft)    | 10  | 68  | 82  | 6   | 300  | 335  | 36   | 49  | 22  |  |
| 95th Queue (ft)       | 50  | 155 | 179 | 26  | 657  | 717  | 75   | 98  | 59  |  |
| Link Distance (ft)    |     | 421 | 421 |     | 4564 | 4564 | 2015 | 311 |     |  |
| Upstream Blk Time (%) |     |     | 0   |     |      |      |      |     |     |  |
| Queuing Penalty (veh) |     |     | 0   |     |      |      |      |     |     |  |
| Storage Bay Dist (ft) | 200 |     |     | 200 |      |      |      |     | 200 |  |
| Storage Blk Time (%)  | 0   | 0   |     |     | 10   |      |      |     |     |  |
| Queuing Penalty (veh) | 0   | 0   |     |     | 0    |      |      |     |     |  |

## Intersection: 3: MCCRACKEN RD & EAST PROJECT ACCESS

| Movement              | EB  | NB  |
|-----------------------|-----|-----|
| Directions Served     | LR  | LT  |
| Maximum Queue (ft)    | 82  | 37  |
| Average Queue (ft)    | 38  | 3   |
| 95th Queue (ft)       | 69  | 19  |
| Link Distance (ft)    | 534 | 311 |
| Upstream Blk Time (%) |     |     |
| Queuing Penalty (veh) |     |     |
| Storage Bay Dist (ft) |     |     |
| Storage Blk Time (%)  |     |     |
| Queuing Penalty (veh) |     |     |

## **Network Summary**

Network wide Queuing Penalty: 1

| Intersection  |        |                      |               |        |         |                    |
|---|--------|----------------------|---------------|--------|---------|--------------------|
| Int Delay, s/veh  | 0.9    |                      |               |        |         |                    |
| Movement  | EBL    | EBT                  | WBT           | WBR    | SBL     | SBR                |
| Lane Configurations   | 7      | <b>^</b>             | <b>^</b>      | 7      | ODL     | 7                  |
| Traffic Vol, veh/h  | 22     | 996                  | 2271          | 35     | 0       | 56                 |
| Future Vol, veh/h   | 22     | 996                  | 2271          | 35     | 0       | 56                 |
| Conflicting Peds, #/hr  | 0      | 0                    | 0             | 0      | 0       | 0                  |
| Sign Control  | Free   | Free                 | Free          | Free   | Stop    | Stop               |
| RT Channelized  | -      | None                 | -             | None   | -<br>-  | None               |
| Storage Length  | 300    | -                    | _             | 200    | _       | -                  |
| Veh in Median Storage,  |        | 0                    | 0             | 200    | 1       | _                  |
| Grade, %  | π -    | 0                    | 0             | _      | 0       | -                  |
| Peak Hour Factor  | 92     | 92                   | 92            | 92     | 92      | 92                 |
| Heavy Vehicles, %   | 92     | 22                   | 10            | 26     | 24      | 4                  |
| Mvmt Flow   | 24     | 1083                 | 2468          | 38     | 0       | 61                 |
| IVIVIIIL FIOW   | 24     | 1003                 | 2400          | 30     | U       | 01                 |
|   |        |                      |               |        |         |                    |
| Major/Minor N   | 1ajor1 | N                    | Major2        | N      | /linor2 |                    |
| Conflicting Flow All  | 2506   | 0                    | -             | 0      | -       | 1234               |
| Stage 1   | -      | -                    | -             | -      | -       | -                  |
| Stage 2   | -      | -                    | -             | -      | -       | -                  |
| Critical Hdwy   | 4.28   | -                    | -             | -      | -       | 6.98               |
| Critical Hdwy Stg 1   | -      | -                    | -             | -      | -       | -                  |
| Critical Hdwy Stg 2   | -      | -                    | -             | -      | _       | -                  |
| Follow-up Hdwy  | 2.29   | _                    | -             | -      | -       | 3.34               |
| Pot Cap-1 Maneuver  | 160    | _                    | -             | -      | 0       | 165                |
| Stage 1   | -      | _                    |               | _      | 0       | -                  |
| Stage 2   | _      | _                    | _             | _      | 0       | _                  |
| Platoon blocked, %  |        | _                    | _             | _      |         |                    |
| Mov Cap-1 Maneuver  | 160    | _                    | _             | _      | _       | 165                |
| Mov Cap-2 Maneuver  | -      | _                    | _             | _      | _       | -                  |
| Stage 1   | _      | _                    | _             | _      | _       | _                  |
| Stage 2   | _      |                      | _             |        | _       | _                  |
| Stage 2   |        |                      |               |        |         |                    |
|   |        |                      |               |        |         |                    |
| Approach  | EB     |                      | WB            |        | SB      |                    |
|   |        |                      | 0             |        | 39      |                    |
| HCM Control Delay, s  | 0.7    |                      | U             |        |         |                    |
|   | 0.7    |                      | U             |        | Ε       |                    |
| HCM Control Delay, s  | 0.7    |                      | U             |        | E       |                    |
| HCM Control Delay, s<br>HCM LOS   |        | EDI                  |               | W/DT   |         | CDI n1             |
| HCM Control Delay, s<br>HCM LOS<br>Minor Lane/Major Mvmt  |        | EBL                  | EBT           | WBT    | WBR S   |                    |
| HCM Control Delay, s HCM LOS  Minor Lane/Major Mvmt Capacity (veh/h)  |        | 160                  | EBT<br>-      | -      | WBR :   | 165                |
| HCM Control Delay, s HCM LOS  Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio                       |        | 160<br>0.149         | EBT<br>-<br>- | -      | WBR S   | 165<br>0.369       |
| HCM Control Delay, s HCM LOS  Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s) |        | 160<br>0.149<br>31.4 | EBT<br>-<br>- | -<br>- | WBR S   | 165<br>0.369<br>39 |
| HCM Control Delay, s HCM LOS  Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio                       | i e    | 160<br>0.149         | EBT<br>-<br>- | -      | WBR S   | 165<br>0.369       |

|                         | ᄼ    | <b>→</b> | •    | ←     | <b>†</b> | <b>↓</b> | 4    |
|-------------------------|------|----------|------|-------|----------|----------|------|
| Lane Group              | EBL  | EBT      | WBL  | WBT   | NBT      | SBT      | SBR  |
| Lane Group Flow (vph)   | 8    | 1075     | 5    | 2524  | 42       | 58       | 26   |
| v/c Ratio               | 0.13 | 0.46     | 0.04 | 0.98  | 0.35     | 0.57     | 0.13 |
| Control Delay           | 44.0 | 5.4      | 38.8 | 26.3  | 42.6     | 61.4     | 1.3  |
| Queue Delay             | 0.0  | 0.0      | 0.0  | 0.0   | 0.0      | 0.0      | 0.0  |
| Total Delay             | 44.0 | 5.4      | 38.8 | 26.3  | 42.6     | 61.4     | 1.3  |
| Queue Length 50th (ft)  | 4    | 84       | 2    | ~611  | 18       | 29       | 0    |
| Queue Length 95th (ft)  | 19   | 208      | 14   | #1064 | 55       | #93      | 0    |
| Internal Link Dist (ft) |      | 409      |      | 4512  | 1981     | 300      |      |
| Turn Bay Length (ft)    | 200  |          | 200  |       |          |          | 200  |
| Base Capacity (vph)     | 61   | 2322     | 134  | 2579  | 126      | 105      | 205  |
| Starvation Cap Reductn  | 0    | 0        | 0    | 0     | 0        | 0        | 0    |
| Spillback Cap Reductn   | 0    | 0        | 0    | 0     | 0        | 0        | 0    |
| Storage Cap Reductn     | 0    | 0        | 0    | 0     | 0        | 0        | 0    |
| Reduced v/c Ratio       | 0.13 | 0.46     | 0.04 | 0.98  | 0.33     | 0.55     | 0.13 |

Intersection Summary

Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

|  | ۶         | <b>→</b>     | •         | •         | <b>←</b>     | •          | 1          | <b>†</b>   | <b>/</b>  | <b>/</b>   | <b>+</b>   |            |
|--|-----------|--------------|-----------|-----------|--------------|------------|------------|------------|-----------|------------|------------|------------|
| Movement                                 | EBL       | EBT          | EBR       | WBL       | WBT          | WBR        | NBL        | NBT        | NBR       | SBL        | SBT        | SBR        |
| Lane Configurations                      | 7         | <b>∱</b> ⊅   |           | 7         | ተኈ           |            |            | ↔          |           |            | 4          | 7          |
| Traffic Volume (veh/h)                   | 7         | 984          | 5         | 5         | 2270         | 52         | 12         | 22         | 5         | 31         | 22         | 24         |
| Future Volume (veh/h)                    | 7         | 984          | 5         | 5         | 2270         | 52         | 12         | 22         | 5         | 31         | 22         | 24         |
| Initial Q (Qb), veh                      | 0         | 0            | 0         | 0         | 0            | 0          | 0          | 0          | 0         | 0          | 0          | 0          |
| Ped-Bike Adj(A_pbT)                      | 1.00      |              | 1.00      | 1.00      |              | 1.00       | 1.00       |            | 1.00      | 1.00       |            | 1.00       |
| Parking Bus, Adj                         | 1.00      | 1.00         | 1.00      | 1.00      | 1.00         | 1.00       | 1.00       | 1.00       | 1.00      | 1.00       | 1.00       | 1.00       |
| Work Zone On Approach                    | / 10      | No           | 1 470     | 1070      | No           | 1750       | 1/04       | No         | 1070      | 1500       | No         | 1.470      |
| Adj Sat Flow, veh/h/ln                   | 640       | 1574         | 1470      | 1870      | 1752         | 1752       | 1604       | 1737       | 1870      | 1530       | 1693       | 1470       |
| Adj Flow Rate, veh/h<br>Peak Hour Factor | 8<br>0.92 | 1070<br>0.92 | 5<br>0.92 | 5<br>0.92 | 2467<br>0.92 | 57<br>0.92 | 13<br>0.92 | 24<br>0.92 | 5<br>0.92 | 34<br>0.92 | 24<br>0.92 | 26<br>0.92 |
| Percent Heavy Veh, %                     | 85        | 22           | 29        | 0.92      | 10           | 10         | 20         | 11         | 0.92      | 25         | 14         | 29         |
| Cap, veh/h                               | 6         | 2181         | 10        | 12        | 2364         | 54         | 67         | 50         | 9         | 117        | 46         | 29<br>77   |
| Arrive On Green                          | 0.01      | 0.71         | 0.71      | 0.01      | 0.71         | 0.71       | 0.06       | 0.06       | 0.06      | 0.06       | 0.06       | 0.06       |
| Sat Flow, veh/h                          | 610       | 3052         | 14        | 1781      | 3326         | 77         | 210        | 817        | 139       | 830        | 740        | 1246       |
| Grp Volume(v), veh/h                     | 8         | 524          | 551       | 5         | 1230         | 1294       | 42         | 0          | 0         | 58         | 0          | 26         |
| Grp Sat Flow(s), veh/h/ln                | 610       | 1495         | 1571      | 1781      | 1664         | 1738       | 1166       | 0          | 0         | 1569       | 0          | 1246       |
| Q Serve(g_s), s                          | 0.9       | 13.3         | 13.3      | 0.2       | 61.5         | 61.5       | 0.6        | 0.0        | 0.0       | 0.0        | 0.0        | 1.7        |
| Cycle Q Clear(g_c), s                    | 0.9       | 13.3         | 13.3      | 0.2       | 61.5         | 61.5       | 3.6        | 0.0        | 0.0       | 3.0        | 0.0        | 1.7        |
| Prop In Lane                             | 1.00      |              | 0.01      | 1.00      | 01.0         | 0.04       | 0.31       | 0.0        | 0.12      | 0.59       | 0.0        | 1.00       |
| Lane Grp Cap(c), veh/h                   | 6         | 1068         | 1123      | 12        | 1183         | 1236       | 126        | 0          | 0         | 163        | 0          | 77         |
| V/C Ratio(X)                             | 1.30      | 0.49         | 0.49      | 0.43      | 1.04         | 1.05       | 0.33       | 0.00       | 0.00      | 0.36       | 0.00       | 0.34       |
| Avail Cap(c_a), veh/h                    | 35        | 1068         | 1123      | 126       | 1183         | 1236       | 150        | 0          | 0         | 185        | 0          | 97         |
| HCM Platoon Ratio                        | 1.00      | 1.00         | 1.00      | 1.00      | 1.00         | 1.00       | 1.00       | 1.00       | 1.00      | 1.00       | 1.00       | 1.00       |
| Upstream Filter(I)                       | 1.00      | 1.00         | 1.00      | 1.00      | 1.00         | 1.00       | 1.00       | 0.00       | 0.00      | 1.00       | 0.00       | 1.00       |
| Uniform Delay (d), s/veh                 | 42.8      | 5.4          | 5.4       | 42.8      | 12.5         | 12.5       | 39.4       | 0.0        | 0.0       | 39.5       | 0.0        | 38.9       |
| Incr Delay (d2), s/veh                   | 270.3     | 0.4          | 0.3       | 23.0      | 36.9         | 39.0       | 1.5        | 0.0        | 0.0       | 1.3        | 0.0        | 2.6        |
| Initial Q Delay(d3),s/veh                | 0.0       | 0.0          | 0.0       | 0.0       | 0.0          | 0.0        | 0.0        | 0.0        | 0.0       | 0.0        | 0.0        | 0.0        |
| %ile BackOfQ(50%),veh/ln                 | 0.6       | 3.3          | 3.5       | 0.2       | 28.8         | 30.8       | 0.9        | 0.0        | 0.0       | 1.2        | 0.0        | 0.6        |
| Unsig. Movement Delay, s/vel             |           |              |           |           |              |            |            |            |           |            |            |            |
| LnGrp Delay(d),s/veh                     | 313.1     | 5.8          | 5.8       | 65.8      | 49.4         | 51.5       | 41.0       | 0.0        | 0.0       | 40.8       | 0.0        | 41.5       |
| LnGrp LOS                                | F         | A            | A         | E         | F            | F          | D          | A          | A         | D          | A          | D          |
| Approach Vol, veh/h                      |           | 1083         |           |           | 2529         |            |            | 42         |           |            | 84         |            |
| Approach Delay, s/veh                    |           | 8.0          |           |           | 50.5         |            |            | 41.0       |           |            | 41.0       |            |
| Approach LOS                             |           | Α            |           |           | D            |            |            | D          |           |            | D          |            |
| Timer - Assigned Phs                     |           | 2            | 3         | 4         |              | 6          | 7          | 8          |           |            |            |            |
| Phs Duration (G+Y+Rc), s                 |           | 11.8         | 6.4       | 68.3      |              | 11.8       | 6.7        | 68.0       |           |            |            |            |
| Change Period (Y+Rc), s                  |           | 6.5          | 5.8       | 6.5       |              | 6.5        | 5.8        | 6.5        |           |            |            |            |
| Max Green Setting (Gmax), s              |           | 6.7          | 6.1       | 60.4      |              | 6.7        | 5.0        | 61.5       |           |            |            |            |
| Max Q Clear Time (g_c+I1), s             |           | 5.6          | 2.2       | 15.3      |              | 5.0        | 2.9        | 63.5       |           |            |            |            |
| Green Ext Time (p_c), s                  |           | 0.0          | 0.0       | 9.4       |              | 0.0        | 0.0        | 0.0        |           |            |            |            |
| Intersection Summary                     |           |              |           |           |              |            |            |            |           |            |            |            |
| HCM 6th Ctrl Delay                       |           |              | 37.9      |           |              |            |            |            |           |            |            |            |
| HCM 6th LOS                              |           |              | D         |           |              |            |            |            |           |            |            |            |

| Intersection           |          |         |        |       |        |      |
|------------------------|----------|---------|--------|-------|--------|------|
| Int Delay, s/veh       | 6.4      |         |        |       |        |      |
| Movement               | EBL      | EBR     | NBL    | NBT   | SBT    | SBR  |
| Lane Configurations    | <b>Y</b> |         |        | 4     | \$     |      |
| Traffic Vol, veh/h     | 9        | 62      | 65     | 15    | 15     | 10   |
| Future Vol, veh/h      | 9        | 62      | 65     | 15    | 15     | 10   |
| Conflicting Peds, #/hr | 0        | 0       | 0      | 0     | 0      | 0    |
| Sign Control           | Stop     | Stop    | Free   | Free  | Free   | Free |
| RT Channelized         | 310p     | None    | -      | None  | -      | None |
| Storage Length         | 0        | NUITE - | -      | -     | -      | NONE |
| Veh in Median Storag   |          |         | -      |       | 0      | -    |
|                        |          | -       | -      | 0     | 0      | -    |
| Grade, %               | 0        | -       | -      | 0     | 0      | -    |
| Peak Hour Factor       | 92       | 92      | 93     | 92    | 92     | 92   |
| Heavy Vehicles, %      | 2        | 26      | 12     | 2     | 2      | 2    |
| Mvmt Flow              | 10       | 67      | 70     | 16    | 16     | 11   |
|                        |          |         |        |       |        |      |
| Major/Minor            | Minor2   |         | Major1 | N     | Major2 |      |
| Conflicting Flow All   | 178      | 22      | 27     | 0     | -      | 0    |
| Stage 1                | 22       | -       | -      | -     | _      | -    |
| Stage 2                | 156      | _       |        |       | _      | _    |
| Critical Hdwy          | 6.42     | 6.46    | 4.22   | -     | -      |      |
|                        | 5.42     |         |        | -     |        |      |
| Critical Hdwy Stg 1    |          | -       | -      | -     | -      | -    |
| Critical Hdwy Stg 2    | 5.42     | 2 524   | -      | -     | _      | -    |
| Follow-up Hdwy         |          | 3.534   |        | -     | -      | -    |
| Pot Cap-1 Maneuver     | 812      | 990     | 1524   | -     | -      | -    |
| Stage 1                | 1001     | -       | -      | -     | -      | -    |
| Stage 2                | 872      | -       | -      | -     | -      | -    |
| Platoon blocked, %     |          |         |        | -     | -      | -    |
| Mov Cap-1 Maneuver     | 775      | 990     | 1524   | -     | -      | -    |
| Mov Cap-2 Maneuver     | 775      |         | -      | -     | -      | -    |
| Stage 1                | 955      | _       | -      | -     | -      | -    |
| Stage 2                | 872      | _       | _      | _     | _      | _    |
| Jugo Z                 | 512      |         |        |       |        |      |
|                        |          |         |        |       |        |      |
| Approach               | EB       |         | NB     |       | SB     |      |
| HCM Control Delay, s   | 9.1      |         | 6.1    |       | 0      |      |
| HCM LOS                | Α        |         |        |       |        |      |
|                        |          |         |        |       |        |      |
| Minor Lane/Major Mvr   | nt       | NBL     | NBT    | EBLn1 | SBT    | SBR  |
| Capacity (veh/h)       |          | 1524    |        | 956   |        |      |
| HCM Lane V/C Ratio     |          | 0.046   |        | 0.081 |        | _    |
| HCM Control Delay (s   | ١        |         |        |       | -      | -    |
| ncivi control belay (S | )        | 7.5     | 0      | 9.1   | -      | -    |

HCM Lane LOS

HCM 95th %tile Q(veh)

Α

0.1

Α

Α

0.3

## 1: SR 132 & SOUTH PROJECT ACCESS Performance by approach

| Approach           | EB  | WB  | SB   | All |
|--------------------|-----|-----|------|-----|
| Denied Del/Veh (s) | 0.3 | 0.0 | 0.1  | 0.2 |
| Total Del/Veh (s)  | 9.7 | 1.5 | 10.0 | 6.3 |

## 2: SR 132/MAZE BLVD & MCCRACKEN RD Performance by approach

| Approach           | EB  | WB   | NB   | SB   | All  |
|--------------------|-----|------|------|------|------|
| Denied Del/Veh (s) | 0.0 | 0.2  | 0.1  | 0.7  | 0.1  |
| Total Del/Veh (s)  | 9.7 | 13.1 | 26.3 | 26.8 | 12.1 |

### 3: MCCRACKEN RD & EAST PROJECT ACCESS Performance by approach

| Approach           | EB NB   | SB  | All |
|--------------------|---------|-----|-----|
| Denied Del/Veh (s) | 0.2 0.0 | 0.1 | 0.1 |
| Total Del/Veh (s)  | 3.6 2.3 | 0.3 | 2.6 |

#### **Total Network Performance**

| Denied Del/Veh (s) | 0.3  |  |
|--------------------|------|--|
| Total Del/Veh (s)  | 27.1 |  |

## Intersection: 1: SR 132 & SOUTH PROJECT ACCESS

| Movement              | EB  | WB  | WB  | WB  | SB  |
|-----------------------|-----|-----|-----|-----|-----|
| Directions Served     | L   | Т   | T   | R   | R   |
| Maximum Queue (ft)    | 75  | 3   | 8   | 11  | 58  |
| Average Queue (ft)    | 26  | 0   | 0   | 0   | 17  |
| 95th Queue (ft)       | 61  | 3   | 6   | 5   | 42  |
| Link Distance (ft)    |     | 421 | 421 |     | 511 |
| Upstream Blk Time (%) |     |     |     |     |     |
| Queuing Penalty (veh) |     |     |     |     |     |
| Storage Bay Dist (ft) | 300 |     |     | 200 |     |
| Storage Blk Time (%)  |     |     |     |     |     |
| Queuing Penalty (veh) |     |     |     |     |     |

## Intersection: 2: SR 132/MAZE BLVD & MCCRACKEN RD

| Movement              | EB  | EB  | EB  | WB  | WB   | WB   | NB   | SB  | SB  |  |
|-----------------------|-----|-----|-----|-----|------|------|------|-----|-----|--|
| Directions Served     | L   | Т   | TR  | L   | T    | TR   | LTR  | LT  | R   |  |
| Maximum Queue (ft)    | 99  | 306 | 298 | 26  | 235  | 256  | 109  | 226 | 102 |  |
| Average Queue (ft)    | 21  | 117 | 132 | 3   | 94   | 118  | 31   | 79  | 14  |  |
| 95th Queue (ft)       | 67  | 244 | 250 | 16  | 181  | 214  | 81   | 175 | 55  |  |
| Link Distance (ft)    |     | 421 | 421 |     | 4564 | 4564 | 2015 | 311 |     |  |
| Upstream Blk Time (%) |     | 0   |     |     |      |      |      | 0   |     |  |
| Queuing Penalty (veh) |     | 0   |     |     |      |      |      | 0   |     |  |
| Storage Bay Dist (ft) | 200 |     |     | 200 |      |      |      |     | 200 |  |
| Storage Blk Time (%)  |     | 1   |     |     | 0    |      |      | 1   | 0   |  |
| Queuing Penalty (veh) |     | 0   |     |     | 0    |      |      | 0   | 0   |  |

## Intersection: 3: MCCRACKEN RD & EAST PROJECT ACCESS

| Movement              | EB  | NB  |
|-----------------------|-----|-----|
| Directions Served     | LR  | LT  |
| Maximum Queue (ft)    | 95  | 36  |
| Average Queue (ft)    | 48  | 3   |
| 95th Queue (ft)       | 80  | 18  |
| Link Distance (ft)    | 534 | 311 |
| Upstream Blk Time (%) |     |     |
| Queuing Penalty (veh) |     |     |
| Storage Bay Dist (ft) |     |     |
| Storage Blk Time (%)  |     |     |
| Queuing Penalty (veh) |     |     |

## **Network Summary**

Network wide Queuing Penalty: 1

| Intersection           |        |                |                |       |         |        |
|------------------------|--------|----------------|----------------|-------|---------|--------|
| Int Delay, s/veh       | 0.4    |                |                |       |         |        |
| Movement               | EBL    | EBT            | WBT            | WBR   | SBL     | SBR    |
| Lane Configurations    | LDL    |                | <u>₩</u>       | VVDIX | JUL     | 7 JUK  |
| Traffic Vol, veh/h     | 56     | <b>††</b> 1565 | <b>TT</b> 1185 | 23    | 0       | 25     |
| Future Vol, veh/h      | 56     | 1565           | 1185           | 23    |         | 25     |
|                        |        |                |                |       | 0       |        |
| Conflicting Peds, #/hr | 0      | 0              | 0              | 0     | O Cton  | O Cton |
| Sign Control           | Free   | Free           | Free           | Free  | Stop    | Stop   |
| RT Channelized         | -      | None           | -              | None  | -       | None   |
| Storage Length         | 300    | -              | -              | 200   | -       | -      |
| Veh in Median Storage  |        | 0              | 0              | -     | 1       | -      |
| Grade, %               | -      | 0              | 0              | -     | 0       | -      |
| Peak Hour Factor       | 92     | 90             | 93             | 92    | 92      | 92     |
| Heavy Vehicles, %      | 5      | 5              | 11             | 30    | 18      | 12     |
| Mvmt Flow              | 61     | 1739           | 1274           | 25    | 0       | 27     |
|                        |        |                |                |       |         |        |
| Mojor/Minor            | laiar1 |                | Aniar2         | N.    | liner?  |        |
|                        | Major1 |                | Major2         |       | /linor2 | /07    |
| Conflicting Flow All   | 1299   | 0              | -              | 0     | -       | 637    |
| Stage 1                | -      | -              | -              | -     | -       | -      |
| Stage 2                | -      | -              | -              | -     | -       | -      |
| Critical Hdwy          | 4.2    | -              | -              | -     | -       | 7.14   |
| Critical Hdwy Stg 1    | -      | -              | -              | -     | -       | -      |
| Critical Hdwy Stg 2    | -      | -              | -              | -     | -       | -      |
| Follow-up Hdwy         | 2.25   | -              | -              | -     | -       | 3.42   |
| Pot Cap-1 Maneuver     | 513    | -              | -              | -     | 0       | 397    |
| Stage 1                | -      | -              | -              | -     | 0       | -      |
| Stage 2                | -      | -              | -              | -     | 0       | -      |
| Platoon blocked, %     |        | -              | _              | -     |         |        |
| Mov Cap-1 Maneuver     | 513    | _              | -              | _     | -       | 397    |
| Mov Cap-2 Maneuver     | -      | _              | _              | _     | _       | -      |
| Stage 1                | _      |                | _              |       | _       |        |
| Stage 2                |        | _              |                |       |         |        |
| Slaye 2                | -      | -              | -              | -     | -       | -      |
|                        |        |                |                |       |         |        |
| Approach               | EB     |                | WB             |       | SB      |        |
| HCM Control Delay, s   | 0.4    |                | 0              |       | 14.7    |        |
| HCM LOS                |        |                |                |       | В       |        |
|                        |        |                |                |       |         |        |
|                        |        |                |                |       |         |        |
| Minor Lane/Major Mvm   | t      | EBL            | EBT            | WBT   | WBR:    | SBLn1  |
| Capacity (veh/h)       |        | 513            | -              | -     | -       | 397    |
| HCM Lane V/C Ratio     |        | 0.119          | -              | -     | -       | 0.068  |
| HCM Control Delay (s)  |        | 13             | -              | -     | -       | 14.7   |
| HCM Lane LOS           |        | В              | -              | -     | -       | В      |
| HCM 95th %tile Q(veh)  |        | 0.4            | -              | _     | -       | 0.2    |
|                        |        |                |                |       |         |        |

|                         | •    | <b>→</b> | •    | <b>←</b> | <b>†</b> | ţ    | 4    |
|-------------------------|------|----------|------|----------|----------|------|------|
| Lane Group              | EBL  | EBT      | WBL  | WBT      | NBT      | SBT  | SBR  |
| Lane Group Flow (vph)   | 20   | 1753     | 5    | 1307     | 70       | 232  | 19   |
| v/c Ratio               | 0.17 | 0.84     | 0.04 | 0.71     | 0.26     | 0.95 | 0.06 |
| Control Delay           | 41.3 | 17.8     | 40.4 | 15.5     | 28.1     | 82.6 | 0.3  |
| Queue Delay             | 0.0  | 0.0      | 0.0  | 0.0      | 0.0      | 0.0  | 0.0  |
| Total Delay             | 41.3 | 17.8     | 40.4 | 15.5     | 28.1     | 82.6 | 0.3  |
| Queue Length 50th (ft)  | 9    | 294      | 2    | 180      | 22       | 111  | 0    |
| Queue Length 95th (ft)  | 34   | #568     | 14   | 367      | 40       | 108  | 0    |
| Internal Link Dist (ft) |      | 409      |      | 4512     | 1981     | 300  |      |
| Turn Bay Length (ft)    | 200  |          | 200  |          |          |      | 200  |
| Base Capacity (vph)     | 132  | 2400     | 119  | 2123     | 271      | 245  | 332  |
| Starvation Cap Reductn  | 0    | 0        | 0    | 0        | 0        | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0        | 0    | 0        | 0        | 0    | 0    |
| Storage Cap Reductn     | 0    | 0        | 0    | 0        | 0        | 0    | 0    |
| Reduced v/c Ratio       | 0.15 | 0.73     | 0.04 | 0.62     | 0.26     | 0.95 | 0.06 |
| Intersection Summary    |      |          |      |          |          |      |      |

<sup># 95</sup>th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

|                              | ۶         | <b>→</b>   | •         | •         | <b>←</b>   | 4         | 1         | <b>†</b> | ~        | <b>/</b>  | <b>†</b> | ✓         |
|------------------------------|-----------|------------|-----------|-----------|------------|-----------|-----------|----------|----------|-----------|----------|-----------|
| Movement                     | EBL       | EBT        | EBR       | WBL       | WBT        | WBR       | NBL       | NBT      | NBR      | SBL       | SBT      | SBR       |
| Lane Configurations          | ሻ         | <b>∱</b> ∱ |           | ሻ         | <b>ተ</b> ኈ |           |           | 4        |          |           | र्स      | 7         |
| Traffic Volume (veh/h)       | 18        | 1572       | 5         | 5         | 1185       | 31        | 13        | 18       | 10       | 81        | 30       | 9         |
| Future Volume (veh/h)        | 18        | 1572       | 5         | 5         | 1185       | 31        | 13        | 18       | 10       | 81        | 30       | 9         |
| Initial Q (Qb), veh          | 0         | 0          | 0         | 0         | 0          | 0         | 0         | 0        | 0        | 0         | 0        | 0         |
| Ped-Bike Adj(A_pbT)          | 1.00      |            | 1.00      | 1.00      |            | 1.00      | 1.00      |          | 1.00     | 1.00      |          | 1.00      |
| Parking Bus, Adj             | 1.00      | 1.00       | 1.00      | 1.00      | 1.00       | 1.00      | 1.00      | 1.00     | 1.00     | 1.00      | 1.00     | 1.00      |
| Work Zone On Approach        |           | No         |           |           | No         |           |           | No       |          |           | No       |           |
| Adj Sat Flow, veh/h/ln       | 1485      | 1826       | 1574      | 1870      | 1737       | 1470      | 1574      | 1707     | 1870     | 1633      | 1752     | 1411      |
| Adj Flow Rate, veh/h         | 20        | 1747       | 6         | 5         | 1274       | 33        | 22        | 31       | 17       | 169       | 62       | 19        |
| Peak Hour Factor             | 0.90      | 0.90       | 0.90      | 0.93      | 0.93       | 0.93      | 0.59      | 0.59     | 0.59     | 0.48      | 0.48     | 0.48      |
| Percent Heavy Veh, %         | 28        | 5          | 22        | 2         | 11         | 29        | 22        | 13       | 2        | 18        | 10       | 33        |
| Cap, veh/h                   | 32        | 2020       | 7         | 12        | 1820       | 47        | 58        | 63       | 20       | 192       | 42       | 229       |
| Arrive On Green              | 0.02      | 0.57       | 0.57      | 0.01      | 0.55       | 0.55      | 0.19      | 0.19     | 0.19     | 0.19      | 0.19     | 0.19      |
| Sat Flow, veh/h              | 1414      | 3546       | 12        | 1781      | 3287       | 85        | 0         | 330      | 106      | 600       | 220      | 1196      |
| Grp Volume(v), veh/h         | 20        | 854        | 899       | 5         | 639        | 668       | 70        | 0        | 0        | 231       | 0        | 19        |
| Grp Sat Flow(s), veh/h/ln    | 1414      | 1735       | 1824      | 1781      | 1650       | 1722      | 436       | 0        | 0        | 820       | 0        | 1196      |
| Q Serve(g_s), s              | 1.1       | 33.8       | 33.8      | 0.2       | 22.8       | 22.9      | 0.0       | 0.0      | 0.0      | 0.0       | 0.0      | 1.1       |
| Cycle Q Clear(g_c), s        | 1.1       | 33.8       | 33.8      | 0.2       | 22.8       | 22.9      | 15.5      | 0.0      | 0.0      | 15.5      | 0.0      | 1.1       |
| Prop In Lane                 | 1.00      |            | 0.01      | 1.00      |            | 0.05      | 0.31      | _        | 0.24     | 0.73      |          | 1.00      |
| Lane Grp Cap(c), veh/h       | 32        | 988        | 1039      | 12        | 914        | 953       | 142       | 0        | 0        | 234       | 0        | 229       |
| V/C Ratio(X)                 | 0.63      | 0.86       | 0.87      | 0.43      | 0.70       | 0.70      | 0.49      | 0.00     | 0.00     | 0.99      | 0.00     | 0.08      |
| Avail Cap(c_a), veh/h        | 126       | 1125       | 1183      | 114       | 1030       | 1075      | 142       | 0        | 0        | 234       | 0        | 229       |
| HCM Platoon Ratio            | 1.00      | 1.00       | 1.00      | 1.00      | 1.00       | 1.00      | 1.00      | 1.00     | 1.00     | 1.00      | 1.00     | 1.00      |
| Upstream Filter(I)           | 1.00      | 1.00       | 1.00      | 1.00      | 1.00       | 1.00      | 1.00      | 0.00     | 0.00     | 1.00      | 0.00     | 1.00      |
| Uniform Delay (d), s/veh     | 39.2      | 14.8       | 14.8      | 40.0      | 13.2       | 13.2      | 28.4      | 0.0      | 0.0      | 35.2      | 0.0      | 26.9      |
| Incr Delay (d2), s/veh       | 18.9      | 6.5        | 6.3       | 22.8      | 1.8        | 1.8       | 2.6       | 0.0      | 0.0      | 55.0      | 0.0      | 0.2       |
| Initial Q Delay(d3),s/veh    | 0.0       | 0.0        | 0.0       | 0.0       | 0.0        | 0.0       | 0.0       | 0.0      | 0.0      | 0.0       | 0.0      | 0.0       |
| %ile BackOfQ(50%),veh/ln     | 0.5       | 11.3       | 11.9      | 0.2       | 6.8        | 7.1       | 1.1       | 0.0      | 0.0      | 7.8       | 0.0      | 0.3       |
| Unsig. Movement Delay, s/veh |           | 21.2       | 01.1      | /20       | 1F 0       | 140       | 21.1      | 0.0      | 0.0      | 00.2      | 0.0      | 27.0      |
| LnGrp Delay(d),s/veh         | 58.2<br>E | 21.3<br>C  | 21.1<br>C | 62.8<br>E | 15.0<br>B  | 14.9<br>B | 31.1<br>C | 0.0      | 0.0<br>A | 90.2<br>F | 0.0      | 27.0<br>C |
| LnGrp LOS                    | <u> </u>  |            | U         | E         |            | В         | C         | A        | A        | Г         | A 250    |           |
| Approach Vol, veh/h          |           | 1773       |           |           | 1312       |           |           | 70       |          |           | 250      |           |
| Approach LOS                 |           | 21.6       |           |           | 15.1       |           |           | 31.1     |          |           | 85.4     |           |
| Approach LOS                 |           | С          |           |           | В          |           |           | С        |          |           | F        |           |
| Timer - Assigned Phs         |           | 2          | 3         | 4         |            | 6         | 7         | 8        |          |           |          |           |
| Phs Duration (G+Y+Rc), s     |           | 22.0       | 6.3       | 52.6      |            | 22.0      | 7.6       | 51.3     |          |           |          |           |
| Change Period (Y+Rc), s      |           | 6.5        | 5.8       | 6.5       |            | 6.5       | 5.8       | 6.5      |          |           |          |           |
| Max Green Setting (Gmax), s  |           | 15.5       | 5.2       | 52.5      |            | 15.5      | 7.2       | 50.5     |          |           |          |           |
| Max Q Clear Time (g_c+I1), s |           | 17.5       | 2.2       | 35.8      |            | 17.5      | 3.1       | 24.9     |          |           |          |           |
| Green Ext Time (p_c), s      |           | 0.0        | 0.0       | 10.2      |            | 0.0       | 0.0       | 8.6      |          |           |          |           |
| Intersection Summary         |           |            |           |           |            |           |           |          |          |           |          |           |
| HCM 6th Ctrl Delay           |           |            | 24.0      |           |            |           |           |          |          |           |          |           |
| HCM 6th LOS                  |           |            | С         |           |            |           |           |          |          |           |          |           |

| Intersection           |           |        |        |              |         |      |
|------------------------|-----------|--------|--------|--------------|---------|------|
| Int Delay, s/veh       | 5.8       |        |        |              |         |      |
| Movement               | EBL       | EBR    | NBL    | NBT          | SBT     | SBR  |
| Lane Configurations    | ₩.        | LDK    | NDL    | - ND1<br>- € | )<br> } | אומכ |
| Traffic Vol, veh/h     | 11        | 95     | 52     | <b>1</b> 5   | 25      | 12   |
| Future Vol, veh/h      | 11        | 95     | 52     | 15           | 25      | 12   |
| Conflicting Peds, #/hr | 0         | 0      | 0      | 0            | 0       | 0    |
| Sign Control           | Stop      | Stop   | Free   | Free         | Free    | Free |
| RT Channelized         | Siup<br>- | None   | -      |              | -       | None |
| Storage Length         | 0         | None - | -      | None -       | -       | None |
|                        |           | -      | -      | 0            | 0       | -    |
| Veh in Median Storage  |           |        |        |              |         |      |
| Grade, %               | 0         | -      | -      | 0            | 0       | -    |
| Peak Hour Factor       | 92        | 92     | 92     | 59           | 48      | 92   |
| Heavy Vehicles, %      | 2         | 23     | 21     | 2            | 2       | 2    |
| Mvmt Flow              | 12        | 103    | 57     | 25           | 52      | 13   |
|                        |           |        |        |              |         |      |
| Major/Minor I          | Minor2    |        | Major1 | N            | Major2  |      |
| Conflicting Flow All   | 198       | 59     | 65     | 0            | -       | 0    |
| Stage 1                | 59        | -      | -      | -            | _       | -    |
| Stage 2                | 139       | _      | _      |              | _       |      |
| Critical Hdwy          | 6.42      | 6.43   | 4.31   | -            | _       | -    |
| Critical Hdwy Stg 1    | 5.42      | 0.43   | 4.31   | _            | _       | -    |
|                        | 5.42      | -      | -      | -            | -       | -    |
| Critical Hdwy Stg 2    |           |        |        | -            | -       | -    |
| Follow-up Hdwy         |           | 3.507  |        | -            | -       | -    |
| Pot Cap-1 Maneuver     | 791       | 951    | 1424   | -            | -       | -    |
| Stage 1                | 964       | -      | -      | -            | -       | -    |
| Stage 2                | 888       | -      | -      | -            | -       | -    |
| Platoon blocked, %     | 750       | 054    | 1 10 1 | -            | -       | -    |
| Mov Cap-1 Maneuver     | 759       | 951    | 1424   | -            | -       | -    |
| Mov Cap-2 Maneuver     | 759       | -      | -      | -            | -       | -    |
| Stage 1                | 924       | -      | -      | -            | -       | -    |
| Stage 2                | 888       | -      | -      | -            | -       | -    |
|                        |           |        |        |              |         |      |
| Approach               | EB        |        | NB     |              | SB      |      |
|                        | 9.4       |        | 5.3    |              | 0       |      |
| HCM Control Delay, s   |           |        | 5.3    |              | U       |      |
| HCM LOS                | Α         |        |        |              |         |      |
|                        |           |        |        |              |         |      |
| Minor Lane/Major Mvm   | nt        | NBL    | NBT I  | EBLn1        | SBT     | SBR  |
| Capacity (veh/h)       |           | 1424   | -      | 927          | _       | -    |
| HCM Lane V/C Ratio     |           | 0.04   | -      | 0.124        | -       | -    |
| HCM Control Delay (s)  |           | 7.6    | 0      | 9.4          | -       | -    |
| HCM Lane LOS           |           | А      | A      | Α            | _       |      |
| HCM 95th %tile Q(veh)  | )         | 0.1    | -      | 0.4          | -       | -    |
|                        |           | 311    |        |              |         |      |

### **MOVEMENT SUMMARY**

### ▼ Site: 2 [SR 132 / McCracken Rd (Site Folder: General)]

2046 AM

Site Category: (None)

Roundabout

| Mov Tu<br>ID | urn       | INPI<br>VOLU | JT   | DEM.  | Vehicle Movement Performance  Mov Turn INPUT DEMAND Deg. Aver. Level of 95% BACK OF Prop. Effective Aver. Aver. |       |       |          |            |               |      |              |               |       |  |  |  |  |  |
|--------------|-----------|--------------|------|-------|---|-------|-------|----------|------------|---------------|------|--------------|---------------|-------|--|--|--|--|--|
| טו           |           |              | MEC  |       |   | Deg.  |       | Level of |            | ACK OF        |      | Effective    | Aver.         | Aver. |  |  |  |  |  |
|              |           | [ Total      | HV]  | FLO   | ws<br>HV1   | Satn  | Delay | Service  | ال<br>Veh. | EUE<br>Dist 1 | Que  | Stop<br>Rate | No.<br>Cycles | Speed |  |  |  |  |  |
|              |           | veh/h        | %    | veh/h | %   | v/c   | sec   |          | veh        | ft            |      |              | -,            | mph   |  |  |  |  |  |
| South: N     | McCra     | acken Ro     | l    |       |   |       |       |          |            |               |      |              |               |       |  |  |  |  |  |
| 3 L          | <b>_2</b> | 12           | 20.0 | 13    | 20.0  | 0.107 | 11.3  | LOS B    | 0.3        | 8.5           | 0.71 | 0.71         | 0.71          | 31.3  |  |  |  |  |  |
| 8 T          | Γ1        | 22           | 11.0 | 24    | 11.0  | 0.107 | 10.6  | LOS B    | 0.3        | 8.5           | 0.71 | 0.71         | 0.71          | 31.6  |  |  |  |  |  |
| 18 F         | ₹2        | 5            | 2.0  | 5     | 2.0   | 0.107 | 9.8   | LOSA     | 0.3        | 8.5           | 0.71 | 0.71         | 0.71          | 30.9  |  |  |  |  |  |
| Approac      | ch        | 39           | 12.6 | 42    | 12.6  | 0.107 | 10.7  | LOS B    | 0.3        | 8.5           | 0.71 | 0.71         | 0.71          | 31.4  |  |  |  |  |  |
| East: SF     | R 132     | 2            |      |       |   |       |       |          |            |               |      |              |               |       |  |  |  |  |  |
| 1 L          | L2        | 5            | 2.0  | 5     | 2.0   | 0.978 | 38.4  | LOS E    | 48.8       | 1316.7        | 0.89 | 0.62         | 1.19          | 23.3  |  |  |  |  |  |
| 6 T          | Γ1        | 2270         | 10.0 | 2467  | 10.0  | 0.978 | 38.0  | LOS E    | 50.3       | 1359.0        | 0.87 | 0.60         | 1.17          | 23.3  |  |  |  |  |  |
| 16 F         | R2        | 52           | 10.0 | 57    | 10.0  | 0.978 | 37.5  | LOS E    | 50.3       | 1359.0        | 0.85 | 0.59         | 1.16          | 22.9  |  |  |  |  |  |
| Approac      | ch        | 2327         | 10.0 | 2529  | 10.0  | 0.978 | 38.0  | LOS E    | 50.3       | 1359.0        | 0.87 | 0.60         | 1.17          | 23.3  |  |  |  |  |  |
| North: M     | /lcCra    | acken Rd     |      |       |   |       |       |          |            |               |      |              |               |       |  |  |  |  |  |
| 7 L          | L2        | 31           | 25.0 | 34    | 25.0  | 0.742 | 96.5  | LOS F    | 2.4        | 71.7          | 0.96 | 1.25         | 2.16          | 14.4  |  |  |  |  |  |
| 4 T          | Τ1        | 22           | 14.0 | 24    | 14.0  | 0.742 | 93.7  | LOS F    | 2.4        | 71.7          | 0.96 | 1.25         | 2.16          | 14.5  |  |  |  |  |  |
| 14 F         | ₹2        | 24           | 29.0 | 26    | 29.0  | 0.742 | 97.6  | LOS F    | 2.4        | 71.7          | 0.96 | 1.25         | 2.16          | 14.2  |  |  |  |  |  |
| Approac      | ch        | 77           | 23.1 | 84    | 23.1  | 0.742 | 96.0  | LOS F    | 2.4        | 71.7          | 0.96 | 1.25         | 2.16          | 14.3  |  |  |  |  |  |
| West: S      | R 13      | 2            |      |       |   |       |       |          |            |               |      |              |               |       |  |  |  |  |  |
| 5 L          | L2        | 7            | 85.0 | 8     | 85.0  | 0.485 | 10.5  | LOS B    | 2.3        | 68.2          | 0.26 | 0.13         | 0.26          | 31.0  |  |  |  |  |  |
| 2 T          | Τ1        | 984          | 22.0 | 1070  | 22.0  | 0.485 | 8.6   | LOSA     | 2.3        | 68.2          | 0.25 | 0.12         | 0.25          | 33.1  |  |  |  |  |  |
| 12 F         | ₹2        | 5            | 29.0 | 5     | 29.0  | 0.485 | 8.6   | LOSA     | 2.3        | 66.8          | 0.24 | 0.12         | 0.24          | 31.9  |  |  |  |  |  |
| Approac      | ch        | 996          | 22.5 | 1083  | 22.5  | 0.485 | 8.7   | LOSA     | 2.3        | 68.2          | 0.25 | 0.12         | 0.25          | 33.1  |  |  |  |  |  |
| All Vehic    | cles      | 3439         | 13.9 | 3738  | 13.9  | 0.978 | 30.5  | LOS D    | 50.3       | 1359.0        | 0.69 | 0.48         | 0.92          | 25.2  |  |  |  |  |  |

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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### **MOVEMENT SUMMARY**

#### ▼ Site: 2 [SR 132 / McCracken Rd (Site Folder: General)]

2046 PM

Site Category: (None)

Roundabout

| Vehi   | cle Mc  | vemen   | t Perfor     | mance         |           |       |       |          |              |        |      |              |               |       |
|--------|---------|---------|--------------|---------------|-----------|-------|-------|----------|--------------|--------|------|--------------|---------------|-------|
| Mov    | Turn    |         | PUT          | DEM           |           | Deg.  |       | Level of | 95% BA       |        |      | Effective    | Aver.         | Aver. |
| ID     |         | Total   | JMES<br>HV 1 | FLO<br>[Total | WS<br>HV] | Satn  | Delay | Service  | QUE<br>[Veh. | Dist ] | Que  | Stop<br>Rate | No.<br>Cycles | Speed |
|        |         | veh/h   | %            | veh/h         | %         | v/c   | sec   |          | veh          | ft     |      | 1 1410       |               | mph   |
| South  | n: McCr | acken R | d            |               |           |       |       |          |              |        |      |              |               |       |
| 3      | L2      | 13      | 22.0         | 14            | 22.0      | 0.182 | 20.0  | LOS C    | 0.5          | 13.6   | 0.83 | 0.83         | 0.83          | 28.1  |
| 8      | T1      | 18      | 13.0         | 20            | 13.0      | 0.182 | 18.8  | LOS C    | 0.5          | 13.6   | 0.83 | 0.83         | 0.83          | 28.4  |
| 18     | R2      | 10      | 2.0          | 11            | 2.0       | 0.182 | 17.4  | LOS C    | 0.5          | 13.6   | 0.83 | 0.83         | 0.83          | 27.8  |
| Appro  | oach    | 41      | 13.2         | 45            | 13.2      | 0.182 | 18.9  | LOS C    | 0.5          | 13.6   | 0.83 | 0.83         | 0.83          | 28.2  |
| East:  | SR 13   | 2       |              |               |           |       |       |          |              |        |      |              |               |       |
| 1      | L2      | 5       | 2.0          | 5             | 2.0       | 0.533 | 8.7   | LOS A    | 3.2          | 88.1   | 0.27 | 0.13         | 0.27          | 33.4  |
| 6      | T1      | 1185    | 11.0         | 1288          | 11.0      | 0.533 | 8.8   | LOS A    | 3.2          | 88.1   | 0.26 | 0.12         | 0.26          | 33.2  |
| 16     | R2      | 31      | 29.0         | 34            | 29.0      | 0.533 | 9.1   | LOS A    | 3.1          | 85.2   | 0.26 | 0.12         | 0.26          | 31.8  |
| Appro  | oach    | 1221    | 11.4         | 1327          | 11.4      | 0.533 | 8.8   | LOSA     | 3.2          | 88.1   | 0.26 | 0.12         | 0.26          | 33.1  |
| North  | : McCr  | acken R | d            |               |           |       |       |          |              |        |      |              |               |       |
| 7      | L2      | 81      | 18.0         | 88            | 18.0      | 0.370 | 18.0  | LOS C    | 1.2          | 35.1   | 0.78 | 0.87         | 1.08          | 27.9  |
| 4      | T1      | 30      | 10.0         | 33            | 10.0      | 0.370 | 17.3  | LOS C    | 1.2          | 35.1   | 0.78 | 0.87         | 1.08          | 28.1  |
| 14     | R2      | 9       | 33.0         | 10            | 33.0      | 0.370 | 19.3  | LOS C    | 1.2          | 35.1   | 0.78 | 0.87         | 1.08          | 27.1  |
| Appro  | oach    | 120     | 17.1         | 130           | 17.1      | 0.370 | 17.9  | LOS C    | 1.2          | 35.1   | 0.78 | 0.87         | 1.08          | 27.9  |
| West   | : SR 13 | 32      |              |               |           |       |       |          |              |        |      |              |               |       |
| 5      | L2      | 18      | 28.0         | 20            | 28.0      | 0.715 | 14.6  | LOS B    | 6.1          | 160.4  | 0.59 | 0.39         | 0.59          | 30.4  |
| 2      | T1      | 1572    | 5.0          | 1709          | 5.0       | 0.715 | 13.6  | LOS B    | 6.1          | 160.4  | 0.58 | 0.38         | 0.58          | 31.1  |
| 12     | R2      | 5       | 22.0         | 5             | 22.0      | 0.715 | 13.8  | LOS B    | 6.1          | 159.3  | 0.57 | 0.37         | 0.57          | 30.0  |
| Appro  | oach    | 1595    | 5.3          | 1734          | 5.3       | 0.715 | 13.6  | LOS B    | 6.1          | 160.4  | 0.58 | 0.38         | 0.58          | 31.1  |
| All Ve | ehicles | 2977    | 8.4          | 3236          | 8.4       | 0.715 | 11.9  | LOS B    | 6.1          | 160.4  | 0.46 | 0.30         | 0.47          | 31.7  |
|        |         |         |              |               |           |       |       |          |              |        |      |              |               |       |

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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#### **DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT**

1010 10th Street, Suite 3400, Modesto, CA 95354 Planning Phone: (209) 525-6330 Fax: (209) 525-5911 Fax: (209) 525-7759

Building Phone: (209) 525-6557

## Stanislaus County

Planning and Community Development

## **Mitigation Monitoring and Reporting Program**

Adapted from CEQA Guidelines sec. 15097 Final Text, October 26, 1998

## **April 18, 2024**

1. Project title and location: General Plan Amendment and Rezone Application

No. PLN2020-0123 -132 Investments

15101 Maze Boulevard (State Route 132), on the northwest corner of State Route 132 and S McCracken Road, abutting the Stanislaus and San Joaquin County border, in the Vernalis area

(APN:016-001-001).

2. Project Applicant name and address: Abdo Almolaiki d.b.a. 132 Investments

> 125 Maze Boulevard Modesto, CA 95351

3. Person Responsible for Implementing

Mitigation Program (Applicant Representative): Abdo Almolaiki, d.b.a. 132 Investments

Jeremy Ballard, Senior Planner (209) 525-6330 4. Contact person at County:

#### MITIGATION MEASURES AND MONITORING PROGRAM:

List all Mitigation Measures by topic as identified in the Mitigated Negative Declaration and complete the form for each measure.

#### XVI. TRANSPORTATION/TRAFFIC

Mitigation Measure: A left turn lane shall be developed north of the eastbound lane of SR 132, subject to approval by California Department of Transportation, to accommodate left hand turns into the site. The left turn lane shall begin 600 feet west of the project's proposed driveway onto SR 132 and shall continue to the SR 132/McCracken Road intersection.

Who Implements the Measure: Applicant/Developer.

When should the measure be implemented: During construction of off-stie improvements.

When should it be completed: Prior to issuance of the Final Occupancy Permit.

Who verifies compliance: California Department of Transportation

(Caltrans).

Other Responsible Agencies: Stanislaus County Public Works Department and

Planning and Community Development

Department.

No. 2 Mitigation Measure: A deceleration lane or enhanced 12-foot shoulder shall be developed on the northern side of the westbound lane of SR 132, subject to approval by California Department of Transportation (Caltrans), to accommodate right hand turns into the project site. The deceleration lane shall begin 600 feet east of the SR 132/McCracken Road intersection and shall provide a right turn pocket onto North McCracken Road; the deceleration lane shall continue west of the SR 132/McCracken Road intersection and shall provide a right turn pocket onto the project driveway on SR 132.

Who Implements the Measure: Applicant/Developer.

When should the measure be implemented: During construction of off-stie improvements.

When should it be completed: Prior to Issuance of the Final Occupancy Permit.

Who verifies compliance: California Department of Transportation.

Other Responsible Agencies: Stanislaus County Public Works Department and

Planning and Community Development

Department.

No. 3 Mitigation Measure: An acceleration lane or enhanced 12-foot shoulder shall be developed on the northern side of the westbound lane of SR 132, subject to approval by California Department of Transportation (Caltrans), to accommodate right hand turns out of the project site. The acceleration lane shall begin west of the proposed driveway onto SR 132 for 600 feet or a distance as determined by Caltrans.

Who Implements the Measure: Applicant/Developer.

When should the measure be implemented: During construction of off-stie improvements.

When should it be completed: Prior to Issuance of the Final Occupancy Permit.

Who verifies compliance: California Department of Transportation.

Other Responsible Agencies: Stanislaus County Public Works Department and

Planning and Community Development

Department.

No. 4 Mitigation Measure: All project driveways and both northwest and northeast corners of the SR 132 and McCracken Road intersection shall be constructed to accommodate the turning requirements of STAA trucks.

Who Implements the Measure: Applicant/Developer.

When should the measure be implemented: During construction of off-stie improvements.

When should it be completed: Prior to Issuance of the Final Occupancy Permit.

Who verifies compliance: California Department of Transportation.

Other Responsible Agencies: Stanislaus County Public Works Department and

Planning and Community Development

Department.

I, the undersigned, do hereby certify that I understand and agree to be responsible for implementing the Mitigation Program for the above listed project.

Signature on File

April 18, 2024

Person Responsible for Implementing Mitigation Program

Date

#### DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

Stanislaus

1010 10<sup>TH</sup> Street, Suite 3400, Modesto, CA 95354 Planning Phone: (209) 525-6330 Fax: (209) 525-5911 Building Phone: (209) 525-6557 Fax: (209) 525-7759

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#### MITIGATED NEGATIVE DECLARATION

NAME OF PROJECT: General Plan Amendment and Rezone Application No.

PLN2020-0123-132 Investments

LOCATION OF PROJECT: 15101 Maze Boulevard (State Route 132), between

McCracken Road, and the County line, in the Vernalis area

(APN:016-001-001).

**PROJECT DEVELOPER:** Abdo Almolaiki dba 132 Investments

**DESCRIPTION OF PROJECT:** Request to amend the General Plan of a 15.66 ± acre parcel from Agriculture to Planned Development and zoning designation from Planned Development (P-D) (23) to a new Planned Development, to allow the development of a fueling station, convenience market and two shell suites for future retail use.

Based upon the Initial Study, dated April 18, 2024 (amended on <u>June 7, 2024</u>), the Environmental Coordinator finds as follows:

- 1. This project does not have the potential to degrade the quality of the environment, nor to curtail the diversity of the environment.
- 2. This project will not have a detrimental effect upon either short-term or long-term environmental goals.
- This project will not have impacts which are individually limited but cumulatively considerable.
- 4. This project will not have environmental impacts which will cause substantial adverse effects upon human beings, either directly or indirectly.

The aforementioned findings are contingent upon the following mitigation measures (if indicated) which shall be incorporated into this project:

- 1. A left turn lane shall be developed north of the eastbound lane of SR 132, subject to approval by California Department of Transportation, to accommodate left hand turns into the site. The left turn lane shall begin 600 feet west of the project's proposed driveway onto SR 132 and shall continue to the SR 132/McCracken Road intersection.
- 2. A deceleration lane or enhanced 12-foot shoulder shall be developed on the northern side of the westbound lane of SR 132, subject to approval by California Department of Transportation (Caltrans), to accommodate right hand turns into the project site. The deceleration lane shall begin 600 feet east of the SR 132/McCracken Road intersection and shall provide a right turn pocket onto North McCracken Road; the deceleration lane shall continue west of the SR 132/McCracken Road intersection and shall provide a right turn pocket onto the project driveway on SR 132.

- 3. An acceleration lane or enhanced 12-foot shoulder shall be developed on the northern side of the westbound lane of SR 132, subject to approval by California Department of Transportation (Caltrans), to accommodate right hand turns out of the project site. The acceleration lane shall begin west of the proposed driveway onto SR 132 for 600 feet or, for a distance as determined by Caltrans.
- All project driveways and both northwest and northeast corners of the SR 132 and McCracken Road intersection shall be constructed to accommodate the turning requirements of STAA trucks.

The Initial Study and other environmental documents are available for public review at the Department of Planning and Community Development, 1010 10th Street, Suite 3400, Modesto, California.

Initial Study prepared by: Jeremy Ballard, Senior Planner

Submit comments to: Stanislaus County

Planning and Community Development Department

1010 10th Street, Suite 3400 Modesto, California 95354

## SUMMARY OF RESPONSES FOR ENVIRONMENTAL REVIEW REFERRALS

## PROJECT: GPA AND REZ APP. NO PLN2020-0123 - 132 INVESTMENTS, LLC

| REFERRED TO:  |      | RESPO  | ONDED                       | RESPONSE |    | MITIGATION<br>MEASURES                    |                                   | CONDITIONS             |     |    |     |                |
|---|------|--------|-----------------------------|----------|----|---|-----------------------------------|------------------------|-----|----|-----|----------------|
|   | 2 WK | 30 DAY | PUBLIC<br>HEARING<br>NOTICE | YES      | ON | WILL NOT<br>HAVE<br>SIGNIFICANT<br>IMPACT | MAY HAVE<br>SIGNIFICANT<br>IMPACT | NO COMMENT<br>NON CEQA | YES | ON | YES | O <sub>N</sub> |
| CA DEPT OF CONSERVATION:<br>Land Resources / Mine Reclamation | Х    | х      | x                           | х        |    | x   |                                   |                        |     | х  |     | х              |
| CA DEPT OF FISH & WILDLIFE                                    | X    | X      | X                           | ^        | Х  | ^   |                                   |                        |     | X  |     | X              |
|   |      |        |                             | Х        |    |   | v                                 |                        | v   | Α  |     |                |
| CA DEPT OF TRANSPORTATION DIST 10 CA DEPT OF WATER RESOURCES  | X    | X      | X<br>X                      | ^        | Х  |   | Х                                 |                        | Х   |    |     | Х              |
| CA OPR STATE CLEARINGHOUSE                                    | X    | X      | X                           | Х        | ^  |   |                                   | Х                      |     | Х  |     |                |
|   | X    | X      | X                           | X        |    |   |                                   | X                      |     | X  | Х   |                |
| CA RWQCB CENTRAL VALLEY REGION                                |      | _      | ^                           | ^        | v  |   |                                   |                        |     | ^  | ^   |                |
| CA DEPT LANDS COMMISSION                                      | X    | v      | V                           |          | X  |   |                                   |                        |     |    |     |                |
| CEMETERY DISTRICT: PATTERSON                                  | X    | X      | X                           |          | X  |   |                                   |                        |     |    |     |                |
| COOPERATIVE EXTENSION COUNTY OF: SAN JOAQUIN                  | X    | X      | X                           |          | X  |   |                                   |                        |     |    |     |                |
|   |      | _      |                             |          | _  |   |                                   |                        |     |    |     |                |
| FIRE PROTECTION DIST: WEST STAN                               | X    | X      | X                           |          | X  |   |                                   |                        |     |    |     |                |
| GSA: WEST STAN/DELTA MENDOTA                                  | X    | X      | X                           |          | X  |   |                                   |                        |     |    |     |                |
| HOSPITAL DISTRICT: DEL PUERTO                                 | X    | X      | X                           |          | Х  |   |                                   |                        |     |    |     |                |
| IRRIGATION DISTRICT: WEST STAN                                | X    | X      | X                           | Х        |    |   |                                   | Х                      |     | Х  | Х   |                |
| MOSQUITO DISTRICT: TURLOCK                                    | X    | X      | X                           |          | X  |   |                                   |                        |     |    |     |                |
| MT VALLEY EMERGENCY MEDICAL                                   | X    | X      | X                           |          | X  |   |                                   |                        |     |    |     |                |
| PACIFIC GAS & ELECTRIC  | Х    | Х      | X                           |          | Х  |   |                                   |                        |     |    |     |                |
| SAN JOAQUIN VALLEY APCD                                       | X    | Х      | X                           | Х        |    |   |                                   | Х                      |     | Х  | Х   |                |
| SCHOOL DISTRICT 1: PATTERSON JOINT                            | Х    | Х      | Х                           |          | Х  |   |                                   |                        |     |    |     |                |
| STAN CO AG COMMISSIONER                                       | X    | Х      | Х                           |          | Х  |   |                                   |                        |     |    |     |                |
| STAN CO BUILDING PERMITS DIVISION                             | Χ    | Х      | Х                           |          | Х  |   |                                   |                        |     |    |     |                |
| STAN CO CEO   | Х    | Х      | Х                           |          | Х  |   |                                   |                        |     |    |     |                |
| STAN CO DER   | Х    | Х      | Х                           | Х        |    |   |                                   | Х                      |     | X  | Х   |                |
| STAN CO DER - GROUNDWATER                                     | Х    | X      | Х                           | Х        |    |   |                                   | Х                      |     | X  |     | Х              |
| STAN CO ERC   | Х    |        |                             | Х        |    | Х   |                                   |                        |     | X  |     | Х              |
| STAN CO FARM BUREAU   | Х    | X      | Х                           |          | Х  |   |                                   |                        |     |    |     |                |
| STAN CO HAZARDOUS MATERIALS                                   | Х    | X      | Х                           | Х        |    |   |                                   | Х                      |     | X  | Х   |                |
| STAN CO PUBLIC WORKS  | Х    |        | Х                           | Х        |    |   |                                   | Х                      |     | X  | Х   |                |
| STAN CO SHERIFF   | Х    | X      | Х                           |          | Х  |   |                                   |                        |     |    |     |                |
| STAN CO SUPERVISOR DIST 3: WITHROW                            | Χ    | Х      | Х                           |          | Х  |   |                                   |                        |     |    |     |                |
| STAN COUNTY COUNSEL   | Χ    | X      | Х                           |          | Х  |   |                                   |                        |     |    |     |                |
| StanCOG   | Х    | X      | Х                           |          | Х  |   |                                   |                        |     |    |     |                |
| STANISLAUS FIRE PREVENTION BUREAU                             | Χ    | X      | Х                           |          | Х  |   |                                   |                        |     |    |     |                |
| STANISLAUS LAFCO  | Х    | X      | Х                           |          |    |   |                                   |                        |     |    |     |                |
| SURROUNDING LAND OWNERS                                       |      | Х      | Х                           |          | Х  |   |                                   |                        |     |    |     |                |
| TELEPHONE COMPANY: ATT  | Х    | X      | Х                           |          | Х  |   |                                   |                        |     |    |     |                |
| TRIBAL CONTACTS   |      |        |                             |          |    |   |                                   |                        | -   |    |     |                |
| (CA Government Code §65352.3)                                 | Х    | Х      | Х                           |          | Х  |   |                                   |                        |     |    |     |                |
| US FISH & WILDLIFE  | Х    | Х      | X                           |          | Х  |   |                                   |                        |     |    |     |                |

I:\Planning\Staff Reports\GPA\2020\PLN2020-0123 - 132 Investments - Maze Boulevard\Planning Commission\June 20, 2024\Staff Report\Exhibit H- Environmental Review Referrals

179 **EXHIBIT H** 

## COUNTY OF STANISLAUS CAMPAIGN CONTRIBUTION DISCLOSURE FORM PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

| Application Number:  |   |   |  |   |
|--|---|---|--|---|
| Application Title:   | CONVENIENCE STORE GAS STA   | TION                                    |  |   |
| Application Address:   | 15010 MAZE BOULEVARD, PATTE   | RSON, CA                                | <u> </u>   |   |
| Application APN:   | 016-001-001   |   |  |   |
| in making a determin<br>Commission, Airport<br>during the 12-month p<br>any of the applicant's | ribution, regardless of the dollar a<br>nation regarding the above appli<br>Land Use Commission, or Build<br>period preceding the filing of the<br>proposed subcontractors or the a | ication (i.<br>ding Code<br>application | e. Stanislaus County Board of a<br>Appeals Board), hereinafter re<br>on, by the applicant, property ov | Supervisors, Planning eferred to as Member,   |
| Yes No X   |   |   |  |   |
| If no, please sign and   | date below.   |   |  |   |
| If yes, please provide   | the following information:  |   |  |   |
| Applicant's Name:  |   |   |  |   |
| Contributor or Contrib   | outor Firm's Name:  |   |  |   |
| Contributor or Contrib   | outor Firm's Address:   |   |  |   |
| Is the Contributor: The Applicar The Property The Subcontr The Applicar                        | Owner ractor  | Yes                                     |  |   |
| by the Applicant and t   | ia law as implemented by the Fai<br>the Applicant's agent/lobbyist wh<br>gether to determine the total cam  | no is repre                             | senting the Applicant in this app  | lication or solicitation                      |
| contributions during th  | s) to whom you, the property ow<br>he 12-month period preceding th<br>dollar amount of the contributio  | e filing of                             | the application, the name of the   | contributor, the dates                        |
| Name of Member:  |   |   |  |   |
| Name of Contributor  | ::  |   |  |   |
|  | ion(s):   |   |  |   |
| Amount(s):   | on(s).  |   |  |   |
| Amount(s).   |   |   |  |   |
| •  | tional sheet(s) to identify addit<br>r agent/lobbyist made campaign of  |   |  | property owner, your                          |
| any future contribution proposed subcontractor   | ertify that the statements made he<br>ns made to Member(s) by the ap<br>ors or the applicant's agent or lob<br>approval, renewal, or extension of                                   | plicant, p<br>byist <u>after</u>        | roperty owner, or, if applicable,<br>the date of signing this disclosu                                 | any of the applicant's re form, and within 12 |
| 5-31-2024  |   |   |  |   |
| Date   |   |   | Signature of Applicant   |   |
| EDMOND T JACOBS A  | ARCHITECT   |   | EDMOND JACOBS  |   |
| Print Firm Name if a   | pplicable   | 180                                     | Print Name of Applicant  | EXHIBIT I                                     |

# COUNTY OF STANISLAUS CAMPAIGN CONTRIBUTION DISCLOSURE FORM PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

| t 12 - the Number  |  |
|--|--|
| Application Number:  | Comment of the contract of the |
| Application Title:   | Convenience store GAS Station 15010 MAZE Blue, Veralau CA 95 385   |
| Application Address:   | DIL - SOLD NELATAGE CA 4) 30)  |
| Application APN:   | 016-001-001  |
| in making a determin<br>Commission, Airport<br>during the 12-month p                         | ibution, regardless of the dollar amount, made to any member of a decision-making body involved attion regarding the above application (i.e. Stanislaus County Board of Supervisors, Planning Land Use Commission, or Building Code Appeals Board), hereinafter referred to as Member period preceding the filing of the application, by the applicant, property owner, or, if applicable proposed subcontractors or the applicant's agent or lobbyist?  |
| Yes No No  |  |
| If no, please sign and   | date below.  |
| If yes, please provide   | the following information:   |
| Applicant's Name: _  |  |
| Contributor or Contri  | butor Firm's Name:   |
| Contributor or Contri  | butor Firm's Address:  |
| Is the Contributor:  |  |
| The Applica  |  |
| The Propert  |  |
| The Subcon   | tractor Yes No   |
| by the Applicant and<br>must be aggregated to<br>Identify the Member<br>contributions during | the Applicant's agent/lobbyist who is representing the Applicant in this application or solicitation or gether to determine the total campaign contribution made by the Applicant.  (s) to whom you, the property owner, your subcontractors, and/or agent/lobbyist made campaign the 12-month period preceding the filing of the application, the name of the contributor, the date it dollar amount of the contribution. Each date must include the exact month, day, and year of the  |
| Name of Member:  |  |
| Name of Contributo   | r:   |
| Date(s) of Contribut   | ion(s):  |
| Amount(s):   |  |
|  | tional sheet(s) to identify additional Member(s) to whom you, the property owner, you ragent/lobbyist made campaign contributions)   |
| any future contribution proposed subcontraction  | ertify that the statements made herein are true and correct. I also agree to disclose to the County ons made to Member(s) by the applicant, property owner, or, if applicable, any of the applicant's or or the applicant's agent or lobbyist after the date of signing this disclosure form, and within 12 approval, renewal, or extension of the requested license, permit, or entitlement to use.   |
| 5-31-2   | 024  |
| Date   | Signature of Applicant   |
| FOMOND 1 Print Firm Name if a  | pplicable 181 YASIR KHANSHALI Print Name of Applicant  |

## COUNTY OF STANISLAUS CAMPAIGN CONTRIBUTION DISCLOSURE FORM PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

| Application Number:  |
|--|
| Application Title: Convenue Store Gas Status  Application Address: 150/0 Maze BIVD, Vernally CA 95785  |
| Application Address: 18010 MAZE BIVD, VETNATUS CIT 40303   |
| Application APN: 016-001-001   |
| Was a campaign contribution, regardless of the dollar amount, made to any member of a decision-making body involving making a determination regarding the above application (i.e. Stanislaus County Board of Supervisors, Planning Commission, Airport Land Use Commission, or Building Code Appeals Board), hereinafter referred to as Member during the 12-month period preceding the filing of the application, by the applicant, property owner, or, if application any of the applicant's proposed subcontractors or the applicant's agent or lobbyist?   |
| Yes No No  |
| If no, please sign and date below.   |
| If yes, please provide the following information:  |
| Applicant's Name:  |
| Contributor or Contributor Firm's Name:  |
| Contributor or Contributor Firm's Address:   |
| Is the Contributor:  |
| The Applicant Yes No   |
| The Property Owner Yes No  |
| The Subcontractor  The Applicant's Agent/ Lobbyist  Yes No   |
| The Applicant's Agent/ Lobbyist Yes \( \subseteq \text{No \( \subseteq \)} \)  |
| Note: Under California law as implemented by the Fair Political Practices Commission, campaign contributions may be the Applicant and the Applicant's agent/lobbyist who is representing the Applicant in this application or solicitation must be aggregated together to determine the total campaign contribution made by the Applicant.  Identify the Member(s) to whom you, the property owner, your subcontractors, and/or agent/lobbyist made campaign contributions during the 12-month period preceding the filing of the application, the name of the contributor, the day of contribution(s) and dollar amount of the contribution. Each date must include the exact month, day, and year of contribution. |
| Name of Member:  |
| Name of Contributor:   |
| Date(s) of Contribution(s):  |
| Amount(s):   |
| (Please add an additional sheet(s) to identify additional Member(s) to whom you, the property owner, you subconsultants, and/or agent/lobbyist made campaign contributions)  |
| By signing below, I certify that the statements made herein are true and correct. I also agree to disclose to the Courany future contributions made to Member(s) by the applicant, property owner, or, if applicable, any of the applicant proposed subcontractors or the applicant's agent or lobbyist after the date of signing this disclosure form, and within months following the approval, renewal, or extension of the requested license, permit, or entitlement to use.   |
| 5/3/24   |
| Date Signature of Applicant  |
| EDMOND JECON Architect Abolo A. Almolaiki  |
| Print Firm Name if applicable  Print Name of Applicant   |

## COUNTY OF STANISLAUS CAMPAIGN CONTRIBUTION DISCLOSURE FORM PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

| Application Number:   |  | ,  |  |   |
|---|--|--|--|---|
| Application Title:  | CONVENENCE S.<br>150/0 MAZE<br>016-001-00            | tore GA  | Station  | 1535/   |
| Application Address:  | 150/0 MAZE   | 2 BIVP, V  | emals CA   | 47 385  |
| Application APN:  | 016-001-00   | 1  |  |   |
| in making a determine<br>Commission, Airport I<br>during the 12-month p | ation regarding the above<br>Land Use Commission, or | e application (i.e<br>r Building Code<br>of the applicatio | Stanislaus County<br>Appeals Board), her<br>n, by the applicant, p | a decision-making body involved<br>Board of Supervisors, Planning<br>reinafter referred to as Member,<br>property owner, or, if applicable, |
| Yes No No   |  |  |  |   |
| If no, please sign and  | date below.  |  |  |   |
| If yes, please provide  | the following information:                           |  |  |   |
| Applicant's Name:   |  |  | 1  |   |
| Contributor or Contrib  | outor Firm's Name:                                   |  |  |   |
| Contributor or Contrib  | outor Firm's Address:                                |  |  |   |
| Is the Contributor: The Applicar The Property The Subcontr The Applicar | Owner  | Yes No Yes No Yes No                                       |  |   |
| by the Applicant and the  |  | vist who is represe  | enting the Applicant   | n, campaign contributions made<br>in this application or solicitation<br>Applicant.   |
| contributions during th   | ne 12-month period preced                            | ling the filing of   | he application, the n  | r agent/lobbyist made campaign<br>ame of the contributor, the dates<br>xact month, day, and year of the                                     |
| Name of Member:   |  |  |  |   |
| Name of Contributor   | :  |  |  |   |
| Date(s) of Contribution   | on(s):   |  |  |   |
| Amount(s):  |  |  |  |   |
|   | ional sheet(s) to identify agent/lobbyist made camp  |  |  | ou, the property owner, your  |
| any future contribution<br>proposed subcontractor                       | is made to Member(s) by                              | the applicant, pro<br>or lobbyist after                    | perty owner, or, if a<br>he date of signing th                     | pagree to disclose to the County<br>pplicable, any of the applicant's<br>is disclosure form, and within 12<br>or entitlement to use.        |
| 5/3/34  |  | The second   |  |   |
| Date Date   |  |  | Signature of Applic  | ant   |
| EMILE .   | Tecahi Acci  | hted   | Timus  | Magi  |
| Print Firm Name if an   | policable  | THEOP  | Print Name of Appl   | icant   |

# COUNTY OF STANISLAUS CAMPAIGN CONTRIBUTION DISCLOSURE FORM PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

| TEATHING & COMMISSION OF THE PARTY OF THE PA |
|--|
| Application Number:  |
| Application Title: Convenue Store GAS STATION  |
| Application Number:  Application Title: Convenue Store Gas Station  Application Address: 150/0 MAZE BIVD, VERNALLS CA 95385  Application APN: Ollo-001-001.  |
| Application Arts. Off Oof Oof  |
| Was a campaign contribution, regardless of the dollar amount, made to any member of a decision-making body involution making a determination regarding the above application (i.e. Stanislaus County Board of Supervisors, Plana Commission, Airport Land Use Commission, or Building Code Appeals Board), hereinafter referred to as Member 12-month period preceding the filing of the application, by the applicant, property owner, or, if application of the applicant's proposed subcontractors or the applicant's agent or lobbyist?  |
| Yes No No  |
| If no, please sign and date below.   |
| if yes, please provide the following information:  |
| Applicant's Name:  |
| Contributor or Contributor Firm's Name:  |
| Contributor or Contributor Firm's Address:   |
| s the Contributor:   |
| The Applicant Yes No No  |
| The Property Owner Yes No  |
| The Subcontractor The Applicant's Agent/ Lobbyist Yes No   |
|  |
| Note: Under California law as implemented by the Fair Political Practices Commission, campaign contributions may the Applicant and the Applicant's agent/lobbyist who is representing the Applicant in this application or solicitate must be aggregated together to determine the total campaign contribution made by the Applicant.  |
| dentify the Member(s) to whom you, the property owner, your subcontractors, and/or agent/lobbyist made campa ontributions during the 12-month period preceding the filing of the application, the name of the contributor, the daf contribution(s) and dollar amount of the contribution. Each date must include the exact month, day, and year of ontribution.  |
| Name of Member:  |
| Name of Contributor:   |
| Date(s) of Contribution(s):  |
| Amount(s):   |
| Please add an additional sheet(s) to identify additional Member(s) to whom you, the property owner, y abconsultants, and/or agent/lobbyist made campaign contributions)  |
| y signing below, I certify that the statements made herein are true and correct. I also agree to disclose to the County future contributions made to Member(s) by the applicant, property owner, or, if applicable, any of the applicant opposed subcontractors or the applicant's agent or lobbyist after the date of signing this disclosure form, and within onths following the approval, renewal, or extension of the requested license, permit, or entitlement to use.   |
| -1-1   |

FOMEN JECONS
Print Firm Name if applicable

Architect

FAYZE A/Ashmaly Print Name of Applicant

# COUNTY OF STANISLAUS CAMPAIGN CONTRIBUTION DISCLOSURE FORM

| PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT  |
|--|
| Application Number:  |
| Application Title: Convenere Store Gas Station Application Address: 150/0 Maze BIVD, Vernally CA 95385   |
| Application Address: 150/0 MAZE BIVD, Vernally CA 95385  |
| Application APN: 016-001-001   |
| Was a campaign contribution, regardless of the dollar amount, made to any member of a decision-making body involve in making a determination regarding the above application (i.e. Stanislaus County Board of Supervisors, Planning Commission, Airport Land Use Commission, or Building Code Appeals Board), hereinafter referred to as Member during the 12-month period preceding the filing of the application, by the applicant, property owner, or, if applicable any of the applicant's proposed subcontractors or the applicant's agent or lobbyist? |
| Yes No No  |
| If no, please sign and date below.   |
| If yes, please provide the following information:  |
| Applicant's Name:  |
| Contributor or Contributor Firm's Name:  |
| Contributor or Contributor Firm's Address:   |
| Is the Contributor:  The Applicant The Property Owner The Subcontractor The Applicant's Agent/ Lobbyist  Yes No The Applicant Yes No The Applicant's Agent/ Lobbyist   |
| Note: Under California law as implemented by the Fair Political Practices Commission, campaign contributions mad by the Applicant and the Applicant's agent/lobbyist who is representing the Applicant in this application or solicitation must be aggregated together to determine the total campaign contribution made by the Applicant.   |
| Identify the Member(s) to whom you, the property owner, your subcontractors, and/or agent/lobbyist made campaig contributions during the 12-month period preceding the filing of the application, the name of the contributor, the date of contribution(s) and dollar amount of the contribution. Each date must include the exact month, day, and year of the contribution.   |
| Name of Member:  |
| Name of Contributor:   |
| Date(s) of Contribution(s):  |
| Amount(s):   |
| (Please add an additional sheet(s) to identify additional Member(s) to whom you, the property owner, you subconsultants, and/or agent/lobbyist made campaign contributions)  |
| By signing below, I certify that the statements made herein are true and correct. I also agree to disclose to the Count my future contributions made to Member(s) by the applicant, property owner, or, if applicable, any of the applicant proposed subcontractors or the applicant's agent or lobbyist after the date of signing this disclosure form, and within 1 months following the approval, renewal, or extension of the requested license, permit, or entitlement to use.  |

Date 185

EOMAND JECON Architect SABA

Signature of Applicant

## COUNTY OF STANISLAUS CAMPAIGN CONTRIBUTION DISCLOSURE FORM PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

| Application Number:   |                                     |   |
|---|-------------------------------------|---|
| Application Title:  |                                     |   |
| Application Address:  |                                     |   |
| Application APN:  |                                     |   |
| Was a campaign contribution, regardless of the dollar and in making a determination regarding the above applica Commission, Airport Land Use Commission, or Buildin during the 12-month period preceding the filing of the apany of the applicant's proposed subcontractors or the apply Yes No No. | ntion (i.e<br>ng Code<br>pplication | Stanislaus County Board of Supervisors, Planning Appeals Board), hereinafter referred to as Member, n, by the applicant, property owner, or, if applicable, |
| If yes, please provide the following information:   |                                     |   |
| Applicant's Name:   |                                     |   |
| Contributor or Contributor Firm's Name:   |                                     |   |
| Contributor or Contributor Firm's Address:  |                                     |   |
| Is the Contributor:  The Applicant Yes The Property Owner Yes The Subcontractor The Applicant's Agent/ Lobbyist Yes   | s No                                |   |
| <b>Note:</b> Under California law as implemented by the Fair I by the Applicant and the Applicant's agent/lobbyist who must be aggregated together to determine the total campa   | is repres                           | enting the Applicant in this application or solicitation  |
| Identify the Member(s) to whom you, the property owne contributions during the 12-month period preceding the f of contribution(s) and dollar amount of the contribution.  | filing of                           | the application, the name of the contributor, the dates   |
| Name of Member:   |                                     |   |
| Name of Contributor:  |                                     |   |
| Date(s) of Contribution(s):   |                                     |   |
| Amount(s):  |                                     |   |
| (Please add an additional sheet(s) to identify addition subconsultants, and/or agent/lobbyist made campaign contains a subconsultants.  |                                     |   |
| By signing below, I certify that the statements made here any future contributions made to Member(s) by the appliproposed subcontractors or the applicant's agent or lobby months following the approval, renewal, or extension of to 106/14/2024  Date   | icant, pro<br>vist <u>after</u> :   | operty owner, or, if applicable, any of the applicant's the date of signing this disclosure form, and within 12   |
|   |                                     |   |
| Amin Vohra  Driest Firms Name if applicable   | 400                                 | Amin Vohra  Drint Name of Amiliant  |
| Print Firm Name if applicable   | 186                                 | Print Name of Applicant   |

## **GPA REZ PLN2020-0123**

# 132 INVESTMENTS

Planning Commission June 20, 2024



# Overview

- Request to
  - Amend the General Plan designation from Agriculture to Planned Development
  - Rezone Planned Development (P-D) (23) to a new Planned Development
  - To allow development of a fueling station, convenience market, and two shell suites for future retail uses





**GPA REZ PLN2020-0123** 

AREA MAP

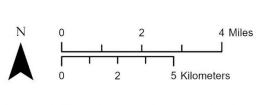
## **LEGEND**

Project Site

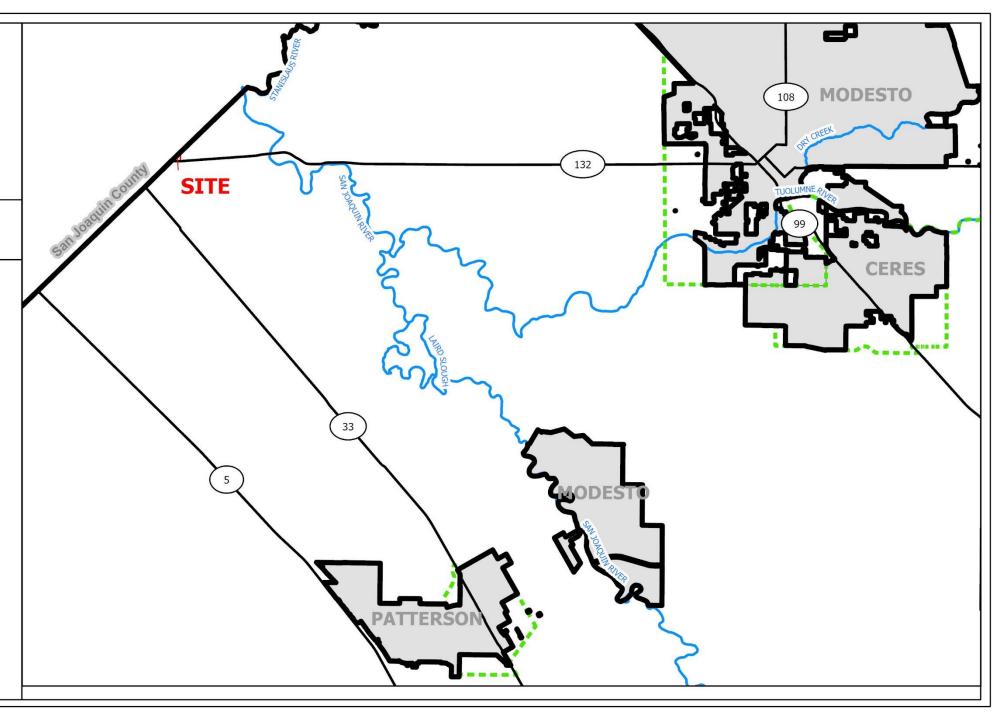
Sphere of Influence

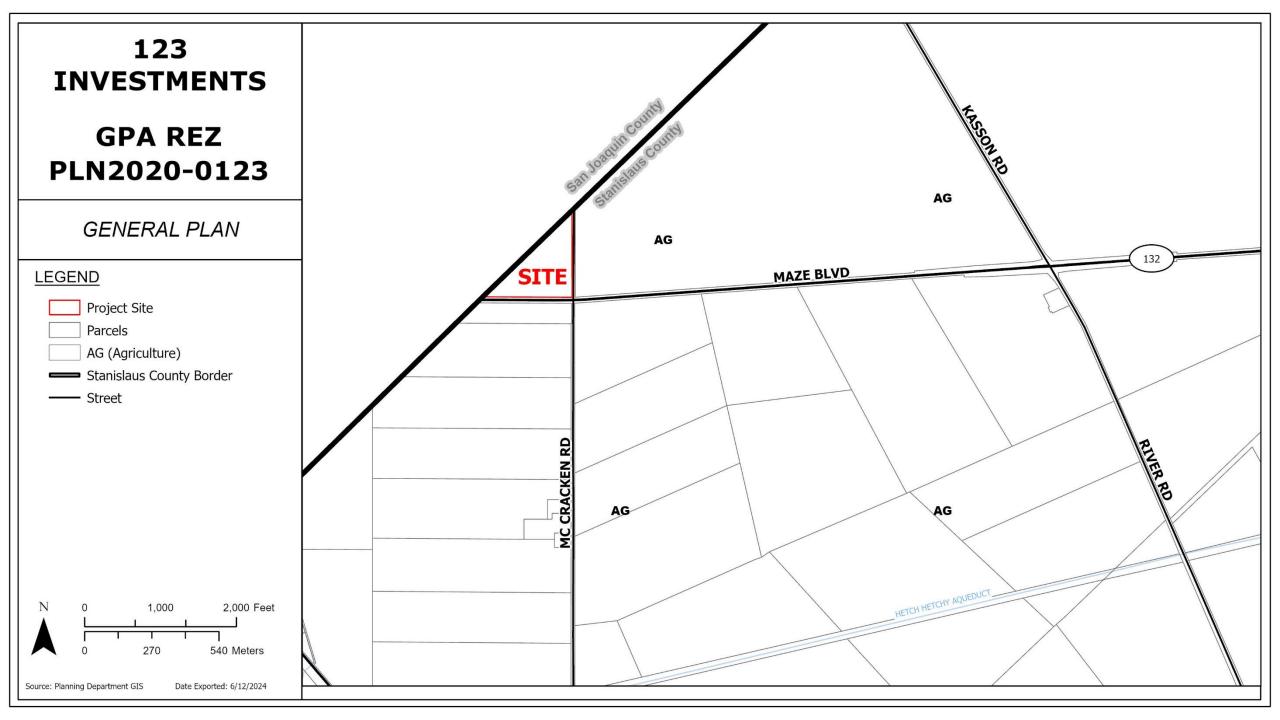
Highway

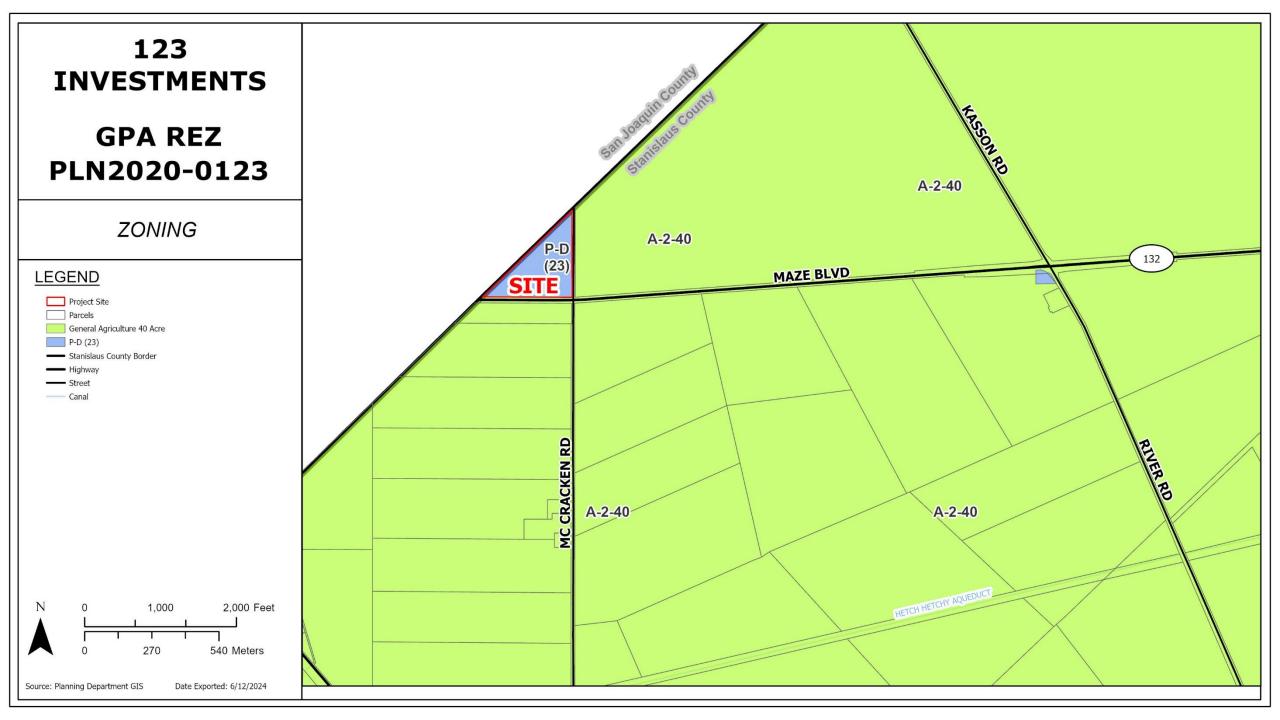
--- River



Source: Planning Department GIS Date Exported: 6/12/2024







# 123 INVESTMENTS

**GPA REZ PLN2020-0123** 

2023 AERIAL AREA MAP

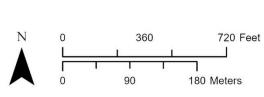
## **LEGEND**

Project Site

Stanislaus County Border

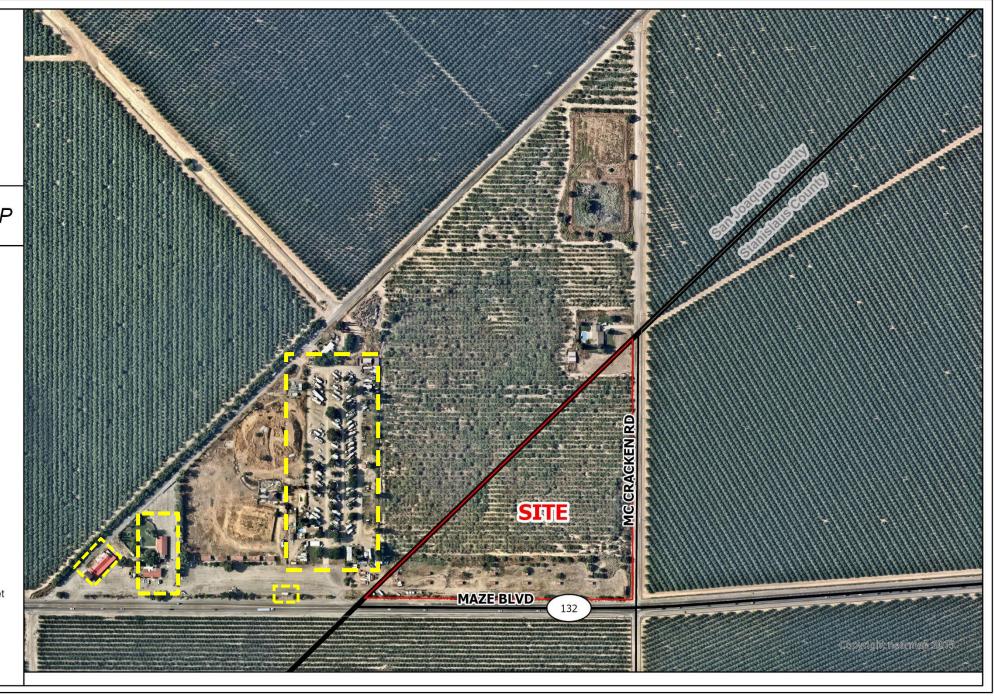
— Highway

— Street



Source: Planning Department GIS

Date Exported: 6/12/2024



# 123 INVESTMENTS

**GPA REZ PLN2020-0123** 

2023 AERIAL SITE MAP

## **LEGEND**

Project Site

Parcels

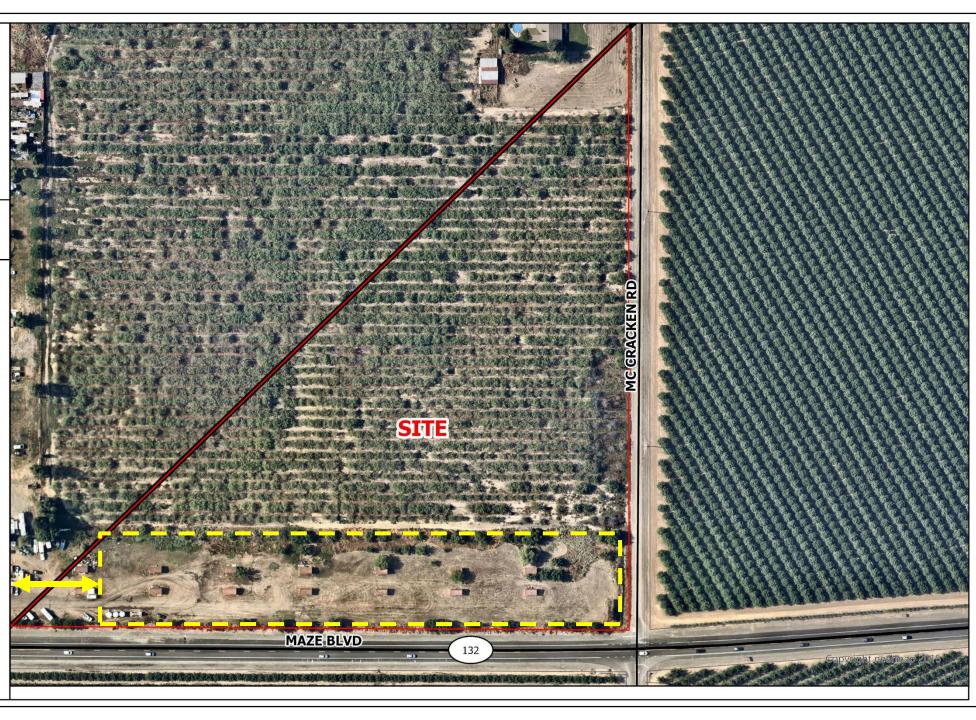
Stanislaus County Border

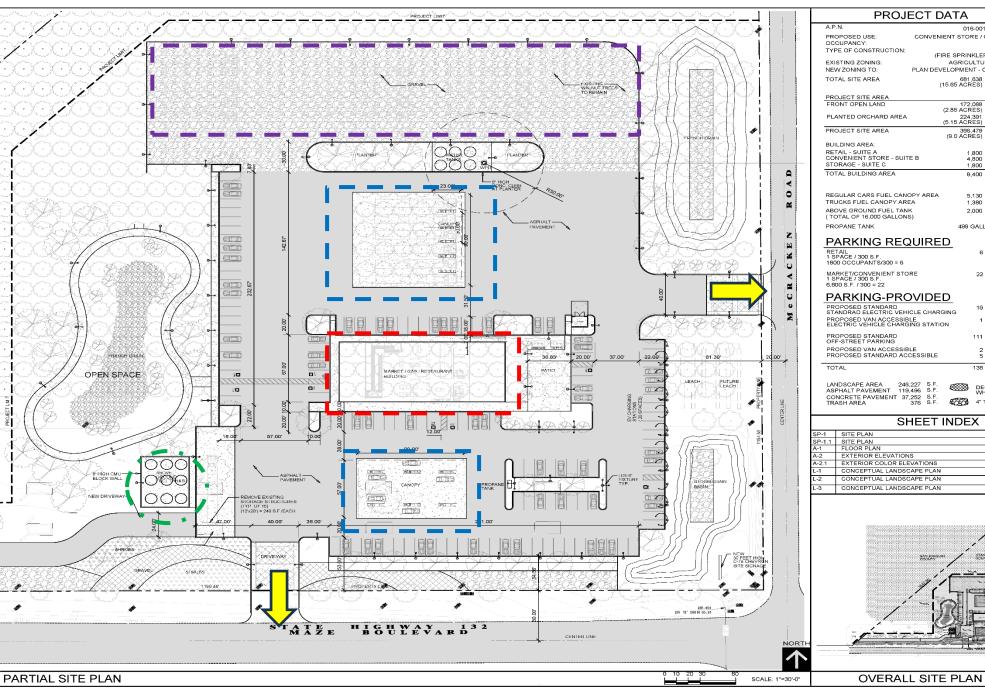
--- Highway

— Street



Source: Planning Department GIS Date Exported: 6/12/2024





#### PROJECT DATA

016-001-001 PROPOSED USE: OCCUPANCY: CONVENIENT STORE / GAS TYPE OF CONSTRUCTION: (FIRE SPRINKLERED) EXISTING ZONING: AGRICULTURAL NEW ZONING TO: PLAN DEVELOPMENT - COM. 681,638 S.F. (15.65 ACRES) TOTAL SITE AREA

PROJECT SITE AREA FRONT OPEN LAND

172,088 S.F. (2.85 ACRES) 224,391 S.F. (5.15 ACRES) PLANTED ORCHARD AREA

PROJECT SITE AREA 396,479 S.F. (9.0 ACRES)

BUILDING AREA:

1,800 S.F. 4,800 S.F. RETAIL - SUITE A CONVENIENT STORE - SUITE B STORAGE - SUITE C 1,800 S.F. TOTAL BUILDING AREA 8,400 S.F.

REGULAR CARS FUEL CANOPY AREA 5,130 S.F. TRUCKS FUEL CANOPY AREA 1,380 S.F. ABOVE GROUND FUEL TANK 2,000 S.F.

499 GALLONS

#### PARKING REQUIRED

6 SPACES RETAIL 1 SPACE / 300 S.F. 1800 OCCUPANTS/300 = 6 22 SPACES

#### PARKING-PROVIDED

PROPOSED STANDARD STANDRAD ELECTRIC VEHICLE CHARGING 19 SPACES PROPOSED VAN ACCESSIBLE ELECTRIC VEHICLE CHARGING STATION 1 SPACE PROPOSED STANDARD OFF-STREET PARKING 111 SPACES PROPOSED VAN ACCESSIBLE PROPOSED STANDARD ACCESSIBLE 5 SPACES

138 SPACES

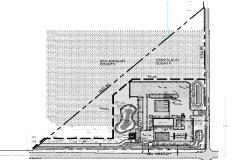
LANDSCAPE AREA 246,227 S.F. ASPHALT PAVEMENT 119,496 S.F. CONCRETE PAVEMENT 37,252 S.F. TRASH AREA 376 S.F.



DECORATIVE ROCK AREA- 1"-2" WHITE COLOR 4" TO 8" COBBLE- GRAY TONES

#### SHEET INDEX

| SP-1  | SITE PLAN                 |
|-------|---------------------------|
| SP-1  | 1 SITE PLAN               |
| A-1   | FLOOR PLAN                |
| A-2   | EXTERIOR ELEVATIONS       |
| A-2.1 | EXTERIOR COLOR ELEVATIONS |
| L-1   | CONCEPTUAL LANDSCAPE PLAN |
| L-2   | CONCEPTUAL LANDSCAPE PLAN |
| L-3   | CONCEPTUAL LANDSCAPE PLAN |





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CONSULTANT

PROJECT ADDRESS:

132 COMPLEX

NEW GAS/ MARKET BUILDING

15010 MAZE BOULEVARD PATTERSON, CA 95363

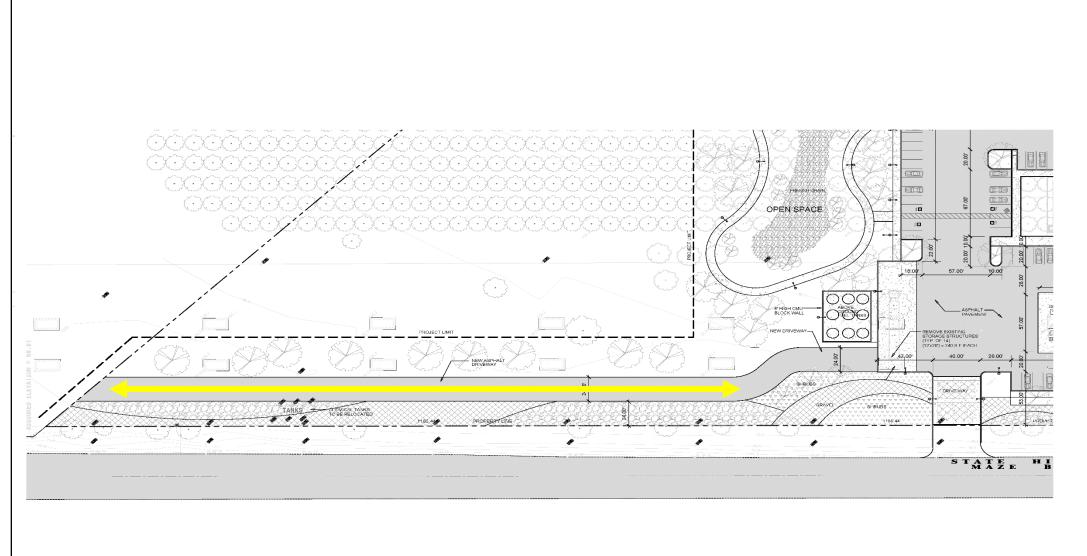
132 INVESTMENT, LLC

2405 E. HIGHWAY 132 VERNALIS, CA 95385

| ANTE:       | DECEMBER 6, 2023 |    |
|-------------|------------------|----|
| RAWN        | ETJ              |    |
| ILE:        | X29-2019         |    |
| PROJECT NO: | 285-19           |    |
| PERMIT NO:  |                  |    |
| REVISIONS   |                  | BY |
|             |                  |    |
|             |                  |    |
|             |                  |    |
|             |                  |    |
|             |                  |    |

SITE PLAN

SP-1





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CONSULTANT:

PROJECT ADDRESS:

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NEW GAS/ MARKET BUILDING

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132 INVESTMENT, LLC

2405 E. HIGHWAY 132 VERNALIS, CA 95385

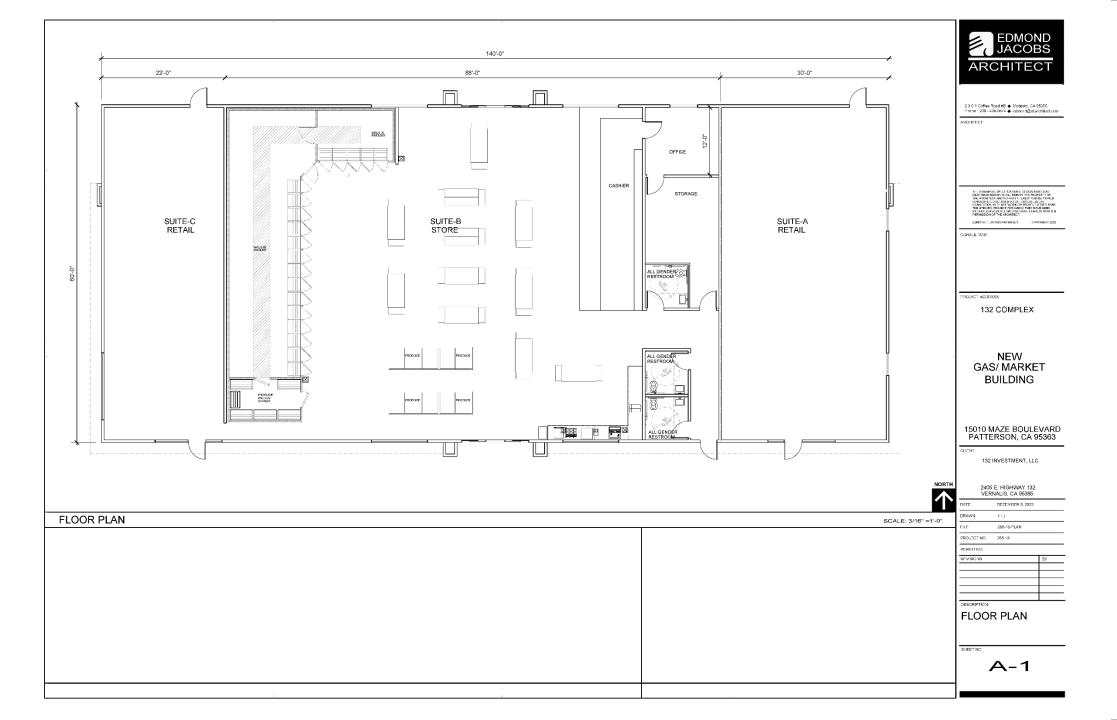
| DATE:       | DECEMBER 6, 2023 |    |
|-------------|------------------|----|
| DRAWN       | ETJ              |    |
| FILE:       | X29-2019         |    |
| PROJECT NO: | 285-19           |    |
| PERMIT NO:  |                  |    |
| REVISIONS   |                  | BY |
|             |                  |    |
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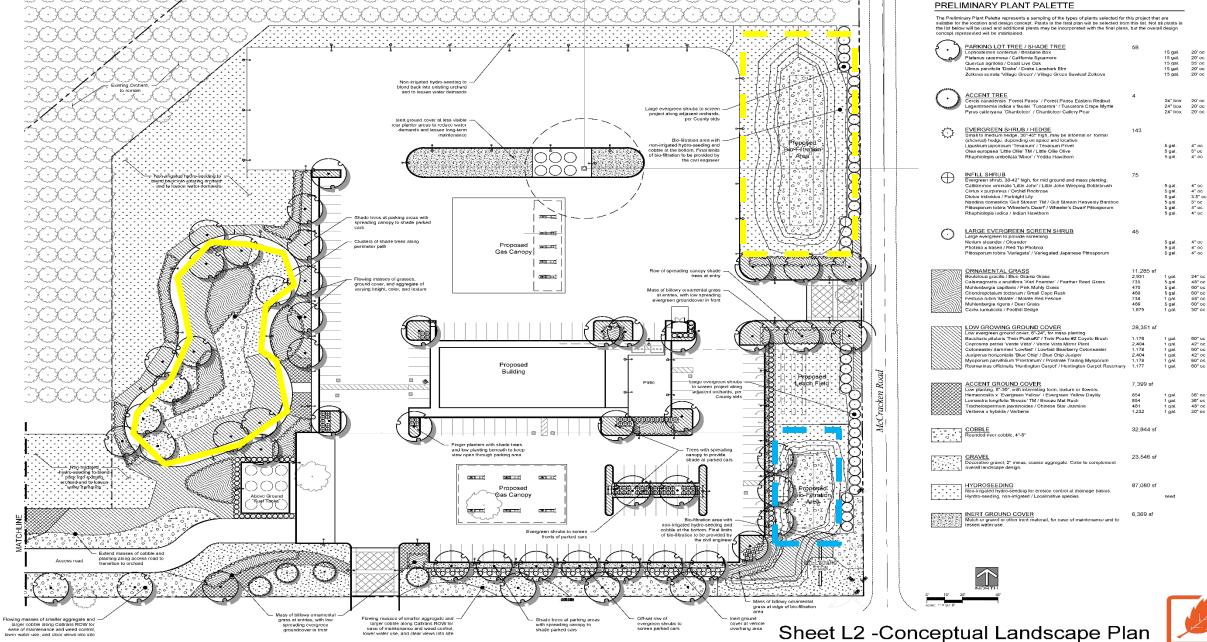
SITE PLAN

NORTH

SP-1.1

SCALE: 1"=30'-0"





lower water use, and clear views into site

# Existing Retail and RV Park Flowing masses of smaller aggregate and — larger cobble along Caltrans ROW for ease of maintenance and weed control, lower water use, and clear views into site

#### PRELIMINARY PLANT PALETTE

The Preliminary Plant Patiette represents a sampling of the types of plants selected for this project that are suitable for the location and design concept. Plants in the final plan will be selected from this list. Not all plants in the fish below will be used and additional plants may be incorporated with the final plants, but the overall design

| concept re         | epresented will be maintained.   |                |                  |                |
|--------------------|--|----------------|------------------|----------------|
| ٤ ک                | PARKING LOT TREE / SHADE TREE  | 58             |                  |                |
| ۲.                 | Lophostemon confertus / Brisbane Box   | 00             | 15 gal.          | 20° oc         |
| $\sim$             | Platanus racemosa / California Sycamore  |                | 15 gal.          | 20° oc         |
| -                  | Quercus agrifolia / Coast Live Oak   |                | 15 gal.          | 35° oc         |
|                    | Ulmus parvifolia 'Drake' / Drake Lacebark Elm  |                | 15 gal.          | 20° oc         |
|                    | Zelkova serrata 'Village Green' / Village Green Sawleaf Zelkova  |                | 15 gal.          | 20° ec         |
| , mm.              |  |                |                  |                |
| <i>i</i> .         | ACCENT TREE Cercis canadensis 'Forest Pansy' / Forest Pansy Eastern Redbud   | 4              | 24" box          | 20° oc         |
| 1 1                | Lagerstroemia indica x fauriei 'Tuscarora' / Tuscarora Crape Myrtle  |                | 24" box          | 20° oc         |
| 46.00              | Pyrus calleryana 'Chanticleer' / Chanticleer Callery Pear  |                | 24" box          | 20° ec         |
| پىر                | EVERGREEN SHRUB / HEDGE  | 143            |                  |                |
| \$ <del>`</del> ,} | Small to medium hedge, 30"-42" high, may be informal or formal   | 140            |                  |                |
|                    | (sheared) hedge, depending on space and location<br>Ligustrum japonicum 'Texanum' / Texanum Privet                         |                | 5 gal.           | 4" oc          |
|                    | Olea europaea 'Little Ollie' TM / Little Ollie Olive   |                | 5 gal.           | 5° oc          |
|                    | Rhaphiolepis umbellata 'Minor' / Yedda Hawthorn  |                | 5 gal.<br>5 gal. | 4" oc          |
| •                  | INFILL SHRUB   | ~-             |                  |                |
| $\oplus$           | Evergreen shrub, 30-42" high, for mid ground and mass planting.  | 75             |                  |                |
| Ψ                  | Callistemon viminalis "Little John" / Little John Weeping Bottlebrush  |                | 5 gal.           | 4" oc          |
|                    | Cistus x purpureus / Orchid Rockrose   |                | 5 gal.           | 4" oc          |
|                    | Dietes iridioides / Fortnight Lily   |                | 5 gal.           | 3.5" 0         |
|                    | Nandina domestica 'Gulf' Stream' TM / Gulf Stream Heavenly Bamboo  |                | 5 gal.           | 3" oc          |
|                    | Pittosporum tobira "Wheeler's Dwarf" / Wheeler's Dwarf Pittosporum   |                | 5 gal.           | 4" oc          |
|                    | Rhaphiolepis indica / Indian Hawthom   |                | 5 gal.           | 4" oc          |
| 0                  | LARGE EVERGREEN SCREEN SHRUB   | 45             |                  |                |
| -                  | Large evergreen to provide screening   |                |                  |                |
|                    | Nerium oleander / Oleander   |                | 5 gal.           | 4" oc<br>4" oc |
|                    | Photinia x fraseri / Red Tip Photinia<br>Pittosporum tobira "Variegata" / Variegated Japanese Pittosporum                  |                | 5 gal.<br>5 gal. | 4" oc          |
|                    | Pittosporum tobila. Valnegatar / Valnegated Sapanese Pittosporum   |                | o yar.           | + 00           |
| 1000000            | ORNAMENTAL GRASS   | 11,285 sf      |                  |                |
| E311111            | Bouteloua gracilis / Blue Grama Grass  | 2,931          | 1 gal.           | 24" oc         |
| 2001/100           | Calamagrostis x acutiflora 'Karl Foerster' / Feather Reed Grass  | 733            | 5 gal.           | 48" 00         |
| 100000             | Muhlenbergia capillaris / Pink Muhly Grass   | 470            | 5 gal.           | 60° oc         |
| VIIII S            | Chondropetalum tectorum / Small Cape Rush  | 469            | 5 gal.           | 60° oc         |
| Merch 1            | Festuca rubra 'Molate' / Molate Red Fescue   | 734<br>469     | 1 gal.           | 48" oc         |
|                    | Muhlenbergla rigens / Deer Grass Carex turnulicola / Foothill Sedge  | 1,875          | 5 gal.<br>1 gal. | 30" 00         |
|                    |  |                |                  |                |
| 1111111            | LOW GROWING GROUND COVER   | 28,351 sf      |                  |                |
|                    | Low evergreen ground cover, 6"-24", for mass planting  |                |                  |                |
|                    | Baccharis pilularis 'Twin Peaks#2' / Twin Peaks #2 Coyote Brush  | 1,178          | 1 gal.           | 60° oc         |
|                    | Coprosma petriei 'Verde Vista' / Verde Vista Mirror Plant<br>Cotoneaster dammerl 'Lowfast' / Lowfast Bearberry Cotoneaster | 2,404<br>1,178 | 1 gal.<br>1 gal. | 42° oc         |
|                    | Juniperus horizontalis 'Blue Chip' / Blue Chip Juniper   | 2,404          | 1 gal.           | 42" 00         |
|                    | Myoporum parvifolium 'Prostratum' / Prostrate Trailing Myoporum  | 1.178          | 1 gal.           | 60° oc         |
|                    | Rosmarinus officinalis 'Huntington Carpet' / Huntington Carpet Rosemary  | 1,177          | 1 gal.           | 60" oc         |
|                    |  |                |                  |                |
| <b>*******</b>     | ACCENT GROUND COVER  Low planting, 6*-30", with interesting form, texture or flowers.                                      | 7,399 sf       |                  |                |
| - XXXXXX           | Hemerocallis x 'Evergreen Yellow' / Evergreen Yellow Dayilly   | 854            | 1 gal.           | 36" oc         |
| - XXXXXX           | Lomandra longifolia 'Breeze' TM / Breeze Mat Rush  | 854            | 1 gal.           | 36" 00         |
| - XXXXXX           | Trachelospermum jasminoides / Chinese Star Jasmine   | 481            | 1 gal.           | 48" 00         |
| *******            | Verbena x hybrida / Verbena  | 1,232          | 1 gal.           | 30" oc         |
|                    |  |                |                  |                |
|                    | COBBLE Rounded river cobble, 4"-8"   | 32,844 sf      |                  |                |
|                    | wl   |                |                  |                |
| (1.0 × 2.0 × 1.0   | GRAVEL   | 23,546 sf      |                  |                |
|                    | Decorative gravel, 2" minus, coarse aggregate. Color to complement overall landscape design.                               |                |                  |                |
|                    |  |                |                  |                |
|                    | HYDROSEDING Non-irrigated hydro-seeding for erosion control at drainage basins.  | 87,080 sf      |                  |                |
|                    | Hydro-seeding, non-irrigated / Local/native species  |                | seed             |                |
|                    |  |                |                  |                |
| 272742             | INERT GROUND COVER   | 6,369 sf       |                  |                |
|                    | Mulch or gravel or other inert materall, for ease of maintenance and to lessen water use.                                  |                |                  |                |
|                    |  |                |                  |                |



Sheet L3 -Conceptual Landscape Plan



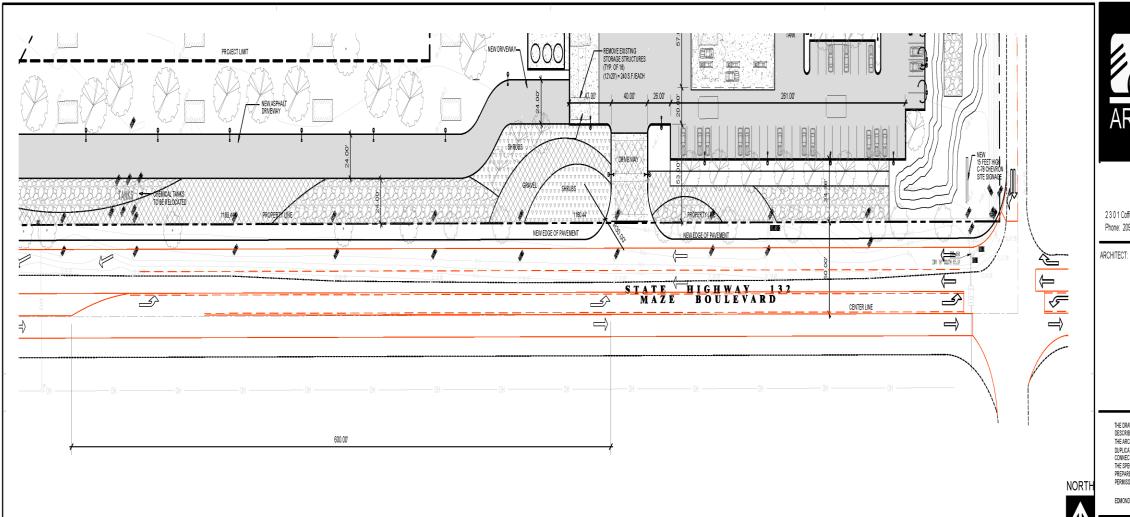


- Project Delays
  - Traffic
  - Water Resources



- Project Delays
  - Traffic
    - Traffic Impact Analysis
    - Mitigation Measures
  - Water Resources





PARTIAL SITE PLAN

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CONSULTANT:

SCALE: 1"=40'-0"

- Project Delays
  - Traffic
  - Water Resources
    - New Public Water System
      - San Joaquin County connection
    - Water Usage
    - Future retail



# 123 INVESTMENTS

**GPA REZ PLN2020-0123** 

2023 AERIAL AREA MAP

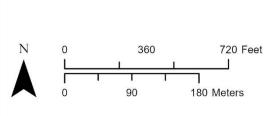
#### **LEGEND**

Project Site

Stanislaus County Border

--- Highway

— Street



Source: Planning Department GIS

Date Exported: 6/12/2024



- Project Delays
  - Traffic
  - Water Resources
    - New Public Water System
    - Water Usage
      - California Environmental Quality Act (CEQA) review
      - Future retail



## General Plan and Zoning Consistency

#### General Plan

- Land Use Element
  - Amendment Criteria
  - Land Use Element
    - Planned Development
- Agriculture Element
  - Conversion criteria
  - Ag Buffers

#### Zoning

- P-D 23 to a new P-D
  - Amendments to the Zoning Designation must be found to be consistent with the General Plan
  - Development standards for parking, landscaping, signage, lighting, building height, setbacks are incorporated into project and detailed in Exhibit C – Development Standards and Mitigation Measures

## **Environmental Review**

- CEQA
  - Mitigated Negative Declaration
  - Amended to address:
    - Comments received from Department of Environmental Resources
      - De minimus threshold corrected to 2.0 AFY
    - Reference to future land use permitting
  - Development Standards



#### Recommendation

- Staff recommendation
  - Recommend project approval to the Board of Supervisors
- Findings Exhibit A
  - Environmental Review
    - Including Mitigation Monitoring and Reporting Program
  - General Plan Amendment
  - Rezone
  - Project Approval



# Questions?