Initial Study and Mitigated Negative Declaration for Elliott Subdivision

June 2024

Prepared By:

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Prepared For:

City of Visalia
315 E Acequia Ave
Visalia, CA 93291

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City of Visalia
315 E Acequia Ave
Visalia, CA 93291

SECTION 1
CEQA Review Process

Project Title: Elliott Subdivision

1.1 California Environmental Quality Act Guidelines

Section 15063 of the California Environmental Quality Act (CEQA) Guidelines requires that the Lead Agency prepare an Initial Study to determine whether a discretionary project will have a significant effect on the environment. All phases of the project planning, implementation, and operation must be considered in the Initial Study. The purposes of an Initial Study, as listed under Section 15063(c) of the CEQA Guidelines, include:

(1) Provide the lead agency with information to use as the basis for deciding whether to prepare an EIR or negative declaration;
(2) Enable an applicant or lead agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a negative declaration;
(3) Assist in the preparation of an EIR, if one is required, by:
    (a) Focusing the EIR on the effects determined to be significant,
    (b) Identifying the effects determined not to be significant,
    (c) Explaining the reasons for determining that potentially significant effects would not be significant, and
    (d) Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.
(4) Facilitate environmental assessment early in the design of a project;
(5) Provide documentation of the factual basis for the finding in a negative declaration that a project will not have a significant effect on the environment
(6) Eliminate unnecessary EIRs;
(7) Determine whether a previously prepared EIR could be used with the project.

1.2 Initial Study

The Initial Study provided herein covers the potential environmental effects of a 225-unit, low-density single-family development on 59.13 gross acres within the City of Visalia Planning Area. The Project site's existing City of Visalia General Plan land use designation is Residential Low Density, with a current County of Tulare zoning designation of AE-20 (Exclusive Agriculture, 20 acre minimum site area). The Project's proposed zoning under City jurisdiction is R-1-5 (Single Family Residential, 5,000 square foot minimum site area). The Project includes 225 homes, with

a minimum of 6,480 square feet per lot, and a 4.15-acre park. The City of Visalia will act as the Lead Agency for processing the Initial Study/Mitigated Negative Declaration under the CEQA Guidelines.

1.3 Environmental Checklist

The Lead Agency may use the CEQA Environmental Checklist Form [CEQA Guidelines, Section 15063(d)(3) and (f)] in preparation of an Initial Study to provide information for determining if there are significant effects of the project on the environment. A copy of the completed Environmental Checklist is outlined in **Section Three**.

1.4 Notice of Intent to Adopt a Negative Declaration

The Lead Agency shall provide a Notice of Intent to Adopt a Negative Declaration (CEQA Guidelines, Section 15072) to the public, responsible agencies, trustee agencies, and the County Clerk within which the project is located, sufficiently before adoption by the Lead Agency of the Negative Declaration to allow the public and agencies the review period. The public review period (CEQA Guidelines, Section 15105) will be 20 days. The City is not anticipating state agency review.

Before approving the project, the Lead Agency shall consider the proposed Negative Declaration together with any comments received during the public review process and shall adopt the proposed Negative Declaration only if it finds based on the whole record before it, that there is no substantial evidence that the project will have a significant effect on the environment and that the Negative Declaration reflects the Lead Agency's independent judgment and analysis.

The written and oral comments received during the public review period will be considered by The City of Visalia before adopting the Negative Declaration. Regardless of the type of CEQA document that must be prepared, the overall purpose of the CEQA process is to:

1) Assure that the environment and public health and safety are protected in the face of discretionary projects initiated by public agencies or private concerns;
2) Provide full disclosure of the project's environmental effects to the public, the agency decision-makers who will approve or deny the project, and the responsible trustee agencies charged with managing resources (e.g. wildlife, air quality) that may be affected by the project; and
3) Provide a forum for public participation in the decision-making process on potential environmental effects.

According to Section 15070(a) a public agency shall prepare or have prepared a proposed negative declaration for a project subject to CEQA when:

The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment. Less than significant impacts with mitigation measures have been identified.

The Environmental Checklist Discussion contained in Section Three of this document has determined that the environmental impacts of the project are less than significant with mitigation measures and that a Mitigated Negative Declaration is adequate for adoption by the Lead Agency.

1.5 Negative Declaration or Mitigated Negative Declaration

The Lead Agency shall prepare or have prepared a proposed Negative Declaration or Mitigated Negative Declaration (CEQA Guidelines Section 15070) for a project subject to CEQA when the Initial Study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment. The proposed Negative Declaration or Mitigated Negative Declaration circulated for public review shall include the following:

(a) A brief description of the project, including a commonly used name for the project.
(b) The location of the project, preferably shown on a map.
(c) A proposed finding that the project will not have a significant effect on the environment.
(d) An attached copy of the Initial Study documenting reasons to support the finding.
(e) Mitigation measures, if any.

1.6 Intended Uses of Initial Study/Negative Declaration Documents

The Initial Study/Negative Declaration document is an informational document that is intended to inform decision-makers, other responsible or interested agencies, and the general public of the potential environmental effects of the proposed project. The environmental review process has been established to enable public agencies to evaluate environmental consequences and to examine and implement methods of eliminating or reducing any adverse impacts. While CEQA requires that consideration be given to avoiding environmental damage, the Lead Agency must balance any potential environmental effects against other public objectives, including economic and social goals. The City of Visalia, as the Lead Agency, will make a determination, based on the environmental review for the Environmental Study, Initial Study, and comments from the general public, if there are less than significant impacts from the proposed project and the requirements of CEQA can be met by adoption of a Mitigated Negative Declaration.

1.7 Notice of Determination (NOD)

The Lead Agency shall file a Notice of Determination within five working days after deciding to approve the project. The Notice of Determination (CEQA Guidelines, Section 15075) shall include the following:

(1) An identification of the project including the project title as identified on the proposed negative declaration, its location, and the State Clearinghouse identification number for the proposed negative declaration if the notice of determination is filed with the State Clearinghouse.

(2) A brief description of the project.

(3) The agency's name and the date on which the agency approved the project.

(4) The determination of the agency that the project will not have a significant effect on the environment.

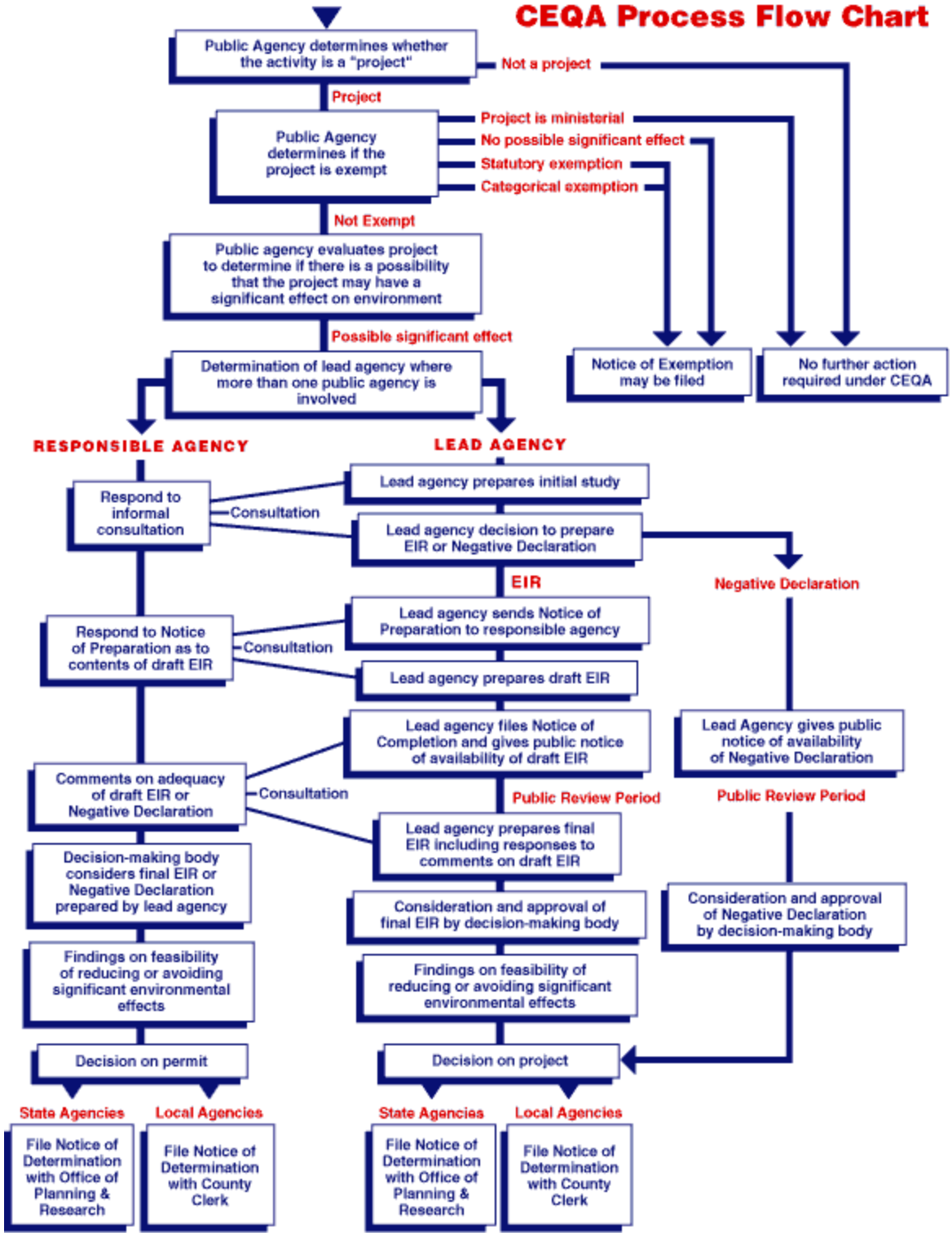
(5) A statement that a negative declaration or a mitigated negative declaration was adopted pursuant to the provisions of CEQA.

(6) A statement indicating whether mitigation measures were made a condition of the approval of the project, and whether a mitigation monitoring plan/program was adopted.

(7) The address where a copy of the negative declaration or mitigated negative declaration may be examined.

(8) The identity of the person undertaking a project which is supported, in whole or in part, through contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies or the identity of the person receiving a lease, permit, license, certificate, or other entitlement for use from one or more public agencies.

1.8 CEQA Process Flow Chart



Section 2

Project Description

City of Visalia
315 E Acequia Ave
Visalia, CA 93291

SECTION 2
Project Description

Project Title: Elliott Property Subdivision

2.1 Project Description and Purpose

The Project proposes a 225-unit, low-density single-family development on 59.13 gross acres within the City of Visalia Planning Area. The Project site's existing City of Visalia General Plan land use designation is Residential Low Density, with a current County of Tulare zoning designation of AE-20 (Exclusive Agriculture, 20 acre minimum site area). The Project's proposed zoning under City jurisdiction is R-1-5 (Single Family Residential, 5,000 square foot minimum site area). The Project includes 225 homes, with a minimum of 6,480 square feet per lot, and a 4.15-acre park.

The Project would result in onsite and offsite infrastructure improvements, including new and relocated utilities, new residential streets, and improvements of West Tulare Avenue, South Roeben Street, and South Shirk Road. The Persian Ditch will remain, fenced off within the park area. The Project will require no demolition.

The Project will require annexation into the City of Visalia; it is within the Visalia Planning Area and borders the existing City limits and single-family homes. The Project plans to develop the project in two phases (Figure 3-2).

2.2 Project Location

The proposed project site is located within the City of Visalia Planning Area within Tulare County. The site is west of S Roeben Street, east of S Shirk Road, and south of W Tulare Avenue. The site is approximately 3.5 miles southwest of the Visalia downtown. The Project involves construction on APNs 087-010-006 and 087-010-008. The site is topographically flat, with agricultural uses to the north and west and single-family housing to the south and east. The site contains agricultural uses, vacant land, and an oak grove.

2.3 Other Permits and Approvals

The following approvals are required for the proposed Project:

- Tentative Subdivision Map

- Tulare County Local Agency Formation Commission Annexation
- San Joaquin Valley Air Pollution Control District (SJVAPCD). The proposed Project is within the jurisdiction of the SJVAPCD and will be required to comply with Rules VIII, 3135, 4101, and 9510.
- Central Valley Regional Water Quality Control Board, SWPPP. The proposed project site is within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB). The Central Valley RWQCB will require a Storm Water Pollution Prevention Plan (SWPPP) to prevent impacts related to stormwater because of project construction.

The following ministerial approvals are required from the City of Visalia for the proposed Project:

- City of Visalia Building and Encroachment Permits
- Roadway Dedication of Shirk Road, Roeben Street, and Tulare Avenue.

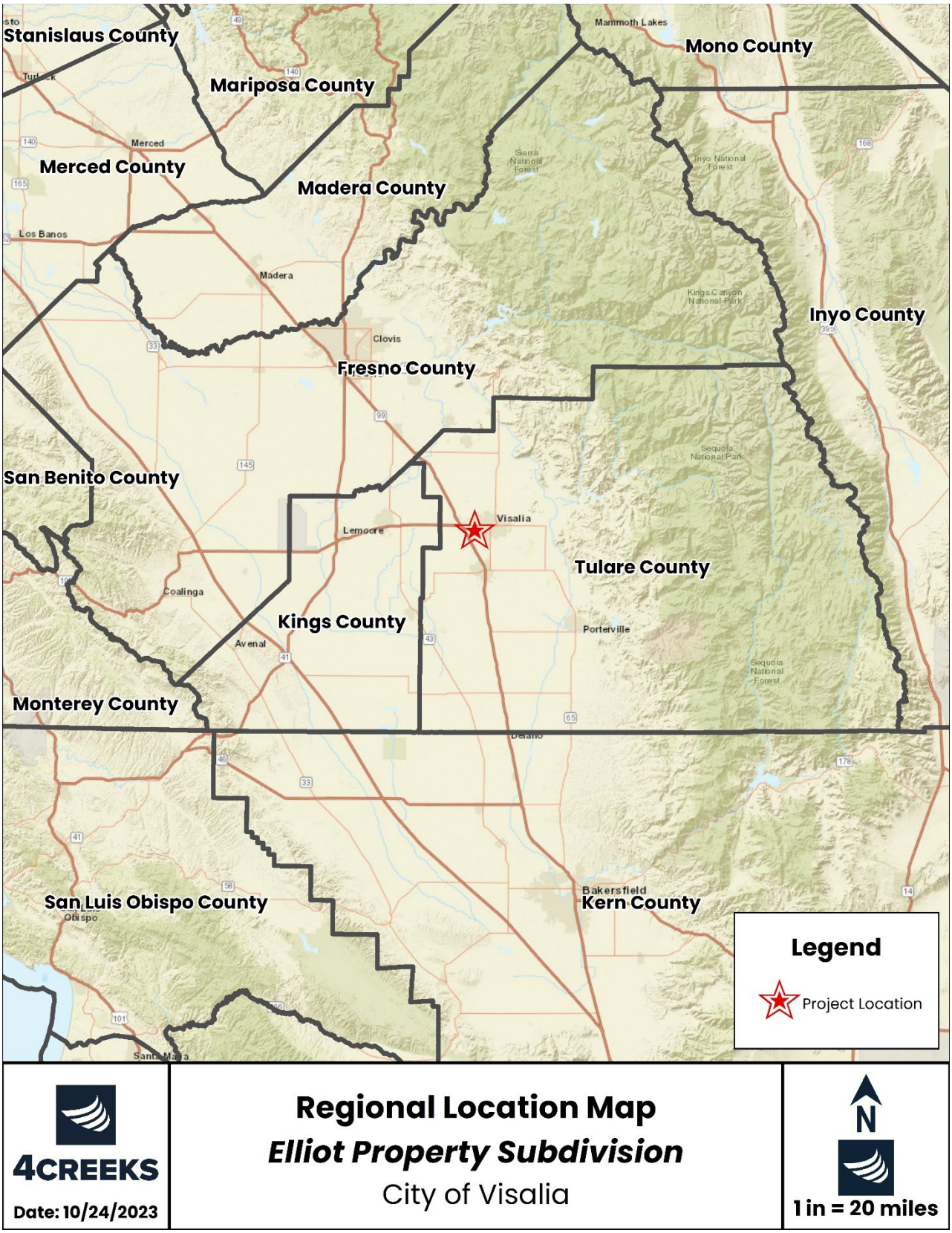


Figure 2-1. Regional Location Map

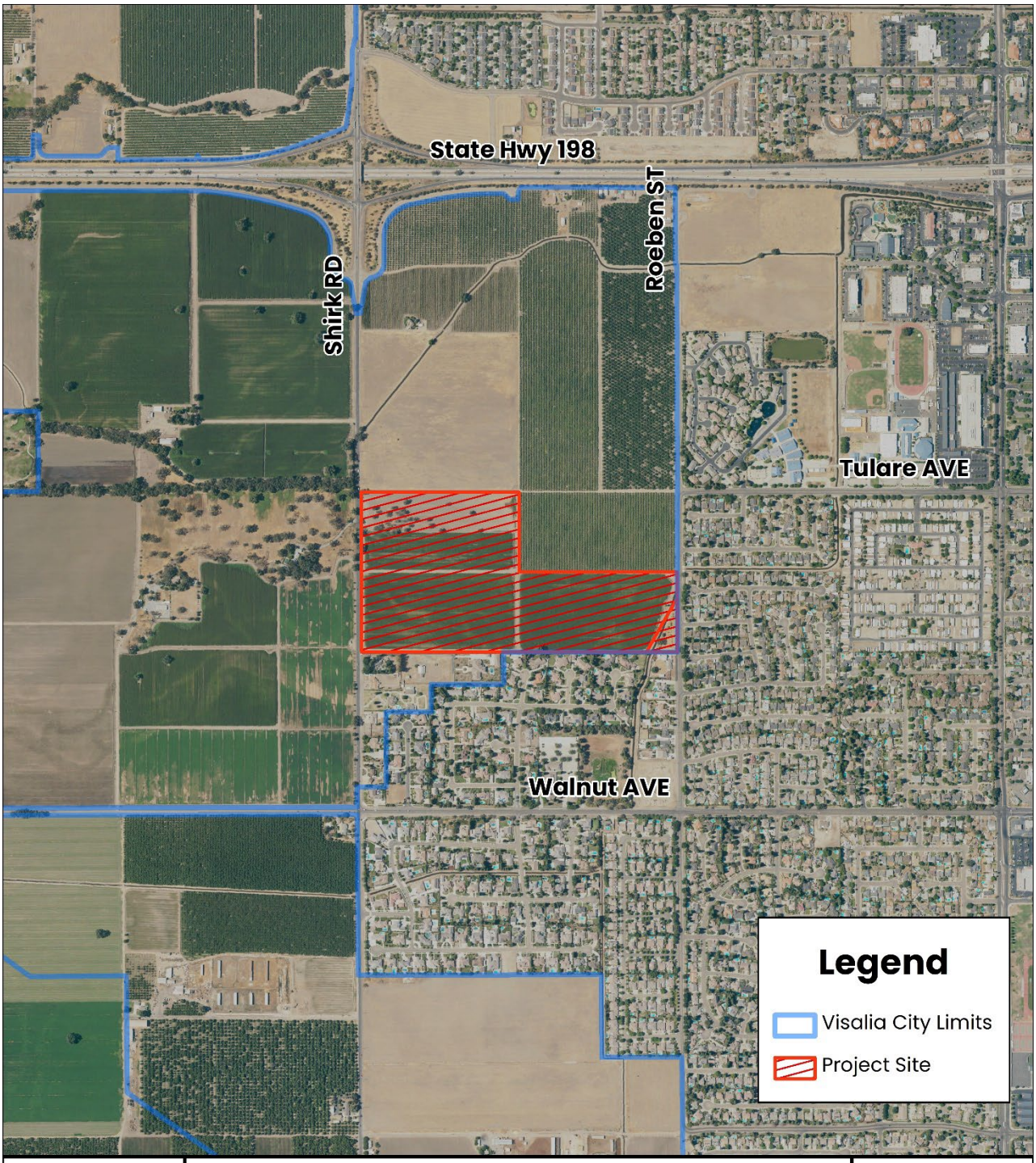


Figure 2-2. Vicinity Map

Section 3

Evaluation of Environmental Impacts

City of Visalia
315 E Acequia Ave
Visalia, CA 93291

SECTION 3
Evaluation of Environmental Impacts

Project Title: Elliott Property Subdivision

This document is the Initial Study/Mitigated Negative Declaration for the proposed construction and operation of 225-unit, low-density single-family development with a park on 59.13 gross acres within the City of Visalia. The City of Visalia will act as Lead Agency for this Project pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

3.1 PURPOSE

The purpose of this environmental document is to implement the California Environmental Quality Act (CEQA). Section 15002(a) of the CEQA Guidelines describes the basic purposes of CEQA as follows.

(1) Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
(2) Identify the ways that environmental damage can be avoided or significantly reduced.
(3) Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
(4) Disclose to the public the reasons why a governmental agency approved the Project in the manner the agency chose if significant environmental effects are involved.

This Initial Study of environmental impacts has been prepared to conform to the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.). According to Section 15070, a public agency shall prepare or have prepared a proposed negative declaration or mitigated negative declaration for a Project subject to CEQA when:

(a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the Project may have a significant effect on the environment, or
(b) The initial study identifies potentially significant effects, but:
(1) Revisions in the Project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released

for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and

(2) There is no substantial evidence, in light of the whole record before the agency, that the Project as revised may have a significant effect on the environment.

3.2 INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

1. **Project Title:** Elliott Property Subdivision

2. **Lead Agency:** City of Visalia, Planning and Community Preservation Department
   Contact Person: Cristobal Carrillo, Planning Division
   315 E Acequia Ave
   Visalia, CA 93291
   Phone Number: (559) 713-4443

3. **Applicant:** San Joaquin Valley Homes
   Contact Person: Nick Peters
   5607 Avenida De Los Robles
   Visalia, CA 93291
   Phone Number: (559)-437-5010

4. **Project Location:** The proposed Project Site is located within the City of Visalia Planning Area within Tulare County. The Site is west of S Roeben Street, east of S Shirk Road, and south of Tulare Street. The Site is approximately 3.5 miles southwest of the Visalia downtown. The Project involves construction on APNs 087-010-006 and 087-010-008. The Site is topographically flat, with agricultural uses to the north and west and single-family housing to the south and east. The Site is zoned AE-20 (Exclusive Agriculture, 20 Acre Minimum Site Area) by Tulare County but will be zoned R-1-5 by the City of Visalia, pending annexation. The Visalia General Plan Designation is Low Density Residential. The Site contains agricultural uses, vacant land, and an oak grove.

5. **General Plan Designation:** The proposed Project Site is designated as Low Density Residential by the Visalia General Plan.

6. **Zoning Designation:** The Site is currently zoned AE-20 in the County of Tulare Designation.

7. **Project Description:** The Project proposes a 225-unit, low-density single-family development on 59.13 gross acres within the City of Visalia Planning Area. The Project site's existing City of Visalia General Plan land use designation is Residential Low Density, with a current County of Tulare zoning designation of AE-20 (Exclusive Agriculture, 20-acre minimum site area). The Project's proposed zoning under City jurisdiction is R-1-5 (Single Family Residential, 5,000 square foot minimum site area). The Project includes 225 homes, with a minimum of 6,480 square feet per lot, and a 4.15-acre park.

   The Project would result in onsite and offsite infrastructure improvements, including new and relocated utilities, new residential streets, and improvements of West Tulare Avenue,

South Roeben Street, and South Shirk Road. The Persian Ditch will remain, fenced off, in the park area. within the park area. The Project will require no demolition.

8. **Surrounding Land Uses and Settings:**

Direction	*Adjacent Street*	*Adjacent Property Usage*
North	None (Future West Tulare Street)	Agricultural and Irrigated Pasture
South	None	Residential
East	South Roeben Street	Residential
West	South Shirk Road	Rural Residence and Agricultural

9. **Required Approvals:** The following approvals are required for the proposed project:
   - Tentative Subdivision Map
   - Tulare County Local Agency Formation Commission Annexation
   - San Joaquin Valley Air Pollution Control District (SJVAPCD). The proposed Project is within the jurisdiction of the SJVAPCD and will be required to comply with Rule VIII, 3135, 4101, and 9510.
   - Central Valley Regional Water Quality Control Board, SWPPP. The proposed Project Site is within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB). The Central Valley RWQCB will require a Storm Water Pollution Prevention Plan (SWPPP) to prevent impacts related to stormwater because of Project construction.

The following ministerial approvals are required from the City of Visalia for the proposed project:

- City of Visalia Building and Encroachment Permits
- Roadway Dedication of Shirk Road, Roeben Street, and Whitendale Avenue

10. **Native American Consultation:** The State requires lead agencies to consider the potential effects of proposed projects and consult with California Native American tribes during the local planning process for the purpose of protecting Traditional Tribal Cultural Resources through the California Environmental Quality Act (CEQA) Guidelines. Pursuant to PRC Section 21080.3.1, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe which is either on or eligible for inclusion in the California Historic Register or local historic register, or, the lead agency, at its discretion, and support by substantial evidence, choose to treat the resources as a Tribal Cultural Resources (PRC Section 21074(a)(1-2)). According to the most recent census data, California is home to 109 currently recognized Native American tribes. Tribes in California currently have nearly 100 separate reservations or Rancherias. Tulare County has several Rancherias. These Rancherias are not located within the City limits.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and Project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See PRC Section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.

11. **Parking and access:** Vehicular access to the Project is available via S Shirk Road, S Roeben Street, and the future expansion of W Tulare Road to the north of the Project. The Project includes new streets and courts that provide full access to the Project site. These internal streets will have a ROW of 60', including sidewalks and parkways on both sides. Improvements will be made to Shirk Road, Tulare Avenue, and Roeben Street. The Right of Way (ROW) of Shirk Road will have an ultimate ROW of 110' with a center median, with the Project providing the eastern half of improvements. The eastern half of Shirk Road will include two lanes of traffic, a bike lane, a sidewalk, and landscaping. The ROW of S. Roeben Street will have an ultimate ROW of 84'. The Project will build out the western half of Roeben Street to include a southbound lane of traffic, sidewalk, bike lane, and landscaping. Tulare Avenue, currently a dirt road to the north of the Project, will have an ultimate ROW of 84', with the Project providing the southern half of improvements, including new pavement for an eastbound lane of traffic, a bike lane, a sidewalk, and landscaping. During construction, workers will utilize existing parking areas and/or temporary construction staging areas for parking vehicles and equipment.

12. **Landscaping and Design:** The landscape and design plans will be required during building permit and final map submittal for any areas maintained by a landscape and lighting district.

13. **Utilities and Electrical Services:** The Project would result in onsite and offsite infrastructure improvements including new and relocated utilities. Electricity will be provided by Southern California Edison, telephone will be provided by AT&T, and natural gas will be provided by Southern California Gas. Water will be provided by Cal Water and sewer services will be provided by the City of Visalia via existing lines. A stormwater pond will be located in the Southwest corner of the site. During construction, a temporary stormwater basin will be utilized.

Acronyms

BMP	Best Management Practices
BAU	Business as Usual
CAA	Clean Air Act
CBC	California Building Code
CCAP	Climate Change Action Plan
CCR	California Code of Regulation
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CRHR	California Register of Historic Places
CWA	California Water Act
DHS	Department of Health Services
FEIR	Final Environmental Impact Report
FMMP	Important Farmland Mapping and Monitoring Program
ISMND	Initial Study Mitigated Negative Declaration
ISR	Indirect Source Review
MCL	Maximum Contaminant Level
MEIR	Master Environmental Impact Report
NOI	Notice of Intent
ND	Negative Declaration
NAC	Noise Abatement Criteria
RCRA	Resource Conservation and Recovery Act of 1976
ROW	Right-of-Way
RWQCB	Regional Water Quality Control Board
SCE	Southern California Edison
SHPO	State Historic Preservation Office
SJVAPCD	San Joaquin Valley Air Pollution Control District
SSJVIC	Southern San Joaquin Information Center
SWPPP	Storm Water Pollution Prevention Plan
TCR	Tribal Cultural Resource
UWMP	Urban Water Management Plan

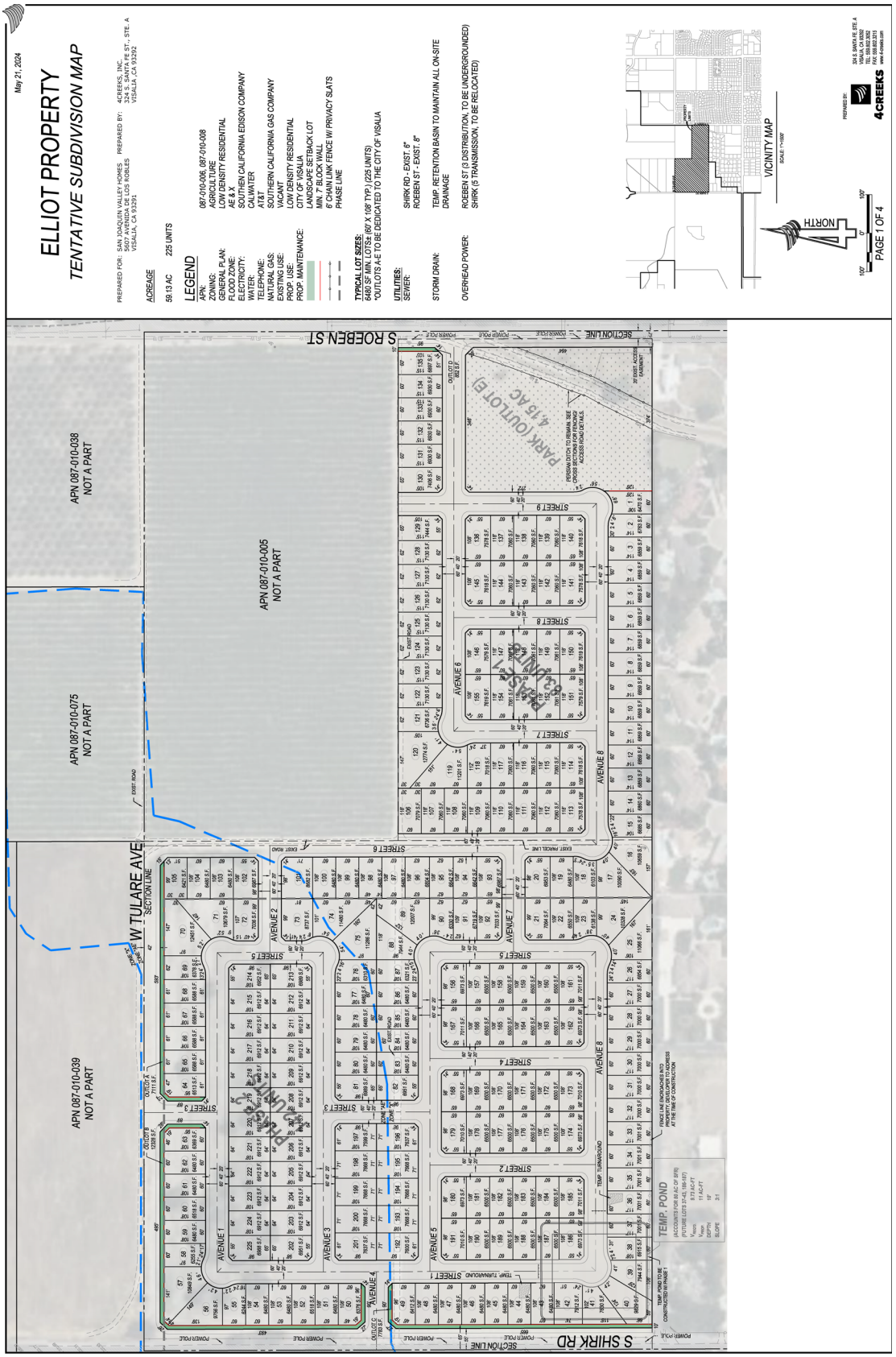


Figure 3-1: Site Plan

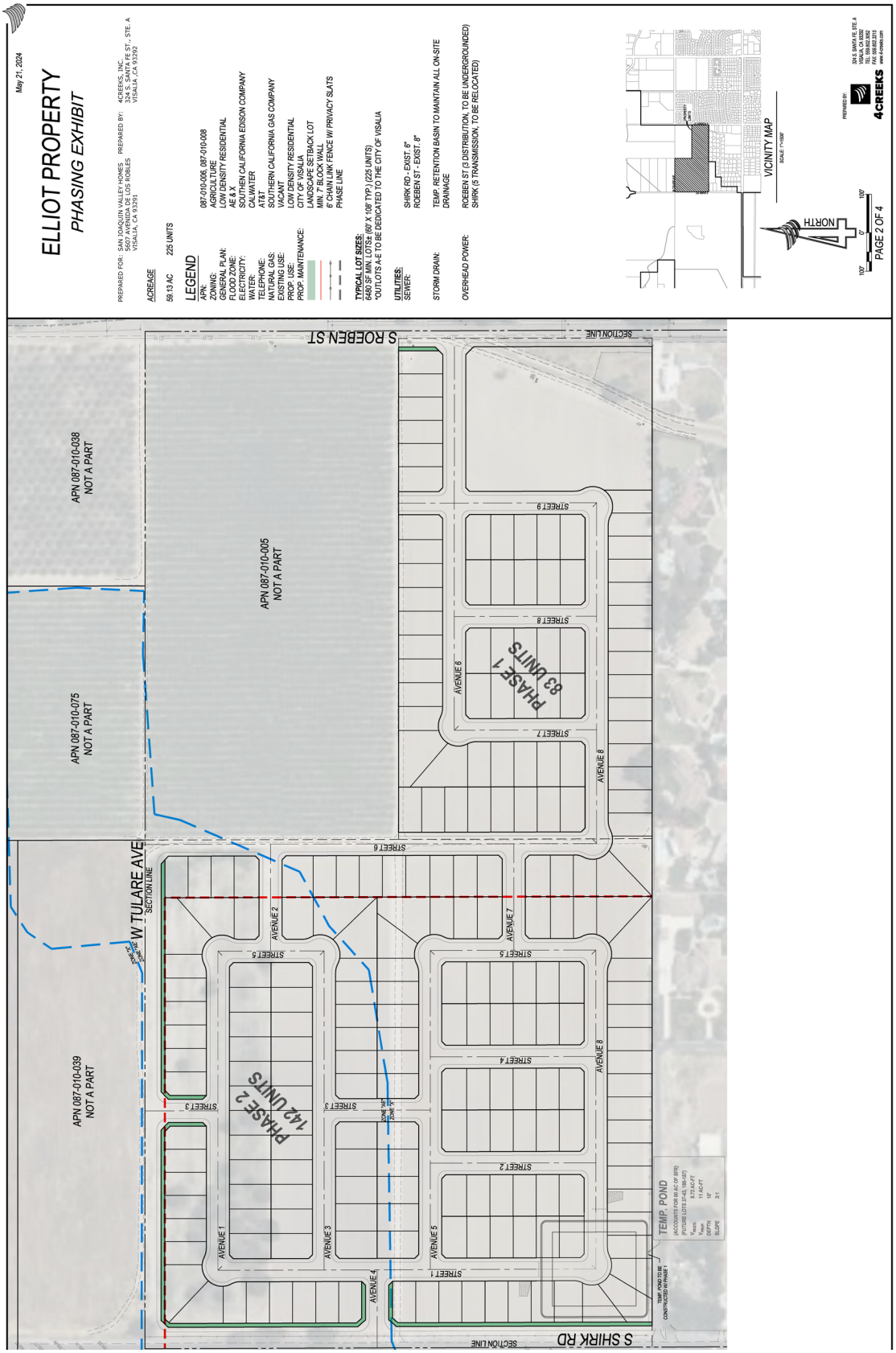


Figure 3-2: Phasing Plan

3.3 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 reference 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 if 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 "Earlier Analyses," as described in (5) below, 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.

    - Earlier Analysis Used. Identify and state where they are available for review.
    - 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.
    - Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated." Describe and mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions 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). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

3.4 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

☐ Aesthetics	☐ Greenhouse Gas Emissions	☐ Public Services
☐ Agriculture and Forest Resources	☐ Hazards & Hazardous Materials	☐ Recreation
☐ Air Quality	☑ Hydrology and Water Quality	☐ Transportation
☑ Biological Resources	☐ Land Use and Planning	☑ Tribal
☑ Cultural Resources	☐ Mineral Resources	☐ Utilities and Service System
☐ Energy	☐ Noise	☐ Wildfire
☑ Geology and soils	☐ Population	☑ Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency) Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.

On the basis of this initial evaluation:

☐ I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION WILL BE PREPARED.

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

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

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

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

6/27/2024

SIGNATURE DATE

Brandon Smith City of Visalia

PRINTED NAME AGENCY

3.5 ENVIRONMENTAL ANALYSIS

The following section provides an evaluation of the impact categories and questions contained in the checklist and identify mitigation measures, if applicable.

I. AESTHETICS

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

Environmental Setting

Scenic Resources

Scenic resources include landscapes and features that are visually or aesthetically pleasing. They contribute positively to a distinct community or region. These resources produce a visual benefit to communities. The City of Visalia has a visual character of a mix of rural and built environments. Visalia is surrounded by natural open space agricultural land, characterized by uses such as grazing, open space, and cultivated agriculture. Downtown Visalia is the physical, cultural, and economic center, with historical homes surrounding the downtown. St. John's River flows along the North side of Visalia's city limits, along with smaller creeks and ditches throughout the city. Valley Oak trees, both individually and in groves, also provide an important scenic feature and link to the natural setting of the San Joaquin Valley. The goal of Visalia's

General Plan regarding visual resources is to preserve and re-establish the city's natural waterway system and Valley Oak tree groves with parks, conservation areas, and trailways.

Scenic Vistas

The Visalia General Plan identifies the Sierra Nevada mountains to the east and agricultural lands surrounding the city as scenic vistas surrounding Visalia.

Existing Visual Character

The following photos demonstrate the aesthetic character of the Project area. As shown, the proposed Project Site area is in a relatively flat area characterized by agricultural uses.

Photo 1: Eastern-facing view of the central-western portion of subject Site parcel 087-010-008 (central-western portion of the subject site).

Photo 2: Western-facing view of the northeastern portion of subject Site parcel 087-010-008 (northeastern portion of the subject site).

Photo 3: View of the irrigation canal (Persian Ditch) located in a presumed easement in the southeastern portion of the subject site.

Photo 4: Southern-facing view of the former residential area located adjacent to South Roeben Street in the southeastern portion of the subject site.

Regulatory Setting

Scenic Roadways

The California Scenic Highway Program was established in 1963 by the State Legislature to protect and enhance the natural beauty of California highways and adjacent corridors through conservation strategies. The State Scenic Highway System includes a list of highways that have either been officially designated or are eligible for designation. State laws affiliated with governing the scenic highway program can be found in Sections 260-263 in The Street and Highways Code.

State Scenic Highways

According to the California Department of Transportation mapping of State Scenic Highways, the City of Visalia does not have officially designated State Scenic Highways, however, the City has one eligible State Scenic Highway, a 44-mile stretch of State Route 198 from State Route 99 to Sequoia National Park. This is designated as a scenic corridor in the City's General Plan This portion of the highway is approximately 0.5 miles north from the proposed Site.

City of Visalia General Plan

The 2030 General Plan includes the policies related to aesthetic resources that correlate to the proposed project:

- *LU-P-28*: Continue to use natural and man-made edges, such as major roadways and

waterways within the City's Urban Area Boundary, as urban development limit and growth phasing lines.

- *LU-P-34*: Work with Tulare County to prevent urban development of agricultural land outside of the current growth boundaries and to promote the of use agricultural preserves, where they will promote orderly development.
- *LU-P-42*: Develop scenic corridor and gateway guidelines that will maintain the agricultural character of Visalia at its urban fringe.
- *LU-P-72*: Ensure that noise, traffic, and other potential conflicts that may arise in a mix of commercial and residential uses are mitigated through good Site planning, building design, and/or appropriate operational measures.
- *OSC-P-13*: In new neighborhoods that include waterways, improvement of the waterway corridor, including preservation and/or enhancement of natural features and development of a continuous waterway trail on at least one side, shall be required.
- *OSC-P-17*: Require that new development along waterways maintain a visual orientation and active interface with waterways. Develop design guidelines to be used for review and approval of subdivision and development proposals to illustrate how this can be accomplished for different land uses in various geographic settings.
- *OSC-P-34*: Enhance views and public access to Planning Area waterways and other significant features such as Valley Oak groves consistent with flood protection, irrigation water conveyance, habitat preservation and recreation planning policies.

Tulare County General Plan

The 2030 Tulare County General Plan contains the following goals and policies related to aesthetic resources that correlate to the proposed project:

- *SL-1.1 Natural Landscapes:* During review of discretionary approvals, including parcel and subdivision maps, the County shall as appropriate, require new development to not significantly impact or block views of Tulare County's natural landscapes.
    - Be sited to minimize obstruction of views from public lands and rights-of-ways,
    - Screen parking areas from view,
    - Include landscaping that screens the development,
    - Limit the impact of new roadways and grading on natural settings, and
    - Include signage that is compatible and in character with the location and building design
- *SL-1.2 Working Landscapes*: The County shall require that new non-agricultural structures and infrastructure located in or adjacent to croplands, orchards, vineyards, and open rangelands be sited so as to not obstruct important viewsheds and to be designed to reflect unique relationships with the landscape.
    - Referencing traditional agricultural building forms and materials,
    - Screening and breaking up parking and paving with landscaping, and
    - Minimizing light pollution and bright signage.
- *SL-1.3 Watercourses*: The County shall protect visual access to, and the character of, Tulare County's scenic rivers, lakes, and irrigation canals.
- *SL-3.2 Urban Expansion–Edges*: The County shall design and plan the edges and interface of communities with working and natural landscapes to protect their scenic qualities by:
    - Maintaining urban separators between cities and communities,
    - Encouraging cities to master plan mixed-density neighborhoods at their edges, locating compatible lower density uses adjacent to working and natural landscapes, and
    - Protecting important natural, cultural, and scenic resources located within areas that may be urbanized in the future.

City of Visalia Zoning Ordinance

The Visalia Zoning Ordinance governs the distribution and intensity of land uses, sets the principles for evaluating development, and guides the development and growth of the City. The Zoning Ordinance establishes specific development criteria for each zoning district (i.e., parking requirements, walls, fencing, setbacks, building height, etc.).

City of Visalia Valley Oak Ordinance

The City's Valley Oak Ordinance provides basic standards, measures, and compliance requirements for the preservation and protection of native Valley oak trees and landmark trees. The Ordinance prohibits the destruction of oak trees except with an oak tree removal permit. A permit may be granted only if it is found that the oak tree is in danger of falling on a structure or is a host for a plant, pest, or disease endangering other species; if removal is necessary to allow the reasonable enjoyment of private property; or if urban forestry or land management practices warrant removal. If a tree removal permit is granted, the tree must either be replaced by new oak trees on the same property, or by paying mitigation fees to be used for the establishment of new oak trees on other property.

Discussion

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

Less than Significant Impact: A scenic vista is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. The Sierra Nevada mountains to the east and agricultural lands surrounding the city are the primary scenic vista within this region. The Site is surrounded by agricultural uses and single-family homes, while the Sierra Nevada foothills are approximately 20 miles east of the Project Site. The Project would obstruct some views of agricultural uses. However, the Project would not significantly alter views overall from the surrounding community. There is *a less than significant impact.*

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

No Impact: There are no officially designated State Scenic Highways located in the City of Visalia or nearby the site. Highway 198, 0.5 miles north of the Site, is eligible to become a State Scenic Highway. The Site is not visible from Highway 198 and will not impact any views. The proposed Project would not damage any scenic resources within a state scenic highway and there is *no impact.*

c) In non-urbanized areas, would the Project substantially degrade the existing visual character or quality of the Site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the Project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant Impact: The Project Site contains an Oak Grove in the northern portion. Following the Valley Oak Ordinance, any trees that must be removed will be inspected and will be replaced. The materials, signage, fencing, landscaping, and building materials used in the construction of the Project will be selected based on their

ability to improve the overall visual character of the area. The proposed Project will comply with the Valley Oak Ordinance (Visalia Municipal Code Chapter 12.24) as well as all applicable zoning and other regulations governing scenic quality. There is *a less than significant impact.*

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

Less than Significant Impact: The proposed Project would result in new lighting sources on the Project Site consistent with adjacent residential development. New lighting sources would include interior lighting from residences, street lighting, and security lighting. All street and landscape lighting will be consistent with the City's lighting standards, which are developed to minimize impacts related to excessive light and glare. Although the Project will introduce new light sources to the area, all lighting will be consistent with adjacent residential land uses and the City's lighting standards. The impacts are *less than significant.*

II. AGRICULTURE AND FOREST RESOURCES:

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California 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 the Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☑	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?	☐	☐	☑	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned timberland Production (as defined by Government Code section 51104(g)?	☐	☐	☐	☑

d) Result in the loss of forestland or conversion of forest land to non-forest use?	☐	☐	☐	☑
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forestland to non-forest use?	☐	☐	☑	☐

Environmental Setting

Central California is one of the world's premier growing regions. Agriculture is an important economic resource for Visalia and the surrounding areas. 39,518 acres, or 65 percent, of the Visalia Planning Area is farmland producing fruit and nut crops, vegetables, nursery products (trees), apiary products (honey), seed crops (cotton), industrial crops (timber), field crops (alfalfa, barley, corn), and livestock.

The proposed Project Site is located within the Visalia Planning Area. The proposed Project Site is not under a Williamson Act Contract or a Farmland Security Zone contract. The proposed Site is designated as with two land use designations, *Prime Farmland* and *Urban and Built-Up Land*, under the Important Farmland Mapping and Monitoring Program (FMMP). The Site is within the Tier 2 Development Boundary and is designated for Low-Density Housing. To the north and west is additional Prime Farmland. To the south and east are Urban and Built-up land.

Regulatory Setting

California Land Conservation Act of 1965

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, allows local governments to enter into contracts with private landowners to restrict the activities on specific parcels of land to agricultural or open space uses. The landowners benefit from the contract by receiving greatly reduced property tax assessments. The California Land Conservation Act is overseen by the California Department of Conservation; however local governments are responsible for determining specific allowed uses and enforcing the contract.

Right to Farm Ordinance

Tulare County adopted a "Right to Farm Ordinance," to protect the rights of commercial farming operations while promoting a "good neighbor policy" between these uses. Under this ordinance, property owners and residents are made aware that they may experience inconveniences due to commercial agricultural operations.

Visalia Municipal Code Chapter 18.04: Agricultural Land Preservation Program

Chapter 18.04 of the Visalia Municipal Code details the Agricultural Land Preservation Program (Program) in Visalia. The Program intends to establish a process for the required preservation of agricultural land through the acquisition of agricultural conservation easements or the payment of an in-lieu fee for projects.

California Farmland Mapping and Monitoring Program (FMMP)

The FMMP is implemented by the California Department of Conservation (DOC) to conserve and protect agricultural lands within the State. Land is included in this program based on soil type, annual crop yields, and other factors that influence the quality of farmland. The FMMP mapping categories for the most important statewide farmland are as follows:

- ***Prime Farmland*** has the ideal physical and chemical composition for crop production. It has been used for irrigated production in the four years prior to classification and can produce sustained yields. 51% of the Visalia Planning Area is classified as Prime Farmland.
- ***Farmland of Statewide Importance*** has also been used for irrigated production in the four years prior to classification and is only slightly poorer quality than Prime Farmland. 11% of the Visalia Planning Area is classified as Farmland of Statewide Importance.
- ***Unique Farmland*** has been cropped in the four years prior to classification and does not meet the criteria for Prime Farmland or Farmland of Statewide Importance but has produced specific crops with high economic value. Less than 1% of the Visalia Planning Area is classified as Unique Farmland.
- ***Farmland of Local Importance*** encompasses farmland that does not meet the criteria for the previous three categories. These may lack irrigation, produce major crops, be zoned as agricultural, and/or support dairy. 2% of the Visalia Planning Area is classified as Farmland of Local Importance.

City of Visalia General Plan

The 2030 General Plan includes the policies related to agricultural resources that correlate to the proposed project:

- *LU-P-14*: Recognize the importance of agriculture-related business to the City and region, and support the continuation and development of agriculture and agriculture related enterprises in and around Visalia by:
  - Implementing growth boundaries and cooperating with the County on agricultural preservation efforts;
  - Accommodating agriculture-related industries in industrial districts;
  - Facilitating successful farmers' markets;
  - Helping to promote locally grown and produced agricultural goods, and the image of Visalia and Tulare County as an agricultural region.
- *LU-P-19*: Ensure that growth occurs in a compact and concentric fashion by implementing the General Plan's phased growth strategy.

- *LU-P-21*: Allow annexation and development of residential, commercial, and industrial land to occur within the Tier II UDB and the Tier III Urban Growth Boundary consistent with the City's Land Use Diagram, according to the stated phasing thresholds.
- *LU-P-30*: Maintain greenbelts, or agricultural/open space buffer areas, between Visalia and other communities by implementing growth boundaries and working with Tulare County and land developers to prevent premature urban growth north of the St. Johns River and in other sensitive locations within the timeframe of this General Plan.
- *LU-P-31*: Promote the preservation of permanent agricultural open space around the City by protecting viable agricultural operations and land within the City limits in the airport and wastewater treatment plant environs.
- *LU-P-32*: Continue to maintain a 20-acre minimum for parcel map proposals in areas designated for Agriculture to encourage viable agricultural operations in the Planning Area.
- *OSC-P-27*: To allow efficient cultivation, pest control and harvesting methods; require buffer and transition areas between urban development and adjoining or nearby agricultural land.
- *OSC-P-28*: Require new development to implement measures, as appropriate, to minimize soil erosion related to grading, site preparation, landscaping, and construction.

Tulare County General Plan

The 2030 Tulare County General Plan contains following goals related to agricultural resources that correlate to the proposed project:

- *AG-1.1*: The County shall maintain agriculture as the primary land use in the valley region of the County, not only in recognition of the economic importance of agriculture, but also in terms of agriculture's real contribution to the conservation of open space and natural resources.
- *AG-1.6*: The County shall consider developing an Agricultural Conservation Easement Program (ACEP) to help protect and preserve agricultural lands (including "Important Farmlands"), as defined in this Element. This program may require payment of an in-lieu fee sufficient to purchase a farmland conservation easement, farmland deed restriction, or other farmland conservation mechanism as a condition of approval for conservation of important agricultural land to non-agricultural use. If available, the ACEP shall be used for replacement lands determined to be of statewide significance (Prime or other Important Farmlands), or sensitive and necessary for the preservation of agricultural land, including land that may be a part of a community separator as part of a comprehensive program to establish community separators. The in-lieu fee or other conservation mechanism shall recognize the importance of land value and shall require equivalent mitigation.

- *AG*-1.7: The County shall promote the preservation of its agricultural economic base and open space resources through the implementation of resource management programs such as the Williamson Act, Rural Valley Lands Plan, Foothill Growth Management Plan or similar types of strategies and the identification of growth boundaries for all urban areas located in the County.
- *AG-1.8*: The County shall not approve applications for preserves or regular Williamson Act contracts on lands located within a UDB and/or HDB unless it is demonstrated that the restriction of such land will not detrimentally affect the growth of the community involved for the succeeding 10 years, that the property in question has special public values for open space, conservation, other comparable uses, or that the contract is consistent with the publicly desirable future use and control of the land in question. If proposed within a UDB of an incorporated city, the County shall give written notice to the affected city pursuant to Government Code §51233.
- *AG-1.10*: The County shall oppose extension of urban services, such as sewer lines, water lines, or other urban infrastructure, into areas designated for agriculture use unless necessary to resolve a public health situation. Where necessary to address a public health issue, services should be located in public rights-of-way in order to prevent interference with agricultural operations and to provide ease of access for operation and maintenance. Service capacity and length of lines should be designed to prevent the conversion of agricultural lands into urban/suburban uses.
- *AG-1.11*: The County shall examine the feasibility of employing agricultural buffers between agricultural and non-agricultural uses, and along the edges of UDBs and HDBs. Considering factors include the type of operation and chemicals used for spraying, building orientation, planting of trees for screening, location of existing and future rights-of-way (roads, railroads, canals, power lines, etc.), and unique site conditions.
- *LU-1.8*: The County shall encourage and provide incentives for infill development to occur in communities and hamlets within or adjacent to existing development in order to maximize the use of land within existing urban areas, minimize the conversion of existing agricultural land, and minimize environmental concerns associated with new development.
- *LU-2.1*: The County shall maintain agriculturally-designated areas for agriculture use by directing urban development away from valuable agricultural lands to cities, unincorporated communities, hamlets, and planned community areas where public facilities and infrastructure are available.
- *PF-1.2*: The County shall ensure that urban development only takes place in the following areas:
    - Within incorporated cities and CACUDBs
    - Within the UDBs of adjacent cities in other counties, unincorporated communities, planned community areas, and HDBs of hamlets

  - Within foothill development corridors as determined by procedures set forth in Foothill Growth Management Plan
  - Within areas set aside for urban use in the Mountain Framework Plan and the mountain sub-area plans; and
  - Within other areas suited for non-agricultural development, as determined by the procedures set forth in the Rural Valley Lands Plan.
- *PF-1.3*: The County shall encourage those types of urban land uses that benefit from urban services to develop within UDBs and HDBs. Permanent uses which do not benefit from urban services shall be discouraged within these areas. This shall not apply to agricultural or agricultural support uses, including the cultivation of land or other uses accessory to the cultivation of land provided that such accessory uses are time-limited through Special Use Permit procedures.
- *PF-1.4*: The County shall encourage urban development to locate in existing UDBs and HDBs where infrastructure is available or may be established in conjunction with development. The County shall ensure that development does not occur unless adequate infrastructure is available, that sufficient water supplies are available or can be made available, and that there are adequate provisions for long term management and maintenance of infrastructure and identified water supplies.

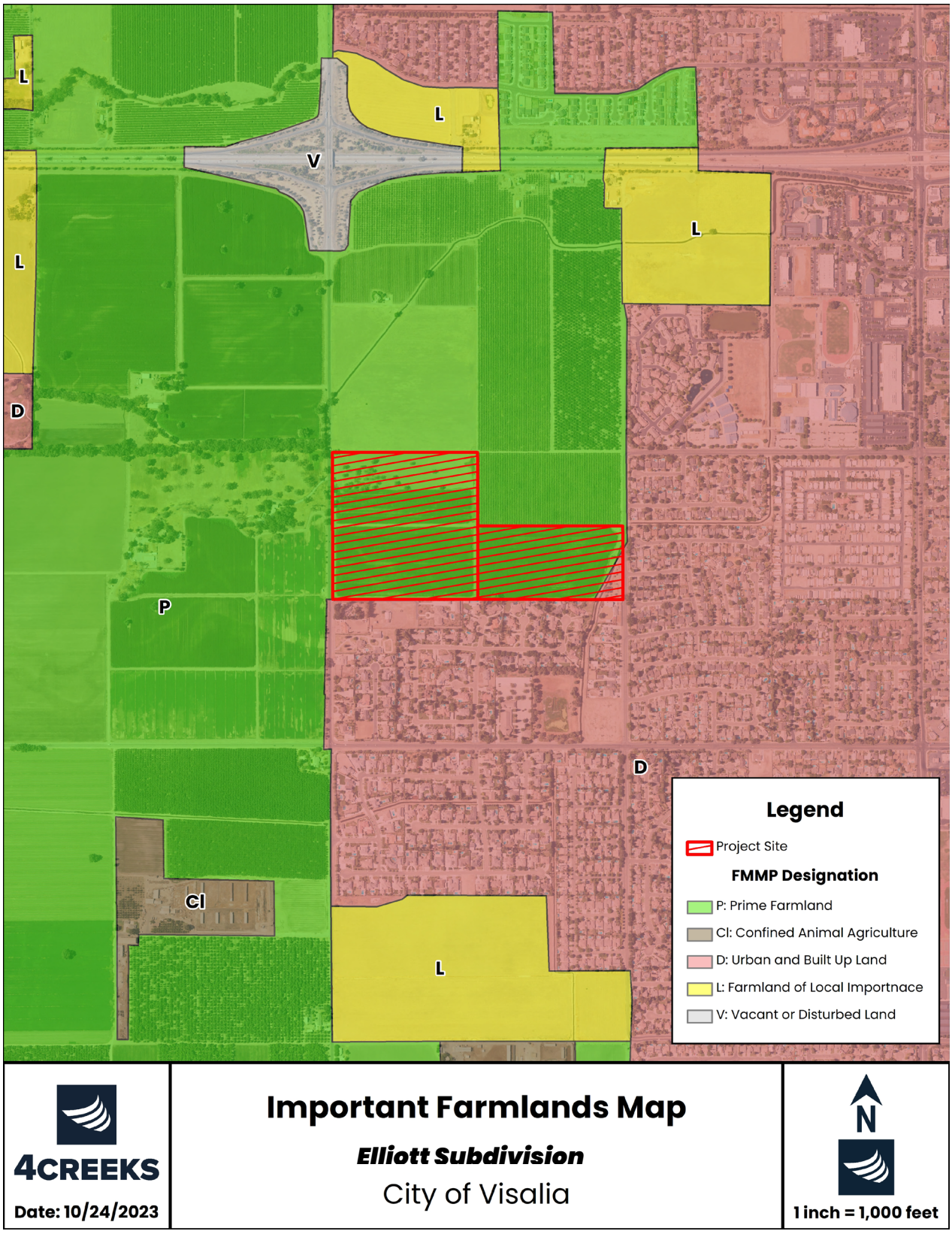


Figure 3-3: Important Farmlands Map

Discussion

a) Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Less Than Significant Impact: The Project Site is currently occupied by agricultural land with field crops. Implementation of the proposed Project would result in the permanent conversion of approximately 57.82 acres of Prime Farmland to non-agricultural uses.

The loss of Prime Farmland on the Project Site would result in the decrease of Important Farmland inventory in Visalia Planning Area. Visalia Planning Area currently has an Important Farmland inventory of 43,155 acres, 33,991 acres of which were categorized as Prime Farmland. Implementation of the Project would convert 57.82 acres of Prime Farmland, which would result in a 0.13 percent decrease in the total Important Farmland inventory of Visalia Planning Area and a 0.17 percent decrease in the Prime Farmland inventory.

As shown in Table 3-1, the Visalia 2030 General Plan (at full buildout) plans to develop 14,265 total acres of Important Farmland, of which 12,490 acres are Prime Farmland. Most of the growth is planned to be adjacent to urbanized areas, which is much less disruptive to other agricultural uses countywide because it discourages the development of new rural neighborhoods or communities that would require the extension of infrastructure that would create growth-inducing impacts and potentially greater impacts to agricultural resources.

FMMP Designation	Existing Planning Area Total (Acres)	Planning Area Total at General Plan Buildout (Acres)	Change
Prime Farmland	33,991	21,501	-12,490 (-37%)
Farmland of Statewide Importance	7,353	6,954	-399 (-5%)
Unique Farmland	181	137	-44 (-24%)
Farmland of Local Importance	1,630	298	-1,333 (-82%)
Important Farmland Total	**43,155**	**28,890**	**-14,265 (-33%)**

Table 3-1: Important Farmland Developed Under 2030 General Plan. Source: Visalia Planning Area General Plan EIR

Although the proposed Site is located on Prime Farmland, the development is in accordance with the 2030 General Plan. The Site is within the Tier 2 Development Boundary and is designated as Low Density Residential by the General Plan. The Project will follow all existing and proposed 2030 General Plan policies to reduce potential impacts.

However, following *Visalia Municipal Code Chapter 18.04*: *Agricultural Land Preservation Program,* the Project will be required to preserve 43.11 acres of Prime Farmland or Farmland of Statewide Importance. This is detailed in the Agricultural Mitigation Memo (Appendix E). The developer will acquire a minimum of 47.35 acres of Prime Farmland or Farmland of Statewide Importance. This land will be located in the southern San Joaquin Valley, but outside of Visalia's Sphere of Influence. This farmland will be preserved for long-term agricultural uses. There is a *less than significant impact.*

b) Would the Project conflict with existing zoning for agricultural use, or a Williamson Act Contract?

Less Than Significant Impact: The Site is currently zoned for agriculture by Tulare County. However, it is within the Visalia Planning Area, Tier 2 Development Boundary and will be annexed by the City. It currently has a General Plan designation of Low Density Residential that would suit the proposed Project. The Project Site is not under a Williamson Act Contract. There is *a less than significant impact.*

c) Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned timberland Production (as defined by Government Code section 51104(g)?

No Impact: The Project Site is not zoned for forest or timberland production. Therefore, *no impacts* would occur.

d) Would the Project result in the loss of forestland or conversion of forest land to non-forest use?

No Impact: No conversion of forestland, as defined under Public Resource Code or General Code, will occur as a result of the Project and there would be *no impacts*.

e) Would the Project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forestland to non-forest use?

Less Than Significant Impact: As discussed above, new development including the Project Site would be focused in and around existing communities. This would prevent new infrastructure from interfering with surrounding farmland. The Project does not include any features which could result in the conversion of forestland to non-forest use. There is a *less than significant impact.*

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 Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☑	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☑	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☑	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☑	☐

Environmental Setting

Air pollution is directly related to regional topography. Topographic features can either stimulate the movement of air or restrict air movement. California is divided into regional air basins based on topographic air drainage features. The proposed Project Site is within the San Joaquin Valley Air Basin, which is bordered by the Sierra Nevada Mountains to the East, Coastal Ranges to the West, and the Tehachapi Mountains to the South.

The mountain ranges surrounding the San Joaquin Valley Air Basin (SJVAB) serve to restrict air movement and prevent the dispersal of pollution. As a result, the SJVAB is highly susceptible to pollution accumulation over time. As shown in Table 3-2, the SJVAB is in nonattainment for several pollutant standards. The primary pollutants of concern in the San Joaquin Valley are ozone (O3) and PM10. Table 3-3 displays Ambient Air Quality Standards for California and Nationally.

Pollutant	Designation/Classification	
	Federal Standards	State Standards
Ozone – One hour	No Federal Standard[f]	Nonattainment/Severe
Ozone – Eight hour	Nonattainment/Extreme[e]	Nonattainment
PM 10	Attainment[c]	Nonattainment
PM 2.5	Nonattainment[d]	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead (Particulate)	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

[a] See 40 CFR Part 81

[b] See CCR Title 17 Sections 60200-60210

[c] On September 25, 2008, EPA redesignated the San Joaquin Valley to attainment for the PM10 National Ambient Air Quality Standard (NAAQS) and approved the PM10 Maintenance Plan.

[d] The Valley is designated nonattainment for the 1997 PM2.5 NAAQS. EPA designated the Valley as nonattainment for the 2006 PM2.5 NAAQS on November 13, 2009 (effective December 14, 2009).

[e] Though the Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).

[f] Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the SJVAB as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

Table 3-2. San Joaquin Valley Attainment Status; Source: SJVAPCD

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (03)	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	--	Same as Primary Standard	Ultraviolet 8 Hour Photometry
	8 Hour	0.070 ppm (137 µg/m³)		0.075 ppm (147 µg/m³)		
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Annual Analysis
	Annual Arithmetic Mean	20 µg/m3		--		
Fine Particulate Matter ($PM_{2.5}$)	24 Hour		Gravimetric or Beta Attenuation	35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Annual Analysis
	Annual Arithmetic Mean	12 µg/m³		15 µg/m³		
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m³)	--	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m³)		9 ppm (10 mg/m³)	--	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		--	--	
Nitrogen Dioxide (NO_2) [8]	1 Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	--	Gas Phase Annual Chemiluminescence
	Arithmetic Mean	0.030 ppm (57 µg/m³)		53 ppb (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide	1 Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	--	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	--		--	0.5 ppm (1300 µg/m³)	
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)9	--	
	Annual Arithmetic Mean	--		0.030 ppm (for certain areas)9	--	
Lead[10,11]	30 Day Average	1.5 µg/m³	Atomic Absorption	--	--	High Volume Sampler and Atomic Absorption
	Calendar Quarter	--		1.5 µg/m3 (for certain areas)11	Same as Primary Standard	
	Rolling 3-Month Average	--		0.15 µg/m³		
Visibility Reducing Particles[12]	8 Hour	See footnote 12	Beta Attenuation and Transmittance through Filter Tape	No National Standard		
Sulfates	24 Hour	25 µg/m³	Ion Chromatography			

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[10]	24 Hour	0.01 ppm (26 μg/m³)	Gas Chromatography			

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each Site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 μg/m3 is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each Site must not exceed 100 ppb. Note that the national standards are in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standards of 53 ppb and 100 ppb are identical to 0.053 ppm and 0.100 ppm, respectively.
9. On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each Site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
10. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
11. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 μg/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
12. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Table 3-3. Ambient Air Quality Standards; Source: SJVAPCD, San Joaquin Valley Attainment Status

Valley Fever

Valley Fever is an illness caused by a fungus (*Coccidioides immitis* and *C. posadasii*) that grows in soils under certain conditions. Favorable conditions for the Valley Fever fungus include

low rainfall, high summer temperatures, and moderate winter temperatures. In California, the counties with the highest incident of Valley Fever are Fresno, Kern, and Kings counties. When soils are disturbed by wind or activities like construction and farming, Valley Fever fungal spores can become airborne. The spores present a potential health hazard when inhaled. Individuals in occupations such as construction, agriculture, and archaeology have a higher risk of exposure due to working in areas of disturbed soils which may have the Valley Fever fungus.

Regulatory Setting

Federal Clean Air Act

The 1977 Federal Clean Air Act (CAA) authorized the establishment of the National Ambient Air Quality Standards (NAAQS) and set deadlines for their attainment. The Clean Air Act identifies specific emission reduction goals, requires both a demonstration of reasonable further progress and an attainment demonstration, and incorporates more stringent sanctions for failure to meet interim milestones. The U.S. EPA is the federal agency charged with administering the Act and other air quality-related legislation. EPA's principal functions include setting NAAQS; establishing minimum national emission limits for major sources of pollution; and promulgating regulations. Under CAA, the NCCAB is identified as an attainment area for all pollutants.

Nonroad Diesel Rule

The EPA established a series of increasingly strict emission standards for new offroad diesel equipment, onroad diesel trucks, and harbor craft. New construction equipment used for the project, including heavy duty trucks, off-road construction equipment, and tugboats will be required to comply with the emission standards.

California Clean Air Act

California Air Resources Board coordinates and oversees both state and federal air pollution control programs in California. As part of this responsibility, California Air Resources Board monitors existing air quality, establishes California Ambient Air Quality Standards, and limits allowable emissions from vehicular sources. Regulatory authority within established air basins is provided by air pollution control and management districts, which control stationary-source and most categories of area-source emissions and develop regional air quality plans. The Project is located within the jurisdiction of the San Joaquin Valley Air Pollution Control District.

The state and federal standards for the criteria pollutants are presented in Section 8.4 of The San Joaquin Valley Unified Air Pollution Control District's 2015 "Guidance for Assessing and Mitigating Air Quality Impacts". These standards are designed to protect public health and welfare. The "primary" standards have been established to protect the public health. The "secondary" standards are intended to protect the nation's welfare and account for air pollutant effects on soils, water, visibility, materials, vegetation, and other aspects of general

welfare. The U.S. EPA revoked the national 1-hour ozone standard on June 15, 2005, and the annual PM_{10} standard on September 21, 2006, when a new $PM_{2.5}$ 24-hour standard was established.

State Tailpipe Emission Standards

To reduce emissions from off-road diesel equipment, onroad diesel trucks, and harbor craft, ARB established a series of increasingly strict emission standards for new engines. New construction equipment used for the project, including heavy duty trucks, off-road construction equipment, tugboats, and barges, will be required to comply with the standards

San Joaquin Valley Air Pollution Control District (SJVAPCD)

The SJVAPCD is responsible for enforcing air quality standards in the Project area. To meet state and federal air quality objectives, the SJVAPCD adopted the following thresholds of significance for projects, as shown in Table 3-4.

Pollutant/Precursor	Construction Emissions	Operational Emissions	
		Permitted Equipment and Activities	Non-Permitted Equipment and Activities
	Emissions (tpy)	Emissions (tpy)	Emissions (tpy)
CO	100	100	100
Nox	10	10	10
ROG	10	10	10
SOx	27	27	27
PM10	15	15	15
PM2.5	15	15	15

Table 3-4. SJVAPCD Thresholds of Significance for Criteria Pollutants; Source: SJVAPCD, Recommended Thresholds of Significant Impact

The following SJVAPCD rules and regulations may apply to the proposed project:

- **Rule 3135:** Dust Control Plan Fee. All projects which include construction, demolition, excavation, extraction, and/or other earth-moving activities as defined by Regulation VIII (Described below) are required to submit a Dust Control Plan and required fees to mitigate impacts related to dust.
- **Rule 4101:** Visible Emissions. District Rule 4101 prohibits visible emissions of air contaminants that are dark in color and/or have the potential to obstruct visibility.
- **Rule 9510:** Indirect Source Review (ISR). This rule reduces the impact of PM10 and NOX emissions from growth on the SJVB. This rule places application and emission reduction requirements on applicable development projects to reduce emissions through on-site mitigation, off-site SJVAPCD-administered projects, or a combination of the two. This Project will submit an Air Impact Assessment (AIA) application following Rule 9510's requirements.
- **Regulation VIII:** Fugitive PM10 Prohibitions. Regulation VIII is composed of eight rules which together aim to limit PM10 emissions by reducing fugitive dust. These rules contain required management practices to limit PM10 emissions during construction, demolition, excavation, extraction, and/or other earth-moving activities.

City of Visalia General Plan

The 2030 General Plan includes the policies related to air quality that correlate to the proposed project:

- *AQ-P-2*: Require use of Best Management Practices (BMPs) to reduce particulate emission as a condition of approval for all subdivisions, development plans, and grading permits, in conformance with the San Joaquin Valley Air Pollution Control District Fugitive Dust Rule.
- *AQ-P-3*: Support implementation of the San Joaquin Valley Air Pollution Control District's regulations on the use of wood-burning fireplaces, as well as their regulations for the installation of EPA-certified wood heaters or approved woodburning appliances in new residential development and a "No Burn" policy on days when the air quality is poor.
- *AQ-P-9*: Continue to mitigate short-term construction impacts and long-term stationary source impacts on air quality on a case-by-case basis and continue to assess air quality impacts through environmental review. Require developers to implement Best Management Practices (BMPs) to reduce air pollutant emissions associated with the construction and operation of development projects.

Discussion

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

No Impact: The proposed Project is located within the boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD) and would result in air pollutant emissions that are regulated by the air district during both its construction and operational phases. The SJVAPCD is responsible for bringing air quality in the Visalia Planning Area into compliance with federal and state air quality standards. The Air District has Particulate Matter (PM) plans, Ozone Plans, and Carbon Monoxide Plans that serve as the clean air plan for the basin.

Together, these plans quantify the required emission reductions to meet federal and state air quality standards and provide strategies to meet these standards. The SJVAPCD adopted the Indirect Source Review (ISR) Rule to fulfill the District's emission reduction commitments in its PM10 and Ozone (NOx) attainment plans and has since determined that implementation and compliance with ISR would reduce the cumulative PM10 and NOx impacts anticipated in the air quality plans to a less than significant level.

Construction Phase: Project construction would generate pollutant emissions from the following construction activities: site preparation, grading, building construction, application of architectural coatings, and paving. The construction-related emissions from these activities were calculated using CalEEMod. The full CalEEMod report can be

found in Appendix A. As shown in Table 3-5 below, Project construction-related emissions do not exceed the thresholds established by the SJVAPCD.

	CO (tpy)	ROG (tpy)	SOx (tpy)*	Nox (tpy)	PM10 (tpy)	PM2.5 (tpy)
Emissions Generated from Project Construction	**2.85**	**3.80**	**.0063**	**2.71**	**0.92**	**0.44**
SJVAPCD Air Quality Thresholds of Significance	**100**	**10**	**27**	**10**	**15**	**15**
*Threshold established by SJVAPCD for SOx, however emissions are reported as SO2 by CalEEMod.						

Table 3-5. Projected Project Emissions Compared to SJVAPCD Thresholds of Significance for Criteria Pollutants related to Construction; Source: SJVAPCD, CalEEMod (v. 2020.4.0) Analysis (Appendix A)

Operational Phase: Implementation of the proposed Project would result in long-term emissions associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products, as well as mobile vehicle emissions. Operational emissions from these factors were calculated using CalEEMod. The full CalEEMod report can be found in Appendix A. As shown in Table 3-6 below, the project's operational emissions do not exceed the thresholds established by the SJVAPCD.

	CO (tpy)	ROG (tpy)	SOx (tpy)*	Nox (tpy)	PM10 (tpy)	PM2.5 (tpy)
Operational Emissions (Dry Years)	**9.30**	**2.83**	**0.021**	**1.57**	**2.25**	**0.64**
SJVAPCD Air Quality Thresholds of Significance	**100**	**10**	**27**	**10**	**15**	**15**
*Threshold established by SJVAPCD for SOx, however, emissions are reported as SO2 by CalEEMod.						

Table 3-6. Projected Project Emissions Compared to SJVAPCD Thresholds of Significance for Criteria Pollutants related to Operations; Source: SJVAPCD, CalEEMod (v. 2020.4.0) Analysis (Appendix A)

Because the emissions from both the construction and operation of the proposed Project would be below the thresholds of significance established by the SJVAPCD, the

Project would not conflict with or obstruct the implementation of an applicable air quality plan and there is a *less than significant impact.*

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

Less Than Significant Impact: The SJVAPCD is responsible for bringing air quality in the Visalia Planning Area into compliance with federal and state air quality standards. The significance thresholds and rules developed by the SJVAPCD are designed to prevent projects from violating air quality standards or significantly contributing to existing air quality violations. As discussed above, neither construction-related emissions nor operation-related emissions will exceed thresholds established by the SJVAPCD. The Project will comply with all applicable SJVAPCD rules and regulations, which will further reduce the potential for any significant impacts related to air quality as a result of the Project implementation. Because these thresholds and regulations are designed to achieve and/or maintain federal and state air quality standards, and the Project is compliant with these thresholds and regulations, the Project will not violate an air quality standard or significantly contribute to an existing air quality violation. The impact is *less than significant.*

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

Less than Significant Impact: The single-family residences located to the south and east are the closest sensitive receptors. The Project does not include any Project components identified by the California Air Resources Board that could potentially impact any sensitive receptors. These include heavily traveled roads, distribution centers, fueling stations, and dry-cleaning operations. The Project would not expose sensitive receptors to substantial pollutant concentrations. The impact would be *less than significant.*

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact: The Project will create temporary localized odors during Project construction. The proposed Project will not introduce conflicting land use (surrounding land includes residential neighborhoods) to the area and will not have any component that would typically emit odors. The Project would not create objectionable odors affecting a substantial number of people. Therefore, impacts would be *less than significant.*

IV. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish & Game or U.S. fish and Wildlife Service?	☐	☑	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☑	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through director removal, filling, hydrological interruption, or other means?	☐	☐	☐	☑
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☑	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☑	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☑

Discussion for this section originates from the Biological Resource Assessment that was prepared for this project by Soar Environmental Consulting to identify biological resources present or potentially present on the project site and assess the significance of project impacts on such resources per provisions of the California Environmental Quality Act (CEQA), the Federal Clean Water Act (CWA), the state and federal endangered species acts (FESA and CESA respectively), California Fish and Game Code, and California Water Code. The research included the California Natural Diversity Database (CNDDB), the United States Fish and Wildlife

Service (USFWS) Information for Planning and Consultation (IPaC), and the California Native Plant Society (CNPS) Online Rare Plant Inventory. The full document can be found in Appendix B.

Environmental Setting

The Project Site is in the western portion of the Visalia Planning Area within the lower San Joaquin Valley, in the Central Valley of California. The Central Valley is bordered to the east by the Sierra Nevada Mountain Range to the east and the Coast Ranges to the west. Like most of California, Visalia is considered a Mediterranean climate.

Warm, dry summers are followed by cool, moist winters. Summer temperatures often reach above 90 degrees Fahrenheit, and the humidity is relatively low. Winter temperatures are often below 60 degrees Fahrenheit during the day and rarely exceed 70 degrees. On average, Visalia receives approximately 11 inches of precipitation in the form of rainfall yearly, most of which occurs between October and March.

Site Description

The topography of the Project Area is relatively flat with a very gradual west facing slope at approximately 305 feet elevation in the eastern property and 301 feet elevation on the western edge of the property. The entire property had been disced and is composed of approximately 49 acres of active agricultural land, 5 acres of regularly maintained valley oak (Quercus lobata) woodland, and 5 acres of grassland. The proposed Project Site is in an urban and agricultural interface environment just outside the western boundary of the City of Visalia. The proposed Project Site is bounded by agricultural fields to the north and east, with single-family homes to the south. A large open grassland field property borders the northern edge, and a large ranch-style residential property with open valley oak woodland occurs along the western edge.

One small, unvegetated open water canal extends north to south at the southeastern edge of the site. Another open water channel is approximately 40 yards outside the northwest corner, west of Shirk Road and drains westward across the wooded ranch property outside the Project Area. These canals are maintained with no vegetation in the channels. The southern canal that occurs within the Project Area is proposed to be turned into an open space park. The canal near the northwest corner is outside of the Project Area. No potentially jurisdictional waters or wetland features occur within the proposed Project Area. There were no signs of pooling water, vernal pool habitat or seasonal wetlands during the focused field survey. The area is active agricultural land or is actively maintained and disced. There are no structures on the property. While no shrub layer occurs on the property, there is a stand of valley oak woodland in the northwest corner that has approximately 31 valley oak trees and other oak saplings. One of these trees is approximately 30" diameter-at-breast height (dbh), however, most of the valley oak trees are between 12" to 24" dbh, respectively. One other large valley oak tree occurs near

the middle of the Project Area along the southern edge. This oak tree would be considered a heritage valley oak, is greater than 36" dbh, and is a multi-trunked tree. The oak trees provide limited nesting and foraging habitat for birds and wildlife; however, the uncultivated grassland and agricultural land represent potential foraging habitat for terrestrial bird and wildlife species.

Prior to performing the Habitat Assessment, Soar Environmental conducted a records search for threatened or endangered species that could potentially occur in the vicinity of the Project Area. The records search included a review of the California Natural Diversity Database (CNDDB), the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC), and California Native Plant Society (CNPS) Online Rare Plant Inventory. A full list of special-status wildlife and vascular plant species with the potential to occur in the Project Area is included below in Table 3-7.

No special-status plant species and one sensitive wildlife species were observed during the site reconnaissance. Nuttall's woodpecker is a species covered by the Migratory Bird Treaty Act (MBTA) and a CDFW bird species of concern. Several other bird species were observed flying and perched on oak trees in the area including red-tail hawk (Buteo jamaicensis). While no other special status species were observed, the Project Area contains potentially suitable habitat for the following species:

Species Name	Species Observed on Project Site?	Potential for Occurrence on Project Site
Amphibians		
Western spadefoot toad (*Spea hammondii*)	No	**Low:** Species is known to occur within 2 miles of the Project Area and there is no breeding habitat and limited upland dispersal habitat for the species in the Project Area.
California tiger salamander (*Ambystoma californiense*)	No	**Low:** Species is not known to occur in the vicinity of the site and there is limited potential estivating habitat for the species in the oak woodland and grassland on the site.
Birds		
Oak titmouse (*Baeolophus inornatus*)	No	**Low.** Limited potential nesting and foraging habitat in the Project Area.
Nuttall's woodpecker (*Dryobates nuttallii*)	Yes	**Present.** Species observed foraging in Project Area during survey. Limited potential nesting and abundant foraging habitat in the Project Area.

Swainson's hawk (*Buteo swainsoni*)	No	**High:** Species known to occur from nine CNDDB records within 5 miles west of Project Area. The closest previous record is one mile west. There is limited nesting and abundant foraging habitat in the Project Area.
Tricolored blackbird (*Agelaius tricolor*)	No	**None:** Species is not known to occur in the vicinity of the site and there is no suitable habitat for the species on the site.
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	No	**Low:** Species is not known to occur in the vicinity of the site and there is limited suitable habitat for the species on the site.
Invertebrates		
Monarch butterfly (*Danaus plexippus*)	No	**None:** Species is not known to occur in the vicinity of the site and there is no suitable habitat or milkweed host plants for the species on the site.
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	No	**None:** Species is not known to occur in the vicinity of the site and there is no suitable habitat for the species in the form of elderberry shrubs on the site.
Vernal pool fairy shrimp (*Branchinecta lynchi*)	No	**None:** Species is not known to occur in the vicinity of the site and there is no suitable habitat for the species on the site.
Vernal pool tadpole shrimp *(Lepidurus packardi)*	No	**None:** Species is not known to occur in the vicinity of the site and there is no suitable habitat for the species on the site.
Mammals		
Fresno kangaroo rat (*Dipodomys nitratoides exilis*)	No	**None:** Species is not known to occur in the vicinity of the site and there is no suitable habitat for the species on the site.
San Joaquin kit fox (*Vulpes macrotis mutica*)	No	**Low:** Species is not known to occur in the vicinity of the site and there is limited potential suitable dispersal and foraging habitat for the species in the Project Area.
Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*)	No	**None:** Species is not known to occur in the vicinity of the site and there is no suitable habitat for the species on the site.
Western mastiff bat (*Eumops perotis californicus*)	No	**Low:** Limited oak woodland roosting and moderate grassland foraging habitat for this species in the Project Area. The area is heavily farmed and maintained. Species is known from one record 2 miles southeast of Project Area.

Reptiles		
Blunt-nosed leopard lizard (*Gambelia sila*)	No	**None:** Species is not known to occur in the vicinity of the site and there is no suitable habitat for the Species in the Project Area.
Western pond turtle (*Actinemys marmorata*)	No	**Low:** Low quality potential habitat in the form of an open water unvegetated canal on the eastern edge and another just offsite to the northwest leave potential for this species to occur nearby. One historic occurrence of the species is known from four miles east of Project Area.
Plant Species Name	**Species Observed in Project Area**	**Potential For Occurrence in Project Area**
California jewelflower (*Caulanthus californicus*)	No	**Low.** The Project Area is active agricultural land and limited maintained grassland and oak woodland that is disced annually.
Ewan's larkspur (*Delphinium hanseni* ssp. *ewanianum*)	No	**Low.** The Project Area is active agricultural land and limited maintained grassland and oak woodland that is disced annually.
Recurved larkspur (*Delphinium recurvatum*)	No	**Low.** The Project Area is active agricultural land and limited maintained grassland and oak woodland that is disced annually.
Heartscale (*Atriplex cordulata* ssp. *cordulata*)	No	**Low.** The Project Area is active agricultural land and limited maintained grassland and oak woodland that is disced annually.
Lesser saltscale (*Atriplex minuscula*)	No	**Low.** The Project Area is active agricultural land and limited maintained grassland and oak woodland that is disced annually.
Subtle orache (*Atriplex subtilis*)	No	**Low.** The Project Area is active agricultural land and limited maintained grassland and oak woodland that is disced annually.

Table 3-7: Special Status Species Potentially on Project Site

Regulatory Setting

Federal Endangered Species Act (FESA): defines an endangered species as "any species or subspecies that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species or subspecies that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."

The Federal Migratory Bird Treaty Act (FMBTA: 16 USC 703-712): FMBTA prohibits killing, possessing, or trading in any bird species covered in one of four international conventions to which the United States is a party, except in accordance with regulations prescribed by the

Secretary of the Interior. The name of the act is misleading, as it actually covers almost all birds native to the United States, even those that are non-migratory. The FMBTA encompasses whole birds, parts of birds, and bird nests and eggs. Although the USFWS and its parent administration, the U.S. Department of the Interior, have traditionally interpreted the FMBTA as prohibiting incidental as well as intentional "take" of birds, a January 2018 legal opinion issued by the Department of the Interior now states that incidental take of migratory birds while engaging in otherwise lawful activities is permissible under the FMBTA. However, California Fish and Game Code makes it unlawful to take or possess any non-game bird covered by the FMBTA (Section 3513), as well as any other native non-game bird (Section 3800), even if incidental to lawful activities.

Birds of Prey (CA Fish and Game Code Section 3503.5): Birds of prey are protected in California under provisions of the Fish and Game Code (Section 3503.5), which states that it is unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks and eagles) or Strigiformes (owls), as well as their nests and eggs. The bald eagle and golden eagle are afforded additional protection under the federal Bald and Golden Eagle Protection Act (16 USC 668), which makes it unlawful to kill birds or their eggs.

Clean Water Act: Section 404 of the Clean Water Act of (1972) is to maintain, restore, and enhance the physical, chemical, and biological integrity of the nation's waters. Under Section 404 of the Clean Water Act, the US Army Corps of Engineers (USACE) regulates discharges of dredged and fill materials into "waters of the United States" (jurisdictional waters). Waters of the US including navigable waters of the United States, interstate waters, tidally influenced waters, and all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries.

California Endangered Species Act (CESA): prohibits the take of any state-listed threatened and endangered species. CESA defines take as "any action or attempt to hunt, pursue, catch, capture, or kill any listed species." If the proposed project results in a take of a listed species, a permit pursuant to Section 2080 of CESA is required from the CDFG.

City of Visalia Oak Tree Ordinance: The City of Visalia has an oak tree ordinance that protects valley oak trees with a diameter at breast height (dbh) of 2 inches or greater. Under this ordinance, removal, or encroachment within the drip-line of or damage to valley oak trees is prohibited. Removal requires a permit from the city manager and mitigation either by replacement in-kind or payment of an in-lieu fee to be used for oak tree planting.

City of Visalia General Plan: The 2030 Visalia General Plan contains the following policies related to the preservation of biological resources that may be considered relevant to the proposed Project's environmental review:

- *OSC-P-8*: Protect, restore, and enhance a continuous corridor of native riparian vegetation along Planning Area waterways, including the St. Johns River; Mill, Packwood, and Cameron Creeks; and segments of other creeks and ditches where feasible, in conformance with the Parks and Open Space diagram of this General Plan.
- *OSC-P-19*: Establish easements or require dedication of land along waterways to protect natural habitat areas, allow maintenance operations and promote trails and bike paths.
- *OSC-P-26*: Establish Best Management Practices (BMPs) for control of invasive plant species where such plants could adversely impact wildlife habitat.
- *OSC-P-27*: Establish a "no net loss" standard for sensitive habitat acreage, including wetlands and vernal pools potentially affected by development.
- *OSC-P-30*: Require assessments of biological resources prior to approval of any discretionary development projects involving riparian habitat, wetlands, or special status species habitat. Early in the development review process, consult with California Department of Fish and Game, U.S. Fish and Wildlife Service, and other agencies.
- *OSC-P-31*: Protect and enhance habitat for special status species, designated under state and federal law. Require protection of sensitive habitat areas and special status species in new development in the following order: 1) avoidance; 2) onsite mitigation, and 3) offsite mitigation.

Discussion

a) Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish & Game or U.S. fish and Wildlife Service?

Less Than Significant Impact With Mitigation Incorporation: The Biological Resource Assessment (Appendix B) conducted for the proposed Project found that Swainson's hawk has a high potential to occur in the Project Area based on potential oak woodland nesting habitat, abundant foraging field and grassland habitat, and many previous CNDDB occurrences near the Project Area. Nuttall's woodpecker, a MBTA species and CDFW species of concern was observed foraging during the Habitat Assessment in the Project Area. San Joaquin kit fox, western yellow-billed cuckoo, western spadefoot toad, California tiger salamander, western mastiff bat, and western pond turtle have low potential to occur in the Project Area. While most of the Project Area is active agricultural land, the northwest portion of the Project Area includes approximately 5.6 acres of valley oak woodland and 4.4 acres of maintained annual grassland. This portion of the Project Area contains suitable potential habitat for these special-status species. Localized land management techniques including regular agricultural activity and routine land management for fire hazard abatement, such as discing, further reduces the potential for these species to occur in the proposed Project Area.

Based on the findings of the BRA, the proposed development of this property has the potential to impact nesting and foraging habitat for Swainson Hawk and other MBTA bird species, such as Nuttall's woodpecker, if any are found nesting in the trees within the Project Area. With incorporation of the Swainson Hawk and nesting bird mitigation measures below (Mitigation Measures BIO-1, BIO-1a, BIO-1b, BIO-1c), which include pre-construction nesting bird surveys and reporting, the proposed Project impacts to these species would be less than significant.

b) Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

Less Than Significant Impact: The Visalia General Plan identifies Grasslands, Valley Oak Riparian Woodland, Valley Oak Woodland, Vernal Pools, and Wetlands as natural communities to protect. The northwest portion of the Project Area has approximately 5.6 acres of Valley Oak Woodland. The Valley Oak Woodland has approximately 31 oak trees growing in it and may require an oak tree removal permit per the City of Visalia oak tree ordinance. If the oak trees are to be removed, the Project proponent pays the permit fees and requirements for the oak removal permit from the City for cutting and removing these trees to cover oak tree planting and establishment. The City of Visalia has an oak tree ordinance (Visalia Municipal Code Chapter 12.24) that protects valley oak trees with a

diameter at breast height (dbh) of 2 inches or greater. Under this ordinance, removal, or encroachment within the drip-line of or damage to valley oak trees is prohibited. Removal requires a permit from the city manager and mitigation either by replacement in-kind or payment of an in-lieu fee to be used for oak tree planting. Impacts would be *less than significant.*

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

No Impact: An unvegetated maintained open water canal runs through the eastern portion of the site. However, the project would not affect the canal and leave a buffer surrounding the canal. No potentially jurisdictional wetlands occur in the Project Area. In regard to federally protected wetlands, the Project will have no impact.

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

Less than Significant Impact: The proposed Project Area is primarily composed of cultivated agricultural lands surrounded by residential development and paved roads. Therefore, the proposed Project Area contains limited natural habitat that would be likely to function as a wildlife movement corridor. Due to the level of agricultural activity, residential development of the surrounding area, limited suitable undisturbed oak woodland and grassland habitat in the Project Area, and the occurrence of larger intact stands of valley oak woodland habitat immediately west of the Project Area, proposed Project impacts would be less than significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant Impact: The proposed Project will result in the removal of approximately 32 valley oak (Quercus lobata) trees that are greater than 2" dbh. At least two of the valley oak trees on the property are greater than 24" dbh trees. One large approximately 36" dbh multi-trunk valley oak occurs in the middle of the property on the southern edge, while the remaining 31 valley oak trees are in the northwestern portion of the property. In the northern oak woodland stand, approximately 20 of the oak trees range from 12" to 24" dbh. One larger valley oak in this stand is approximately 30" dbh. The remaining 10 small oak trees range from 4" to 12" dbh. Removal of these oak trees would require an Oak Tree Permit. The City of Visalia has an oak tree ordinance (Visalia Municipal Code Chapter 12.24) that protects valley oak trees with a diameter at breast height (dbh) of 2 inches or greater. Under this ordinance, removal, or encroachment within the drip-line of or damage to valley oak trees is prohibited. Removal requires a permit from the city manager and mitigation either by replacement in-kind or payment of an in-lieu fee to be

used for oak tree planting. Visalia's ordinance protects valley oaks over 2 inches dbh, requiring a permit for removal and mandating replacement or a fee for tree planting. The impact would be *less than significant.*

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact: There are no known habitat conservation plans or Natural Community Conservation Plans (NCCP) in the proposed Project area. There would be *no impact.*

Mitigation Measures for Impacts to Biological Resources

Mitigation Measure BIO-1: Swainson's Hawk Nesting Habitat

If construction, grading, or Project-related improvements are to commence between March 1 and September 15, a focused survey for Swainson's hawk nests on the site and within ¼ mile of the site shall be conducted by a qualified biologist no later than 30 days prior to the start of construction work (including clearing and grubbing). If active nests are found, the California Fish and Wildlife shall be contacted to determine appropriate protective measures, and these measures shall be implemented prior to the start of any ground-disturbing activities. If no active nests are found during the focused survey, no further mitigation will be required.

Mitigation Measure BIO-1a: Nesting Bird and Roosting Bat Survey

If Project-related activities are scheduled between February 1 to August 31 (the typical nesting season), a focused survey for nests shall be conducted by a Designated Biologist within three (3) calendar days prior to the beginning of Project-related activities. The Designated Biologist shall survey a minimum radius of 500-feet for MBTA birds around the Project Area and for sign of roosting bats. If no active nests or roosts are found, project activities may proceed as scheduled.

Mitigation Measure BIO-1b: Active Nests or Roosts

If an active nest or roost is found, active nests should be avoided, and a no disturbance or destruction buffer shall be determined and established by a Designated Biologist through consultation with CDFW. A report will be prepared documenting any active nest(s) and CDFW will be contacted and consulted in order to approve an adequate buffer size for the species. The buffer shall be kept in place until after the breeding nesting season or the Designated Biologist confirms the young have fledged, are foraging independently, and the nest is no longer active for the season. The extent of these buffers shall be determined by CDFW and established by the Designated Biologist and will depend on the species present, the level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers.

Mitigation Measure BIO-1c: Project Delay

If a lapse in project-related work of fourteen (14) calendar days or longer occurs, the Designated Biologist shall complete another focused survey before Project work can be reinitiated.

V. CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☑	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☑	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☑	☐	☐

A Phase 1 cultural resources assessment for the Elliott Property Subdivision was conducted by SOAR Environmental Consulting (Appendix C). The Project proposes to construct a 225-unit, low-density single-family development and a 4.15-acre park. The Project is subject to the California Environmental Quality Act (CEQA).

Environmental Setting

Penutian-speaking Yokuts tribal groups occupied the southern San Joaquin Valley region and much of the nearby Sierra Nevada. Yokuts villages apparently extended up to, but not into, the mouths of the canyons on the northern and western fronts of the Tehachapi Mountains, well into the foothills and lower elevations of the Sierra Nevada on the east, and to the crest of the Temblor Range on the west. The Yokuts are Penutian speakers and are linguistically related to northern occupants of the San Joaquin Valley. The Yokuts settlement pattern was largely consistent, regardless of the specific tribe involved. Winter villages were typically located along lakeshores and major stream courses (as these existed circa AD 1800), with dispersal phase family camps located at elevated spots on the valley floor and near gathering areas in the foothills. Throughout Native California, and Yokuts territory in general, the acorn was a primary dietary component, along with a variety of gathered seeds. Valley tribes augmented this resource with lacustrine and riverine foods, especially fish and wildfowl. Although population estimates vary and population size was greatly affected by the introduction of Euro-American diseases and social disruption, the Yokuts were one of the largest, most successful groups in Native California. Cook (1978) estimates that the Yokuts region contained 27 percent of the aboriginal population in the state at the time of contact; other estimates are even higher. Many Yokuts people continue to reside in the southern San Joaquin Valley today.

In California, the historic era is divided into three general periods: the Spanish or Mission Period (1769 to 1821), the Mexican or Rancho Period (1821 to 1848), and the American Period (1848 to present). The mission system, which ultimately established 21 missions between 1796 and 1822,

consisted of missions, presidios, and pueblos, and was designed to convert the indigenous peoples of California to Christianity and assimilate them under Spanish rule (Gudde 1998).
Visalia, then called Four Creeks, was settled in 1852. In this same year Tulare County was officially formed from parts of Mariposa County. In these early years Visalia was used as a supply center for the nearby gold mining operations along the Kern River. During this time Visalia's agricultural economy was based predominantly around livestock. The Southern Pacific Railroad constructed train tracks throughout the San Joaquin Valley, and with this a shift was triggered in Visalia's agricultural economy to one revolving around field crops. By 1874 Visalia was incorporated as a city in Tulare County. The next major economic change was brought about by the increased availability of irrigation water, resulting in the conversion of large grain fields to small farms, where citrus, grapes, olives, and deciduous fruits were raised. These crops are a mainstay of the region's economy today (City of Visalia, 2023).

Cultural Records Search

On October 13, 2023, Soar submitted a records search request to the Southern San Joaquin Valley Information Center (SSJVIC) located at the California State University, Bakersfield (Appendix A of Cultural Resources Assessment). The purpose of this request was to identify any prehistoric or historical resources on or near the Project Site that had been previously recorded within the Project boundary and a 0.5-mile radius of the Project area and identify and review prior cultural resource investigations completed in or near the Project boundary. SSJVIC staff researched historical USGS topographic maps, reports of previous cultural resource investigations, archaeological Site and survey base maps, cultural resource records (DPR forms) as well as listings of the Historic Properties Directory of the Office of Historic Preservation, General Land Office Maps, Archaeological Determinations of Eligibility, and the California Inventory of Historic Resources. The results from the records search indicate two (2) cultural resource studies have been conducted within the Project area. According to the information on file, there is one (1) resource within the Project area. There are two (2) recorded resources within the 0.5-mile record search radius. There were seven (7) reports identified within a 0.5-mile radius of the Project area. There are no recorded cultural resources within the Project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks.

Native American Consultation

The State requires lead agencies to consider the potential effects of proposed projects and consult with California Native American tribes during the local planning process for the purpose of protecting Traditional Tribal Cultural Resources through the California Environmental Quality Act (CEQA) Guidelines. Pursuant to PRC Section 21080.3.1, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe which is either on or eligible for inclusion in the California Historic Register or local historic register, or, the lead agency, at its discretion, and support by

substantial evidence, choose to treat the resources as a Tribal Cultural Resources (PRC Section 21074(a) (1-2)).

Additional information may also be available from the California Native American Heritage Commission's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.

The site contains agricultural uses, vacant land, and an oak grove. If any artifacts are inadvertently discovered during ground-disturbing activities, existing federal, State, and local laws, and regulations as well as the mitigation measures will require construction activities to cease until such artifacts are properly examined and determined not to be of significance by a qualified cultural resource professional.

The California Native American Heritage Commission (NAHC) was contacted by SOAR Environmental Consulting on October 13, 2023, to conduct a Sacred Lands File (SLF) search, and to obtain a list of tribes culturally and geographically affiliated with the Project area (Appendix B of IS/MND Appendix C). On December 1st, 2023, the NAHC indicated there are no Native American traditional cultural places or sacred sites within or near the Project area. The NAHC provided a list of five (5) Tulare County Native American groups and individuals affiliated with the local tribes. On December 4th, 2023, Ms. Froshour sent letters to all individuals describing the location, and the nature of the project. In each letter, Ms. Froshour included a request for information regarding prehistoric, historic, ethnographic land use, as well as contemporary Native American values. Soar Environmental did not receive comments from the Tulare County Native American groups or affiliated individuals regarding the proposed development at the project location.

Following AB 52, Native American Tribes that could potentially be impacted by the Project were contacted. The Tribes that were formally noticed of this Project were:

- Big Sandy Rancheria of Western Mono Indians
- Dunlap Band of Mono Indians
- Kern Valley Indian Community
- Santa Rosa Rancheria Tachi Yokut Tribe
- Tubatulabals of Kern Valley
- Tule River Indian Tribe
- Wuksache Indian Tribe/Eshom Valley Band

The City did not receive any comments for this project.

Regulatory Setting

In this report "cultural resources" are defined as prehistoric or historical archaeological sites as well as historical objects, buildings, or structures. In accordance with 30 Code of Federal Regulations (CFR) §60.4, "historical" in this report applies to cultural resources which are at least 50 years old. The significance or importance of a cultural resource is dependent upon whether the resource qualifies for inclusion at the local or state level in the California Register of Historical Resources (CRHR), or at the federal level in the National Register of Historic Places (NRHP). Cultural resources that are determined to be eligible for inclusion in the CRHR are called "historical resources" (California Code of Regulations [CCR] 15064.5[a]). Under this statue the determination of eligibility is partially based on the consideration of the criteria of significance as defined in 14 CCR 15064.5(a)(3). Cultural resources eligible for inclusion in the NRHP are deemed "historic properties."

National Historic Preservation Act

The National Historic Preservation Act was adopted in 1966 to preserve historic and archeological sites in the United States. The Act created the National Register of Historic Places, the list of National Historic Landmarks, and the State Historic Preservation offices.

California Historic Register

The California Historic Register was developed as a program to identify, evaluate, register, and protect Historical Resources in California. Historical resources may include, but are not limited to, "any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically or archaeologically significant" (PRC §5020.1[j]). In addition, a resource included in a local register of historical resources or identified as significant in a local survey conducted in accordance with the state guidelines are also considered historic resources under California Public Resources Code (PRC) Section 5020.1.

According to CEQA guidelines §15064.5 (a)(3), criteria for listing on the California Register of Historical Resources includes the following:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- Is associated with the lives of persons important in our past.
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- Has yielded, or may be likely to yield, information important in prehistory or history.

Protection of cultural resources within California is additionally regulated by PRC §5097.5, which prohibits destruction, defacing, or removal of any historic or prehistoric cultural features on land under the jurisdiction of State or local authorities.

City of Visalia General Plan

The 2030 General Plan includes the policies related to cultural resources that correlate to the proposed project:

- *LU-P-48*: Preserve established and distinctive neighborhoods throughout the City by maintaining appropriate zoning and development standards to achieve land use compatibility in terms of height, massing, and other characteristics; providing design guidelines for high-quality new development; supporting housing rehabilitation programs; and other means.
- *OSC-P-42*: Establish requirements to avoid potential impacts to sites suspected of being archeologically, paleontologically, or historically significant or of concern, by:
    - Requiring a records review for development proposed in areas that are considered archaeologically or paleontologically sensitive;
    - Determining the potential effects of development and construction on archaeological or paleontological resources (as required by CEQA);
    - Requiring pre-construction surveys and monitoring during any ground disturbance for all development in areas of historical and archaeological sensitivity (defined as areas identified according to the National Historic Preservation Act as part of the Section 106 process); and
    - Implementing appropriate measures to avoid the identified impacts, as conditions of Project approval.

Discussion

a) Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Less Than Significant Impact with Mitigation: A records search was conducted on behalf of the Applicant from the SSJVIC of the CHRIS at California State University in Bakersfield, California, to determine if historical or archaeological sites had previously been recorded within the study area, if the Project area had been systematically surveyed by archaeologists prior to the initial study, and/or whether the region of the field Project was known to contain archaeological sites and to thereby be archaeologically sensitive.

According to the SSJVIC records search, there has been two previous cultural resource investigations within the Project area (TU-00041, TU-01190). From these two investigations, one historical resource has been identified in the Project area (P-54-002177). There has been seven reports conducted within a 0.5-mile radius of the Project area, and two recorded resources have been found within the 0.5-mile record search radius (P-54-003667, P-54-003670). The historical resource identified within the project area is the South Fork Persian Ditch, which is a nineteenth century earthenware irrigation ditch, which was constructed between the years 1854 and 1856 by farmers and other water users in the area.

After an analysis of the significance of the structure, SOAR determined that the South Fork Persian Ditch lacks significance and is not eligible for the National Register of Historic Places (NRHP).

Although cultural resources were identified on the site, the South Fork Ditch is not NRHP eligible, so no historic places will be affected. The Project is not located within any known historic districts or landscapes, and the construction would be limited to the 59.13-acre property and the 4.15-acre park, so no historically significant resources would be affected. However, the presence of remains or unanticipated cultural resources under the ground surface is possible. Implementation of Mitigation Measures CUL-1, CUL-2, CUL-3, and CUL-4 will ensure that impacts to this checklist item will be *less than significant with mitigation* incorporation.

b) Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less Than Significant Impact with Mitigation: There are no known archaeological resources located within the Project area. Implementation of Mitigation Measures CUL-1 and CUL-2 will ensure that potential impact to unknown archeological resources will be *less than significant with mitigation* incorporation.

c) Would the Project disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact with Mitigation: There are no known human remains buried in the Project vicinity. If human remains are unearthed during Project construction, there is a potential for a significant impact. As such, implementation of Mitigation Measure CUL-2 will ensure that impacts remain *less than significant with mitigation incorporation.*

Mitigation Measures for Impacts to Cultural Resources

Mitigation Measure CUL-1: If previously unknown resources are encountered before or during grading activities, construction shall stop in the immediate vicinity of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance.

If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could

include avoidance or capping, incorporation of the Site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.

Mitigation Measure CUL-2: In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

Mitigation Measure CUL-3: Prior to the start of construction, an archaeological firm shall be hired to conduct a pre-construction survey and submit a comprehensive report to the lead agency for review and approval prior to the start of construction. This report should document the findings of the pre-construction survey and include an assessment of the potential impacts of the proposed Project on any identified archaeological resources. The plan should outline specific measures that will be implemented, such as construction phasing, Site buffering, and artifact preservation, to protect the cultural resources, if any are discovered. To ensure compliance, the Project approval should require that the archaeological survey report and the associated plan be prepared by a qualified archaeologist and that the survey and monitoring activities be conducted in accordance with relevant state and federal regulations and best practices. By requiring a comprehensive archaeological survey report and a detailed mitigation plan, the lead agency can ensure that any impacts to archaeological resources are avoided or minimized to the fullest extent possible.

Mitigation Measure CUL-4: During any ground disturbing activities, an archaeological firm shall be hired to monitor the Project Site. The monitoring should be conducted by a qualified archaeologist with experience in the region and in compliance with relevant state and federal regulations and best practices. The monitoring should include regular Site

inspections to identify any archaeological resources that may have been uncovered during ground-disturbing activities. If any resources are identified, the monitoring should also include documentation, mapping, and analysis of the resources, as well as the development of a mitigation plan to address any potential impacts to the resources.

VI. ENERGY

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

Environmental Setting

Southern California Edison (SCE) provides electricity services to the City of Visalia. SCE serves approximately 15 million people in a 50,000 square-mile area of Central, Coastal, and Southern California. SCE supplies electricity to its customers through a variety of renewable and nonrenewable sources. Table 3-8 below shows the proportion of each energy resource sold to California consumers by SCE in 2021 as compared to the statewide average.

Fuel Type		SCE Power Mix	California Power Mix
Coal		0%	3.0%
Large Hydroelectric		2.3%	9.2%
Natural Gas		22.3%	37.9%
Nuclear		9.2%	9.3%
Other (Oil/Petroleum Coke/Waste Heat)		0.2%	0.2%
Unspecified Sources of Power[1]		34.6%	6.8%
Eligible Renewables	Biomass	0.1%	2.3%
	Geothermal	5.7%	4.8%
	Small Hydro	0.5%	1.0%
	Solar	14.9%	14.2%
	Wind	10.2%	11.4%
	Total Eligible Renewable	**31.4%**	**33.6%**
1. "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.			

Table 3-8. 2021 SCE and State power resources; Source: SCE; California Energy Commission

SCE also offers Green Rate Options, which allow consumers to indirectly purchase up to 100% of their energy from renewable sources. To accomplish this, SCE purchases the renewable energy necessary to meet the needs of Green Rate participants from solar renewable developers.

Southern California Gas Company (SoCalGas) provides natural gas services to the Project area. Natural gas is an energy source developed from fossil fuels composed primarily of methane (CH4). Approximately 45% of the natural gas burned in California is used for electricity generation, while 21% is consumed by the residential sector, 25% is consumed by the industrial sector, and 9% is consumed by the commercial sector.

Regulatory Setting

California Code of Regulations, Title 20

Title 20 of the California Code of Regulations establishes standards and requirements for appliance energy efficiency. The standards apply to a broad range of appliances sold in California.

California Code of Regulations, Title 24

Title 24 of the California Code of Regulations is a broad set of standards designed to address the energy efficiency of new and altered homes and commercial buildings. These standards regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. Title 24 requirements are enforced locally by the City of Selma Building Department.

California Green Building Standards Code (CALGreen)

CalGreen is a mandatory green building code that sets minimum environmental standards for new buildings. It includes standards for volatile organic compound (VOC) emitting materials, water conservation, and construction waste recycling.

SB 100

SB 100, passed in 2018, set a deadline in 2045 for 100% of energy to be renewable. Additionally, by 2030, 60% of all energy must be renewable. California is targeting this goal through solar and other renewable sources.

AB 178

For California to meet its renewable goals, AB 178 was passed in 2018. AB 178 states that starting in 2020 all new low-rise residential buildings must be built with solar power.

City of Visalia General Plan

The 2030 General Plan includes the policies related to energy use that correlate to the proposed project:

- *T-P-41*: Integrate the bicycle transportation system into new development and infill redevelopment. Development shall provide short-term bicycle parking and long-term bicycle storage facilities, such as bicycle racks, stocks, and rental bicycle lockers. Development also shall provide safe and convenient bicycle and pedestrian access to high-activity land uses such as schools, parks, shopping, employment, and entertainment centers.
- *T-P-53*: Develop flexible parking requirements in the zoning ordinance for development proposals based on "best practices" and the proven potential to reduce parking demand.

Discussion

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?

Less Than Significant Impact: The proposed Project includes the construction and operation of single-family housing. During Project construction, there would be an increase in energy consumption related to worker trips and operation of construction equipment. This increase in energy use would be temporary and limited to the greatest extent possible through compliance with local, state, and federal regulations. Vehicle fuel consumption during Project construction was estimated based on the assumed construction schedule, vehicle trip lengths, and the number of workers per construction phase as provided by CalEEMod, and Year 2023 gasoline/diesel MPG factors provided by the EMFAC2017. To simplify the estimation process, it was assumed that all worker vehicles used gasoline as a fuel source and all vendor vehicles used diesel as a fuel source. Table 3-9, below, provides gasoline and diesel fuel used by construction and on-road sources during each phase of Project construction.

Construction Phase	# of Days	Daily Worker Trips[1]	Daily Vendor Trips[1]	Daily Hauling Trips[1]	Total Gasoline Fuel Use (gallons)[2]	Total Diesel Fuel Use (gallons)[2]
Site Preparation	40	18	0	0	7,799	0
Grading	110	20	0	0	33,871	0
Building Construction	1110	81	24	0	177,549	23,069
Paving	75	15	0	0	8,836	0
Architectural Coating	75	16	0	0	1,410	0
Total	**1410**	**N/A**	**N/A**	**N/A**	**229,465**	**23,069**

1. Data provided by CalEEMod (Appendix A)

Table 3-9. On-Road Mobile Fuel Use Generated by Construction Activities. Source: CalEEMod(v. 2020.4.0); EMFAC2014

While construction of the proposed Project will result in additional energy consumption, this energy use is not unnecessary or inefficient. This energy use is justified by the energy-efficient nature of the proposed Project and would be limited to the greatest extent possible through compliance with local, state, and federal regulations. Once construction is complete, the Project is expected to achieve net zero energy consumption. The proposed Project is subject to the California New Residential Zero Net Energy Action Plan 2015-2020. This plan establishes a goal for all residential buildings built after January 1, 2020, to be zero net energy. The California Energy Commission is responsible for the development and enforcement of specific strategies to achieve this goal. These strategies are implemented through Title 24, Part 6 of the California Building Code, which requires developers to include certain measures (including solar panels on all new residential buildings) to achieve required building efficiency standards.

Total Annual Operational VMT[1]	Annual Fuel Use (Gasoline)	Annual Fuel Use (Diesel)	Average MPG
5,889,125 Miles	**225,635 Gallons**	**25,324 Gallons**	**23.5**

1. Data Provided by CalEEMod

Table 3-10. On-Road Mobile Fuel Use Generated by Operational Activities. Source CalEEMod (v. 2020.4.0); EMFAC2014

During Project operations, the proposed Project is not anticipated to result in wasteful fuel consumption. This is due to the distance of the Project Site to the commercial, recreational, and other residential uses, resulting in less of a reliance on personal vehicles. Because construction-related energy use would be temporary and limited to

the greatest extent feasible through consistency with Federal, State, and local policies related to energy conservation, and operation of the Project will comply with all energy efficiency standards required under Title 24, Section 6, and these standards were specifically developed to achieve net zero energy for residential projects, it can be presumed that the Project will achieve net zero energy. The Project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. The impact is *less than significant.*

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact: The proposed Project will not conflict with or obstruct any state or local plans for renewable energy or energy efficiency. The proposed Project will comply with all state and local policies related to energy efficiency and there is *no impact*.

VII. GEOLOGY AND SOILS

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

Environmental Setting

Geologic Stability and Seismic Activity

- **Seismicity**

The Visalia Planning Area has no known major fault systems within its boundaries. There are small faults in the Southern San Joaquin Valley, approximately 30 miles away, though none of them are known to be active. The greatest potential for seismic activity in Visalia Planning Area is posed by the San Andreas Fault, approximately 75 miles away from the site, or the Owens Valley Fault Group, which is located approximately 125 miles away from the Project site.

- **Liquefaction**
  Liquefaction is a phenomenon whereby unconsolidated and/or near saturated soils lose cohesion and are converted to a fluid state as a result of severe vibratory motion. The relatively rapid loss of soil shear strength during strong earthquake shaking results in temporary, fluid-like behavior of the soil, which can result in landslides and lateral spreading. Soil liquefaction causes ground failure that can damage roads, pipelines, underground cables, and buildings with shallow foundations. Liquefaction hazards may exist in and around wetland areas and creeks, though soil types are generally too coarse or too high in clay content, and not likely to be subject to sufficient acceleration to cause liquefaction.

- **Landslides**
  Landslides refer to a wide variety of processes that result in the downward and outward movement of soil, rock, and vegetation under gravitational influence. Landslides are caused by both natural and human-induced changes in slope stability and often accompany other natural hazard events, such as floods, wildfire, or earthquake. Due to little elevation changes throughout the planning area, including the proposed Project site, it is considered a low landslide hazard area.

- **Subsidence**
  Land Subsidence refers to the vertical sinking of land because of either manmade or natural underground voids. Subsidence has occurred throughout the Central Valley because of groundwater, oil, and gas withdrawal. The Kaweah Subbasin that underlies the Planning Area is in an overdraft condition on an average long-term basis. According to the most recent Urban Water Management Plan (UWMP), groundwater elevations have declined up to 50 feet between 1990 and 2010. While groundwater recharge efforts are in progress, groundwater levels will continue to decline unless recharge is increased.

Soils Involved in Project

The proposed Project involves construction on two soil types. The properties of the soil are described briefly below:

- **Nord Fine Sandy Loam:** The Nord series consists of very deep, well drained soils that formed in mixed alluvium dominantly from granitic and sedimentary rocks and has

slopes of 0 to 2 percent. It is well drained; has negligible to low runoff; and has moderate permeability but is moderately slow in saline-sodic phases.

- **Akers, Saline Sodic:** The Akers series consists of very deep, well drained soils formed in alluvium derived from granitic rock. Akers soils are on terraces and has slopes of 0 to 2 percent. It is well drained; has negligible to low runoff; and has moderate permeability. Saline-sodic phases have moderately slow permeability.

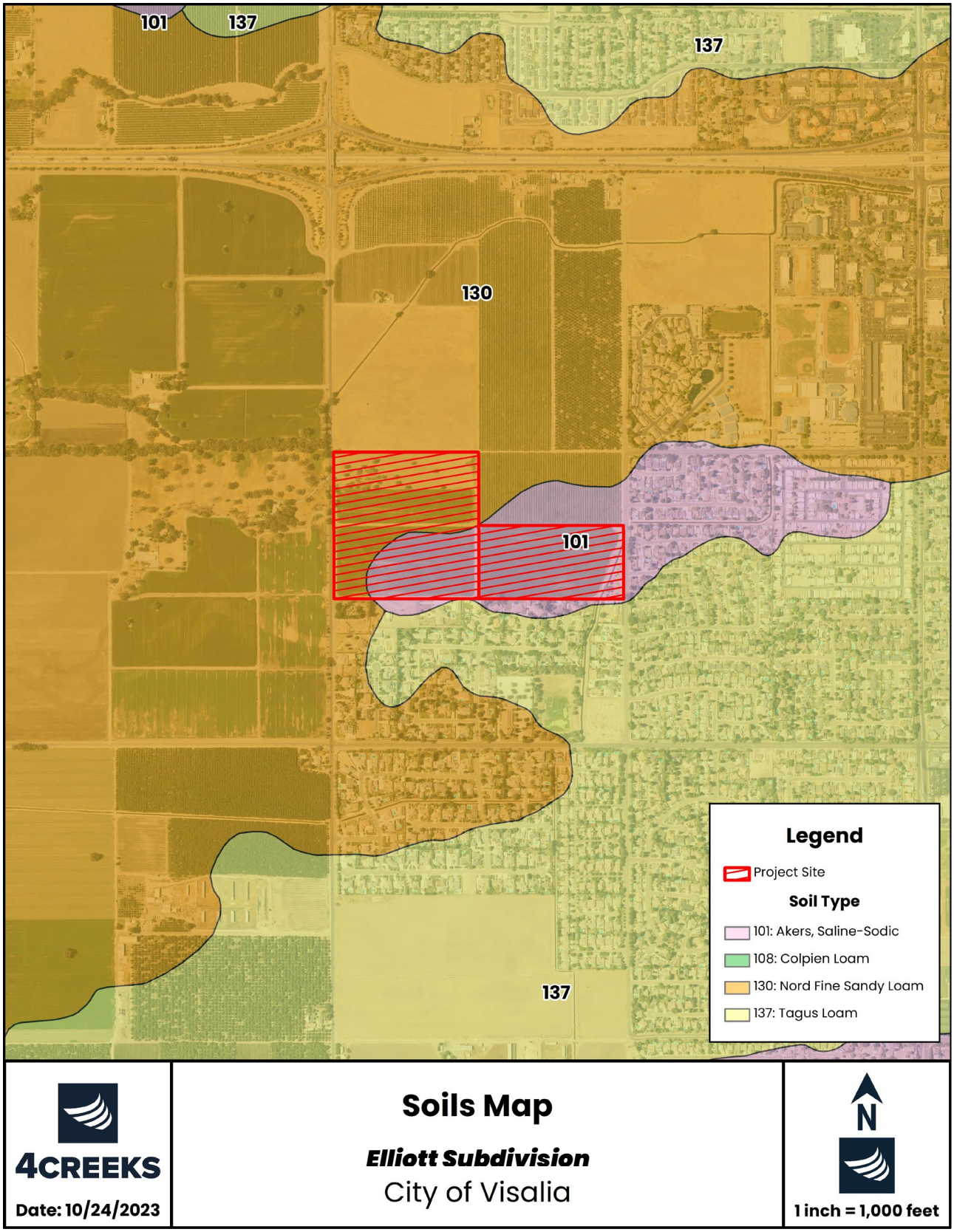


Figure 3-4: Soils Map

Regulatory Setting

California Building Code

The California Building Code (CBC) contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. CBC provisions provide minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings and structures, and certain equipment.

City of Visalia Municipal Code (California Building Code)

The City of Visalia Municipal Code has incorporated and adopted the CBC, 2013 Edition, as promulgated by the California Building Standards Commission, which incorporates the adoption of the 2012 edition of the International Building Code, as amended with necessary California amendments and the 2012 International Building Code of the International Code Council.

City of Visalia General Plan

The 2030 General Plan includes the policies related to geology and soils that correlate to the proposed project:

- *OSC-P-28*: Require new development to implement measures, as appropriate, to minimize soil erosion related to grading, Site preparation, landscaping, and construction.

Discussion

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

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact: Although the Project is located in an area of relatively low seismic activity, the Project Site has a low chance of being affected by ground shaking from distant faults. The potential for strong seismic ground shaking on the Project Site is not a significant environmental concern due to the infrequent seismic activity of the area and the distance to the faults. The Project does not propose any components which could cause substantial adverse effects in the event of an earthquake. Additionally, the Project has no potential to indirectly or directly cause the rupture of an earthquake fault. Therefore, there is *no impact* related to the risk of loss, injury, or death involving a rupture of a known earthquake fault.

ii. Strong seismic ground shaking?

No Impact: The Project Site is in an area of low seismic activity. The proposed Project does not include any activities or components that could feasibly cause strong seismic ground shaking, either directly or indirectly. There is *no impact.*

iii. Seismic-related ground failure, including liquefaction?

No Impact: The risk of liquefaction within the planning area outside of wetland areas is low because the soil types are generally unsuitable for liquefaction. The area's low potential for seismic activity would further reduce the likelihood of liquefaction occurrence. Because the Project Site is within an area of low seismic activity, and the soils associated with the Project area are not suitable for liquefaction, there are *no impacts.*

iv. Landslides?

No Impact: The Planning Area of Visalia is considered at insignificant risk of small landslides. Additionally, the Project Site is generally flat and there are no hill slopes in the area. No geologic landforms exist on or near the Site that would result in a landslide event. As a result, there is a very low potential for landslides. There would be *no impact.*

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

Less Than Significant Impact: Because the Project Site is relatively flat, the potential for erosion is low. However, construction-related activities and increased impermeable surfaces can increase the probability of erosion to occur. Construction-related impacts related to erosion will be temporary and subject to best management practices (BMPs) required by SWPPP, which are developed to prevent significant impacts related to erosion from construction. Because impacts related to erosion would be temporary and limited to construction, and because required best management practices would prevent significant impacts related to erosion, the impact will remain *less than significant.*

c) Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-Site landslide, lateral spreading, subsidence, liquefaction or collapse?

No Impact: The soils associated with the Project Site are considered stable and have a low capacity for landslides, lateral spreading, subsidence, liquefaction, or collapse. Because the Project area is stable, and this Project would not result in a substantial grade change to the topography to the point that it would increase the risk of landslides, lateral spreading, subsidence, liquefaction, or collapse, there is *no impact.*

d) Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

No Impact: The proposed Project Site is not in an area with expansive soils. Because the soils associated with the Project do not exhibit shrink-swell behavior, implementation of the Project will pose no risk to life or property caused by expansive soils and there is *no impact.*

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

No Impact: The proposed Project would not include the use of septic tanks or any other alternative wastewater disposal systems. The proposed buildings will tie into Visalia's existing sewer services. Therefore, there would be *no impact.*

f) Would the Project directly or indirectly destroy a unique paleontological resource or Site or unique geologic feature?

Less Than Significant Impact with Mitigation: There are no unique geologic features and no known paleontological resources located within the Project area. However, there is always the possibility that paleontological resources may exist below the ground surface. Implementation of Mitigation Measures CUL-1 and CUL-2 will ensure that any impacts resulting from Project implementation remain less than significant with mitigation incorporation.

Mitigation Measures for Impacts to Geological Resources

Mitigation Measure CUL-1: If previously unknown resources are encountered before or during grading activities, construction shall stop in the immediate vicinity of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance.

If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the Site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any historical artifacts recovered as a result of mitigation shall be provided to a City-

approved institution or person who is capable of providing long-term preservation to allow future scientific study.

Mitigation Measure CUL-2: In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

VIII. GREENHOUSE GAS EMISSIONS

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

Environmental Setting

Natural processes and human activities emit greenhouse gases. The presence of GHGs in the atmosphere affects the earth's temperature. Without the natural heat-trapping effect of GHGs, the earth's surface would be about 34°C cooler. However, it is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

The effect of greenhouse gases on the earth's temperature is equivalent to the way a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide, methane, nitrous oxide, ozone, chlorofluorocarbons, hydrochlorofluorocarbons, hydro fluorocarbons, per fluorocarbons, sulfur, and hexafluoride. Some gases are more effective than others. The Global Warming Potential (GWP) has been calculated for each greenhouse gas to reflect how long it remains in the atmosphere, on average, and how strongly it absorbs energy. Gases with a higher GWP absorb more energy, per pound, than gases with a lower GWP, and thus contribute more to global warming. For example, one pound of methane is equivalent to twenty-one pounds of carbon dioxide.

GHGs as defined by AB 32 include the following gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. GHGs as defined by AB 32 are summarized in Table 3-11. Each gas's effect on climate change depends on three main factors. The first is the quantity of these gases in the atmosphere, followed by how long they stay in the atmosphere, and finally how strongly they impact global temperatures.

Greenhouse Gas	Description and Physical Properties	Lifetime	GWP	Sources
Methane (CH4)	Is a flammable gas and is the main component of natural gas	12 years	21	Emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.
Carbon dioxide (CO2)	An odorless, colorless, natural greenhouse gas.	30-95 years	1	Enters the atmosphere through burning fossil fuels (coal, natural gas, and oil), solid waste, trees and wood products, and also as a result of certain chemical reactions (e.g., manufacture of cement). Carbon dioxide is removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.
Chloro-fluorocarbons	Gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are non-toxic nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the earth's surface).	55-140 years	3,800 to 8,100	Were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone.
Hydro-fluorocarbons	A man-made greenhouse gas. It was developed to replace ozone-depleting gases found in a variety of appliances. Composed of a group of greenhouse gases containing carbon, chlorine an at least one hydrogen atom.	14 years	140 to 11,700	Powerful greenhouse gases that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for stratospheric ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent greenhouse gases.

Greenhouse Gas	Description and Physical Properties	Lifetime	GWP	Sources
Nitrous oxide (N2O)	Commonly known as laughing gas, is a chemical compound with the formula N2O. It is an oxide of nitrogen. At room temperature, it is a colorless, non-flammable gas, with a slightly sweet odor and taste. It is used in surgery and dentistry for its anesthetic and analgesic effects.	120 years	310	Emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.
Pre-fluorocarbons	Has a stable molecular structure and only breaks down by ultraviolet rays about 60 kilometers above Earth's surface.	50,000 years	6,500 to 9,200	Two main sources of pre-fluorocarbons are primary aluminum production and semiconductor manufacturing.
Sulfur hexafluoride	An inorganic, odorless, colorless, and nontoxic nonflammable gas.	3,200 years	23,900	This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing and as a tracer gas.

Table 3-11. Greenhouse Gasses; Source: EPA, Intergovernmental Panel on Climate Change

Regarding the quantity of these gases in the atmosphere, we first must establish the amount of the particular gas in the air, known as Concentration, or abundance, which is measured in parts per million, parts per billion, and even parts per trillion**.** To put these measurements in more relatable terms, one part per million is equivalent to one drop of water diluted into about 13 gallons of water, roughly a full tank of gas in a compact car. Therefore, it can be assumed larger emissions of greenhouse gases lead to a higher concentration in the atmosphere.

Each of the designated gases described above can reside in the atmosphere for different amounts of time, ranging from a few years to thousands of years. All these gases remain in the atmosphere long enough to become well mixed, meaning that the amount that is measured in the atmosphere is roughly the same all over the world regardless of the source of the emission.

Regulatory Setting

AB 32

AB 32 set the 2020 greenhouse gas emissions reduction goal into law. It directed the California Air Resources Board to begin developing discrete early actions to reduce greenhouse gases while also preparing a scoping plan to identify how best to reach the 2020 limit. The reduction measures to meet the 2020 target are to be adopted by the start of 2011.

SB 1078, SB 107, and Executive Order S-14-08

SB 1078, SB 107, and Executive Order S-14-08 require California to generate 20% of its electricity from renewable energy by 2017. SB 107 then changed the 2017 deadline to 2020. Executive Order S-14-08 required that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020.

San Joaquin Valley Air Pollution Control District

SJVAPCD adopted a Climate Change Action Plan (CCAP) in August 2008. While the plan does not have regulatory powers, it directs SJVAPCD to develop guidance to assist District staff, valley businesses, land-use agencies, and other permitting agencies in addressing GHG emissions as part of the CEQA process.

City of Visalia Climate Action Plan (CAP)

Visalia's draft 2013 CAP includes a baseline GHG emissions inventory of municipal and community emissions, identification, and analysis of existing and proposed GHG reduction measures, and reduction targets to help Visalia work toward the State's goal of an 80 percent reduction below baseline emissions by 2050. The plan sets 2020 and 2030 reduction targets and includes reduction actions for energy, transportation, and waste and resource conservation.

City of Visalia Climate Change Initiatives

In January 2007, Visalia's mayor signed the "Cool Cities" pledge, part of the U.S. Mayors Climate Protection Agreement. By entering into this agreement, the City has adopted the goal of reducing citywide GHG emissions to 7% below 1990 levels by 2012. As detailed in the CAP, this goal was subsequently expanded in response to ARB's recommended reduction target of 15% below the 2005 baseline, and the City added a 2030 mitigation target to correlate with the 2030 General Plan Update and the goal of achieving an 80% reduction by 2050.

Discussion

a) Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact: The SJVAPCD does not provide numeric thresholds to assess the significance of greenhouse gas emissions. Instead, the SJVAPCD "Guidance for Valley Land Use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA" states that projects that achieve a 29% GHG emission reduction compared to Business as Usual (BAU) would be determined to have a less than significant individual and cumulative impact for GHG. "Business as usual" (BAU) conditions are defined based on the year 2005 building energy efficiency, average vehicle emissions, and electricity energy conditions. The BAU conditions assume no improvements in energy efficiency, fuel efficiency, or

renewable energy generation beyond that existing today. The 2005 BAU conditions were estimated using CalEEMod.

Implementation of the proposed Project would result in long-term greenhouse gas emissions associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products, as well as mobile emissions. The GHG emissions were estimated using CalEEMod (Appendix A).

	C02 (MT/Year)	CH4 (MT/Year)	N20 (MT/Year)	CO2e (MT/Year)
2005 BAU	3,687	3.72	0.364	3,889
Operational Emissions	2,477	3.37	0.110	2,594
% Reduction From BAU				**33%**

Table 3-12: Projected Project Operational GHG Emissions Compared to 2005 BAU; Source: (CalEEMod, V.2020.4.0)

The project's operational GHG is estimated to be 1,295 CO2e MT lower than the 2005 BAU. This is a reduction of 33%, more than the 29% threshold. Therefore, the impact is considered *less than significant.*

b) Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact: The SJVAPCD states that individual and cumulative GHG emissions are considered less than significant if a Project complies with an approved GHG emission reduction plan or GHG mitigation program within the geographic area in which the Project is located. The City of Visalia Climate Action Plan meets the requirements for a Qualified Greenhouse Gas Reduction Strategy. Therefore, the proposed project's GHG emissions would not be considered a significant impact if the proposed Project were consistent with the City's GHG Reduction Strategy. Table 3-13, below, evaluates the proposed project's consistency with the applicable measures, both existing and proposed, in the GHG reduction plan.

Climate Action Plan Measures	Project Consistency with Strategy
2. Increase in Solar Photovoltaic (PV) Installations	**Consistent.** The proposed Project would involve solar panels on the new homes.
7. Urban Forestry: Requirement for all new development to have street trees, require shade over at least 25% of area in city pocket parks.	**Consistent.** The proposed Project plans to provide trees on all local roads and include them in the improvements on existing roads.

10. Bicycle Path Plan	**Consistent.** The proposed Project includes improvements with bike paths and parkways on Roeben St., Tulare Ave., and Shirk Rd.
11. Infill and High-Density Development	**Consistent.** The proposed Project has residential housing consistent with the 2030 General Plan.

Table 3-13. Project Consistency with Climate Action Plan Strategies.

As discussed above, the proposed Project is consistent with the City of Visalia Climate Action Plan. The proposed Project will comply with all Federal, State, and Local rules pertaining to the regulation of greenhouse gas emissions and the Project will implement Best Performance Standards developed by the SJVAPCD. The Project will not conflict with any plan, policy, or regulation developed to reduce GHG emissions. There is *no impact.*

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☑	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☑	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☑	☐
d) Be located on a Site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard or excessive noise to the public or the environment?	☐	☐	☐	☑
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?	☐	☐	☑	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
g) Expose people or structures, either directly or indirectly, to significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☑

Environmental Setting

The proposed Project Site is located approximately .2 miles West of the nearest school (Central Valley Christian Schools) and approximately 0.95 miles northeast of the nearest public airport (Visalia Municipal Airport). The terminal of the Airport is approximately 1.37 miles away; however, the nearest runway is 0.95 miles from the Project Site (Figure 3-4).

The Department of Toxic Substances Control's (DTSC's) Envirostor was used to identify any sites known to be associated with releases of hazardous materials or wastes within the Project area. This research confirmed that the Project would not be located on or nearby a Site that is included on a list of hazardous materials sites compiled under Government Code Section 65962.5.

Regulatory Setting

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S. Code [U.S.C.] §9601 et seq.).
The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or the Superfund Act) authorizes the President to respond to releases or threatened releases of hazardous substances into the environment.

Occupational Safety and Health Administration
The Occupational Safety and Health Administration (OSHA) sets and enforces Occupational Safety and Health Standards to ensure safe working conditions. OSHA provides training, outreach, education, and compliance assistance to promote safe workplaces. The proposed Project would be subject to OSHA requirements during construction, operation, and maintenance.

Toxic Substances Control Act of 1976 (15 U.S.C. §2601 et seq.).
The Toxic Substance Control Act was enacted by Congress in 1976 and authorizes the EPA to regulate any chemical substances determined to cause an unreasonable risk to public health or the environment.

Hazardous Waste Control Law, Title 26.
The Hazardous Waste Control Law creates hazardous waste management program requirements. The law is implemented by regulations contained in Title 26 of the California Code of Regulations (CCR), which contains requirements for the following aspects of hazardous waste management:

- Identification and classification;
- Generation and transportation;
- Design and permitting of recycling, treatment, storage, and disposal facilities;
- Treatment standards;
- Operation of facilities and staff training; and
- Closure of facilities and liability requirements.

California Code of Regulations, Title 22, Chapter 11.
Title 22 of the California Code of Regulations contains regulations for the identification and classification of hazardous wastes. The CCR defines waste as hazardous if it has any of the following characteristics: ignitability, corrosivity, reactivity, and/or toxicity.

California Emergency Services Act

The California Emergency Services Act created a multi-agency emergency response plan for the state of California. The Act coordinates various agencies, including CalEPA, Caltrans, the California Highway Patrol, regional water quality control boards, air quality management districts, and county disaster response offices.

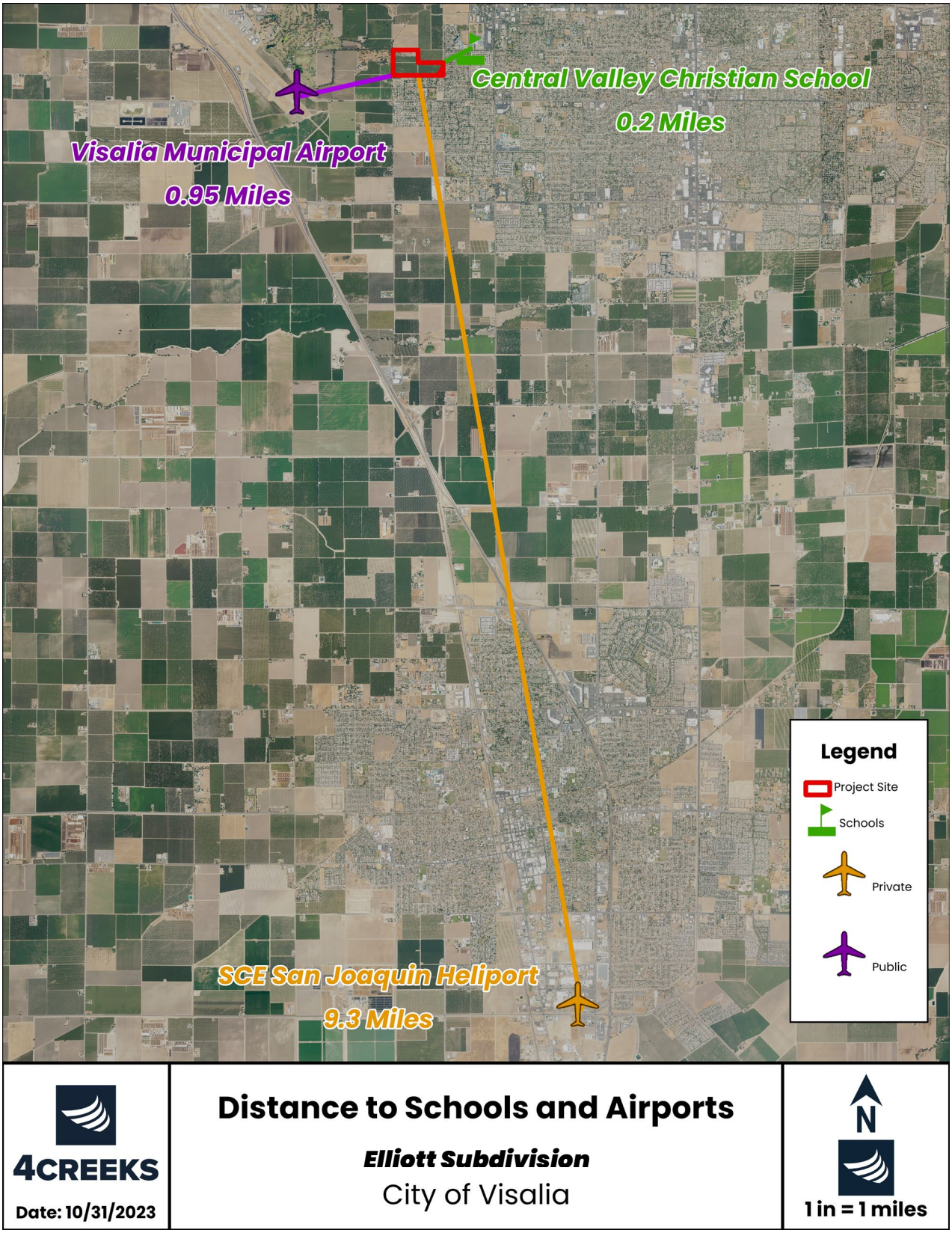


Figure 3-5: Distance to Schools and Airports

Discussion

a) Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact: Project construction activities may involve the use, storage, and transport of hazardous materials. During construction, the contractor will use fuel trucks to refuel onsite equipment and may use paints and solvents to a limited degree. The storage, transport, and use of these materials will comply with Local, State, and Federal regulatory requirements. There is the potential for small leaks due to refueling of construction equipment, however standard construction Best Management Practices (BMPs) included in the SWPPP will reduce the potential for the release of construction related fuels and other hazardous materials by controlling runoff from the Site and requiring proper disposal or recycling of hazardous materials. The impact is *less than significant.*

b) Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact: There is no reasonably foreseeable condition or incident involving the Project that could result in release of hazardous materials into the environment, other than any potential accidental releases of standard fuels, solvents, or chemicals encountered during typical construction of a residential subdivision. Should an accidental hazardous release occur or should the Project encounter hazardous soils, existing regulations for handling hazardous materials require coordination with the California Department of Toxic Substances Control for an appropriate plan of action, which can include studies or testing to determine the nature and extent of contamination, as well as handling and proper disposal. Therefore, potential impacts are *less than significant*.

c) Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant Impact: The Project is located approximately .2 miles from an existing school. During construction, the contractor will use fuel trucks to refuel onsite equipment and may use paints and solvents to a limited degree. The storage, transport, and use of these materials will comply with Local, State, and Federal regulatory requirements. There is the potential for small leaks due to refueling of construction equipment, however standard construction Best Management Practices (BMPs) included in the SWPPP will reduce the potential for the release of construction related fuels and other hazardous materials by controlling runoff from the Site and requiring proper disposal or recycling of hazardous materials. The operational aspect of the Project does not involve the use or storage of

hazardous substances other than insignificant amounts of pesticides, fertilizers, and cleaning agents required for normal maintenance of structures and landscaping. The Project would not emit hazardous emissions or involve the handling of acutely hazardous materials or waste. Therefore, there would be *a less than significant impact.*

d) Would the Project be located on a Site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact: The Project Site is not listed as a hazardous materials Site pursuant to Government Code Section 65962.5 and is not included on a list compiled by the Department of Toxic Substances Control. There would be *no impact.*

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

Less Than Significant Impact: The proposed Project is located approximately .95 miles northeast of the nearest public airport (Visalia Municipal Airport). However, according to the Airport Master plan, the Project Site would not be impacted by the airport. Noise contours developed for 2019 show that the airport would produce less than 65 dB on the Project Site. All land uses located outside of the 65 dB contours are considered to have a less than significant noise impact from the airport. Implementation of the proposed Project would not result in a safety hazard for people residing or working in the Project area. There is *a less than significant impact.*

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

No Impact: The City's design and environmental review procedures shall ensure compliance with emergency response and evacuation plans. In addition, the Site plan will be reviewed by the Fire Department per standard City procedure to ensure consistency with emergency response and evacuation needs. Therefore, the proposed Project would have *no impact* on emergency evacuation.

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

No Impact: The land surrounding the Project Site is developed with urban uses and farmlands which are not considered to be wildlands. Additionally, the City of Visalia General Plan finds that fire hazards within the Planning Area, including the proposed Project site, have low frequency, limited extent, limited magnitude, and low significance. The proposed

Project would not expose people or structures to significant risk of loss, injury or death involving wildland fires and there is *no impact.*

X. HYDROLOGY AND WATER QUALITY

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

Environmental Setting

Surface Water

Visalia is in the center of the Kaweah River Delta System, resulting in many rivers and creeks flowing through the city. The St. Johns River is the City's primary surface water feature. Other significant surface water features include Modoc Ditch, Mill Creek Ditch, Mill Creek, Tulare Irrigation District (TID) Canal, Packwood Creek, Cameron Creek, Deep Creek, Evans Creek,

Persian Ditch, and several other local ditches. These receive a significant amount of water during the rainy season and help drain stormwater.

Groundwater

Groundwater in Tulare County is present in valley deposits of alluvium that are several thousand feet thick and occurs in both confined and unconfined conditions. The creeks in Visalia are tied to the groundwater system. The creeks lose water in the winter while they feed the groundwater, and gain water in the summer when the groundwater feeds the creeks. The depth to groundwater varies significantly throughout the valley floor area of Tulare County. In the area around Visalia, depth to groundwater varies from about 120 feet below ground surface along the western portion of the city to approximately 100 feet below ground surface to the east, as measured in spring 2010. Groundwater levels measured in the city have declined since the 1940s, from approximately 30 feet below ground surface in 1940 to 120 feet below ground surface in 2010. The water quality of the groundwater that underlies the Planning Area is excellent for domestic and agricultural uses. This is mostly due to the abundant snowmelt that originates in the Sierra Nevada. Groundwater is the primary source of drinking water for the planning area residents.

Stormwater Drainage

The City, in conjunction with Kaweah Delta Water Conservation District and Tulare Irrigation District, operates and maintains a vast municipal storm drainage system that consists of drainage channels, 23 detention and retention basins, 33 pump stations and 250 miles of pipe. Stormwater from the Project Site will be collected and conveyed to an on-site stormwater basin.

Regulatory Setting

Clean Water Act

The Clean Water Act (CWA) is enforced by the U.S. EPA and was developed in 1972 to regulate discharges of pollutants into the waters of the United States. The Act made it unlawful to discharge any pollutant from a point source into navigable waters unless a National Pollution Discharge Elimination System (NPDES) Permit is obtained.

National Flood Insurance Act

The Federal Emergency Management Agency (FEMA) is tasked with responding to, planning for, recovering from, and mitigating against disasters. The Federal Insurance and Mitigation Administration within FEMA is responsible for administering the National Flood Insurance Program (NFIP) and administering programs that aid with mitigating future damages from natural hazards.

California Water Quality Porter-Cologne Act

California's primary statute leading water quality and water pollution concerns with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970

(Porter-Cologne Act). The Porter-Cologne Act grants the State Water Resource Control Board (SWRCB) and each of the nine Regional Water Quality Boards (RWQCB) power to protect water quality and further develop the Clean Water Act within California. The applicable RWQCB for the proposed Project is the Central Valley RWQCB.

Central Valley RWQCB

The proposed Project Site is within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB). The Central Valley RWQCB requires a National Pollution Discharge Elimination System (NPDES) Permit and Stormwater Pollution Prevention Plan (SWPPP) for projects disturbing more than one acre of total land area. Because the Project is greater than one acre, a NPDES Permit and SWPPP will be required.

City of Visalia General Plan

The 2030 General Plan includes the policies related to hydrology and water quality that correlate to the proposed project:

- *PSCU-P-59*: Require new developments to incorporate floodwater detention basins into Project designs where consistent with the Stormwater Master Plan and the Groundwater Recharge Plan.
- *PSCU-P-60*: Control urban and stormwater runoff and point and non-point discharge of pollutants. As part of the City's Stormwater Management Program, adopt and implement a Stormwater Management Ordinance to minimize stormwater runoff rates and volumes, control water pollution, and maximize groundwater recharge. New development will be required to include Low Impact Development features that reduce impermeable surface areas and increase infiltration. Such features may include, but are not limited to:
    - Canopy trees or shrubs to absorb rainwater;
    - Grading that lengthens flow paths over permeable surfaces and increases runoff travel time to reduce the peak hour flow rate;
    - Partially removing curbs and gutters from parking areas where appropriate to allow stormwater sheet flow into vegetated areas;
    - Use of permeable paving in parking lots and other areas characterized by significant impervious surfaces;
    - On-Site stormwater detention, use of bioswales and bioretention basins to facilitate infiltration; and
    - Integrated or subsurface water retention facilities to capture rainwater for use in landscape irrigation and other non-potable uses.
- *PSCU-P-46*: Adopt and implement a Water Efficient Landscaping Ordinance for new and/or refurbished development that exceeds mandated sizes, and ensure that all new City parks, streetscapes, and landscaped areas conform to the Ordinance's requirements. The Ordinance should include provisions to optimize outdoor water use by:
    - Promoting appropriate use of plants and landscaping;

- Establishing limitations on use of turf including size of turf areas and use of cool-season turf such as Fescue grasses, with exceptions for specified uses (e.g., recreation playing fields, golf courses, and parks);
- Establishing water budgets and penalties for exceeding them;
- Requiring automatic irrigation systems and schedules, including controllers that incorporate weather-based or other self-adjusting technology;
- Promoting the use of recycled water; and
- Minimizing overspray and runoff.

Discussion

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

Less than Significant with Mitigation: The Project will result in less than significant impacts to water quality due to potentially polluted runoff generated during construction activities. Construction may include excavation, grading, and other earthwork across most of the 59.13-acre Project site. During storm events, exposed construction areas across the Project Site may cause runoff to carry pollutants, such a chemicals, oils, sediment, and debris. Implementation of a Stormwater Pollution Prevention Plan (SWPPP) will be required for the project. A SWPPP identifies all potential sources of pollution that could affect stormwater discharges from the Project Site and identifies best management practices (BMPs) related to stormwater runoff. As such, implementation of Mitigation Measures HYD- 1 and HYD-2 will ensure impacts remain *less than significant with mitigation.*

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

Less than Significant Impact: Water services will be provided by Cal Water, Visalia District, upon development. The District currently produces about 27 million gallons of local groundwater per day from 75 active wells and delivers it to customers through more than 519 miles of pipeline. The District delivers water to residential, commercial, industrial, and governmental customers. Residential customers account for most of the District's service connections and 69 percent of its water uses. Non-residential water uses account for 28 percent of total demand, while distribution system losses account for 3 percent. The system produced 30,152 acre-feet (AF) of groundwater in 2020. The available water supply is expected to supply the projected population based on the General Plan land uses. The system has a capacity to pump 100,829 acre-feet per year (AFY), all from groundwater. The projected demand is expected to 35,276 AF in 2030, 38,310 AF in 2035, and 41,258 AF in 2040.

Using average per-person water use in Visalia (183 gallons; 2020 Urban Water Management Plan) and the average household size in Visalia (2.99 persons; US Census

Bureau), water demand for the proposed 225-unit residential development is estimated to be approximately 122,566 gallons of water daily, or about 137-acre feet per year. With an expected increase of 5,124 AF from 2020 to 2030, there will be enough water supply for the proposed project. The most water-intensive aspect of the Project (Low-Density Residential homes) is consistent with the City's General Plan land use designation. As such, the Project would not affect groundwater supplies beyond what has already been analyzed in the most current General Plan EIR or Urban Water Management Plan.

The Project would result in nearly full development of the site, which would convert approximately 59.13 acres from pervious surfaces to impervious surfaces. However, this would not significantly interfere with groundwater recharge because all stormwaters would be collected and diverted to a new stormwater basin located on the southwest area of the Site for groundwater recharge. Because the addition of impervious surfaces would not interfere substantially with groundwater recharge and the Project would not utilize groundwater resources beyond what has been previously analyzed in the Visalia Planning Area General Plan EIR or the Urban Water Management Plan, the impact would be *less than significant.*

c) Would the Project substantially alter the existing drainage pattern of the Site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner, which would:

i. Result in substantial erosion or siltation on- or off-site?

Less than Significant with Mitigation: The proposed Project would result in the addition of impervious surfaces and alter existing drainage patterns on the 59.13-acre Project Site which would have the potential to result in erosion or siltation on- or off-site. The disturbance of soils during construction could cause erosion, resulting in temporary construction impacts. However, this impact would be appropriately mitigated through implementation of a Stormwater Pollution Prevention Plan (SWPPP) which include mandated erosion control measures, which are developed to prevent significant impacts related to erosion caused by runoff during construction (Mitigation Measure HYD-1). The Project proponent will also be required to prepare drainage plans (Mitigation Measure HYD-2) and a Development Maintenance Manual (Mitigation Measure HYD-3) to ensure that existing drainage patterns are maintained during Project operations and that the Project would not result in substantial erosion or siltation on- or off-site. The impact is *less than significant with implementation of these mitigation measures.*

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Less than Significant with Mitigation: The Project would result in the addition of impervious surfaces on the 59.13-acre Project Site which would have the potential to increase surface

runoff resulting in flooding on- or off-site. This impact would be appropriately mitigated through implementation of Mitigation Measure HYD-2, which requires the Project to submit drainage plans to the City Engineer prior to the issuance of grading permits. The drainage plans will include BMPs to ensure runoff from the Project will not result in flooding on- or off-site. Therefore, impacts are *less than significant with mitigation.*

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?

Less than Significant with Mitigation: The proposed Project would result in the addition of impervious surfaces and alter existing drainage patterns on the 59.13-acre Project Site which would have the potential to impact existing stormwater drainage systems or provide additional sources of polluted runoff. The Project would contain a storm drainage basin to collect all runoff from the site. The disturbance of soils during construction could cause erosion, resulting in temporary construction impacts. However, this impact would be appropriately mitigated through implementation of a Stormwater Pollution Prevention Plan (SWPPP) which include mandated erosion control measures, which are developed to prevent significant impacts related to erosion caused by runoff during construction (Mitigation Measure HYD-1). During Project operations, the proposed impervious surfaces, including roads, building pads, and parking areas, would collect automobile derived pollutants such as oils, greases, rubber, and heavy metals. This could contribute to point source and non-point source pollution if these pollutants were transported into waterways during storm events. The Project proponent will be required to prepare drainage plans (Mitigation Measure HYD-2) and a Development Maintenance Manual (Mitigation Measure HYD-3) to ensure that the Project would not overwhelm the planned stormwater drainage basin or result in discharges of polluted runoff into local waterways. The impact is *less than significant with implementation of these mitigation measures.*

iv. Impede or redirect flood flows?

Less than Significant with Mitigation: The Project Site is generally flat and no significant grading or leveling will be required. The proposed Project Site is not in proximity to a stream or river and will not alter the course of a stream or river. According to National Flood Hazard mapping by the Federal Emergency Management Agency, the proposed Project is within the “AE” and “X” flood zones. Approximately 15.25 acres, or 62 of the residential units, of the Site are within the AE flood zone. The AE flood zone has a 1% chance of flooding every year. The remainder of the site is within the X flood zone, which has a 0.2% chance of flooding every year.

Following regulations set by the American Society of Civil Engineers, all homes within the AE flood zone will be built following these regulations:

1. The elevation of the lowest floor in a structure must be at or above the zone's base flood elevation (BFE).
2. Enclosed areas below the BFE or lowest floor cannot be used as living spaces.
3. All electrical, plumbing and HVAC equipment must be elevated to or above the area's BFE.

The Project would result in the addition of impervious surfaces on the 59.13-acre Site which could affect drainage and flood patterns. This impact would be appropriately mitigated through implementation of Mitigation Measure HYD-2, which requires the Project to submit drainage plans to the City Engineer prior to the issuance of grading permits. The drainage plans will include BMPs to ensure the Project will not impede or redirect flood flows. Therefore, impacts are *less than significant with mitigation.*

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

No Impact: The proposed Project is located inland and not near an ocean or large body of water, therefore, would not be affected by a tsunami. The proposed Project is in a relatively flat area and would not be impacted by inundation related to mudflow. Since the Project is in an area that is not susceptible to inundation, the Project would not risk the release of pollutants due to Project inundation. As such, there is *no impact.*

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

No Impact: The Project would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. The proposed Project is consistent with the Central Valley RWQCB. The Project will comply with all applicable rules and regulations regarding water quality and groundwater management and there is *no impact.*

Mitigation Measures for Hydrology and Water Quality

Mitigation Measure HYD-1: Prior to the issuance of any construction/grading permit and/or the commencement of any clearing, grading, or excavation, the Applicant shall submit a Notice of Intent (NOI) for discharge from the Project Site to the California SWRCB Storm Water Permit Unit.

• Prior to issuance of grading permits for Phase 1 the Applicant shall submit a copy of the NOI to the City.

• The City shall review noticing documentation prior to approval of the grading permit. City monitoring staff will inspect the Site during construction for compliance.

Mitigation Measure HYD-2: The Applicant shall require the building contractor to prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to the City 45 days prior to the start of work for approval. The contractor is responsible for understanding the State General Permit and instituting the SWPPP during construction. A SWPPP for Site construction shall be developed prior to the initiation of grading and implemented for all construction activity on the Project Site in excess of one (1) acre, or where the area of disturbance is less than one acre but is part of the Project's plan of development that in total disturbs one or more acres. The SWPPP shall identify potential pollutant sources that may affect the quality of discharges to storm water and shall include specific BMPs to control the discharge of material from the site. The following BMP methods shall include, but would not be limited to:

- Dust control measures will be implemented to ensure success of all onsite activities to control fugitive dust;
- A routine monitoring plan will be implemented to ensure success of all onsite erosion and sedimentation control measures;
- Provisional detention basins, straw bales, erosion control blankets, mulching, silt fencing, sand bagging, and soil stabilizers will be used;
- Soil stockpiles and graded slopes will be covered after two weeks of inactivity and 24 hours prior to and during extreme weather conditions; and,
- BMPs will be strictly followed to prevent spills and discharges of pollutants onsite, such as material storage, trash disposal, construction entrances, etc.

Mitigation Measure HYD-3: A Development Maintenance Manual for the Project shall include comprehensive procedures for maintenance and operations of any stormwater facilities to ensure long-term operation and maintenance of post-construction stormwater controls. The maintenance manual shall require that stormwater BMP devices be inspected, cleaned, and maintained in accordance with the manufacturer's maintenance conditions. The manual shall require that devices be cleaned prior to the onset of the rainy season (i.e., mid-October) and immediately after the end of the rainy season (i.e., mid-May). The manual shall also require that all devices be checked after major storm events. The Development Maintenance Manual shall include the following:

- Runoff shall be directed away from trash and loading dock areas;
- Bins shall be lined or otherwise constructed to reduce leaking of liquid wastes;
- Trash and loading dock areas shall be screened or walled to minimize offsite transport of trash; and,
- Impervious berms, trench catch basin, drop inlets, or overflow containment structures nearby docks and trash areas shall be installed to minimize the potential for leaks, spills, or wash down water to enter the drainage system.

XI. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☑
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☑

Environmental Setting

The proposed Project Site is in the Visalia Planning Area, just outside of the city limits. The Site is approximately 3.5 miles southwest of the Visalia downtown. The Site is currently zoned as AE-20 by the County of Tulare but is prezoned for R-1-5 zoning by the City of Visalia after annexation (Figure 3-6). The Site is designated as Low Density Residential by the Visalia General Plan (Figure 3-5). It is located within the Tier 2 UDB. The Project does not need rezoning or General Plan Amendments.

The Site currently contains agriculture uses. The Site is topographically flat and is bounded by agricultural uses to the north and west, and single-family residential to the south and east. The agricultural land to the north and west is designated as Low Density Residential, Medium Density Residential, Neighborhood Commercial, and Parks/Recreation by the Visalia General Plan.

Regulatory Setting

Visalia General Plan

The proposed Project Site is designated as Low Density Residential.

- The Low-Density Residential designation provides single family detached housing. Residential densities are typical of single-family subdivisions. The typical residential density for this designation ranges from two to 10 housing units per gross acre. Buildout is assumed at four units per gross acre.

The 2030 General Plan includes the policies related to land use that correlate to the proposed project:

- *LU-P-19*: Ensure that growth occurs in a compact and concentric fashion by implementing the General Plan's phased growth strategy.

- *LU-P-21*: Allow annexation and development of residential, commercial, and industrial land to occur within the Tier II UDB and the Tier III Urban Growth Boundary consistent with the City's Land Use Diagram, according to the following phasing thresholds:
    - Tier II: The expansion criteria for land in Tier II to become available for annexation and development is that such annexation and development shall only occur if it does not result in excess of a 10-year supply of undeveloped residential land within the new Tier I. This is intended to be consistent with LAFCO policies discouraging residential annexations exceeding a 10-year housing inventory. Thus, the "inner" tier is distinguished from the GPURC-recommended Tier I in that it is not based on projected capacity and need, but rather on a requirement to be able to demonstrate that less than a ten year inventory of residential land exists.
- *LU-P-25*: Provide planning and technical support for the relocation of agricultural operations currently located in the city to compatible locations in the Planning Area or the County.
- *LU-P-28*: Continue to use natural and man-made edges, such as major roadways and waterways within the city's Urban Area Boundary, as urban development limit and growth phasing lines.
- LU-P-47: Establish criteria and standards for pedestrian, bicycle, and vehicle circulation networks within new subdivisions and non-residential development.
- *LU-P-71*: Ensure that noise, traffic, and other potential conflicts that may arise in a mix of commercial and residential uses are mitigated through good site planning, building design, and/or appropriate operational measures.

City of Visalia Zoning Ordinance

The proposed Project Site is prezoned for R-1-5 zoning. The Project will comply with the R-1-5 zoning. The R-1-5 zone has a minimum site area of 5,000 square feet, with a minimum width of 50 feet. The Project has 225 lots with a minimum of 6,480 square feet per lot.

R-1 zoning is intended to provide living area within the city where development is limited to low density concentrations of one-family dwellings where regulations are designed to accomplish the following:

- to promote and encourage a suitable environment for family life;
- to provide space for community facilities needed to compliment urban residential areas and for institutions that require a residential environment;
- to minimize traffic congestion and to avoid an overload of utilities designed to service only low-density residential use.

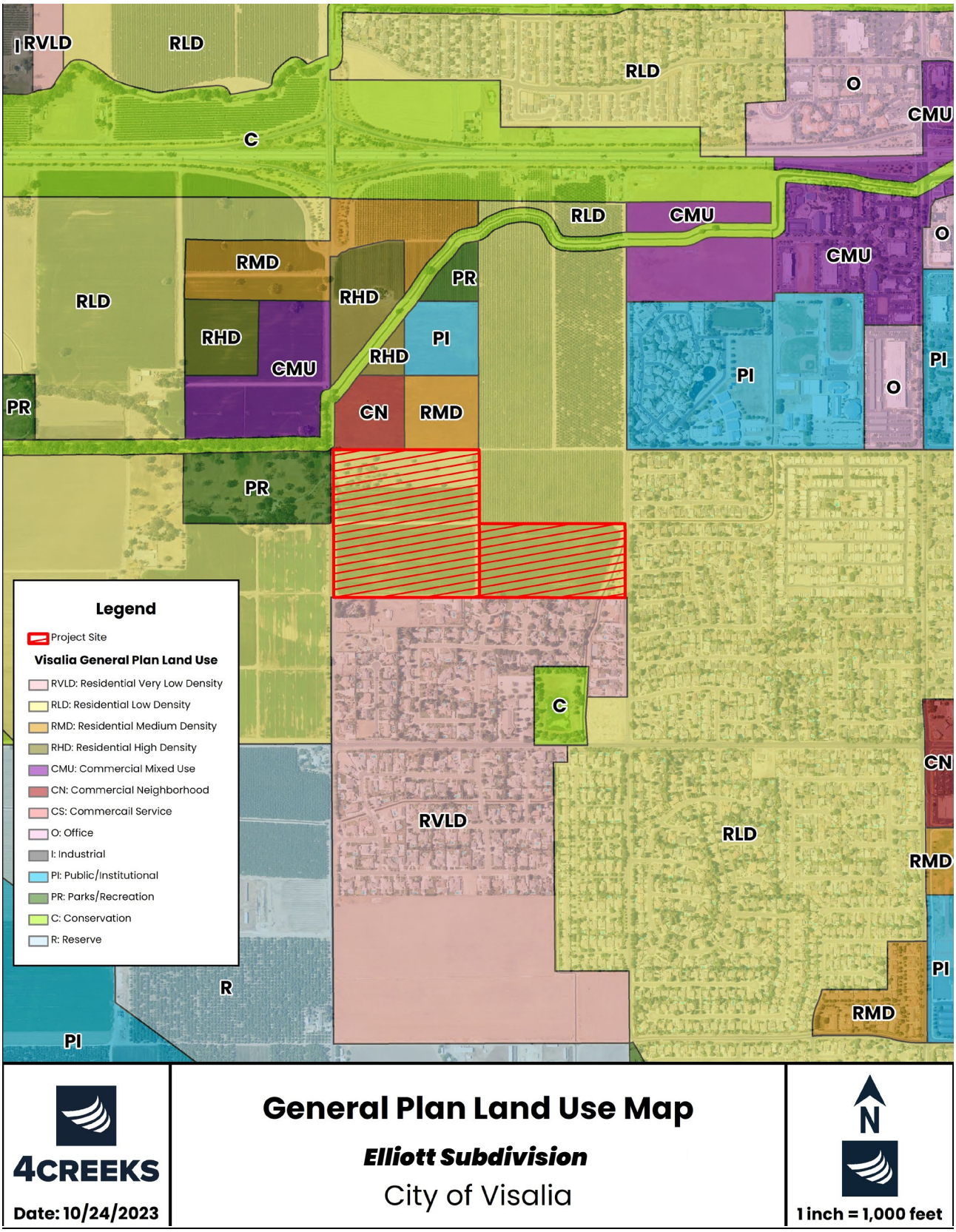


Figure 3-6: General Plan Land Use Designation

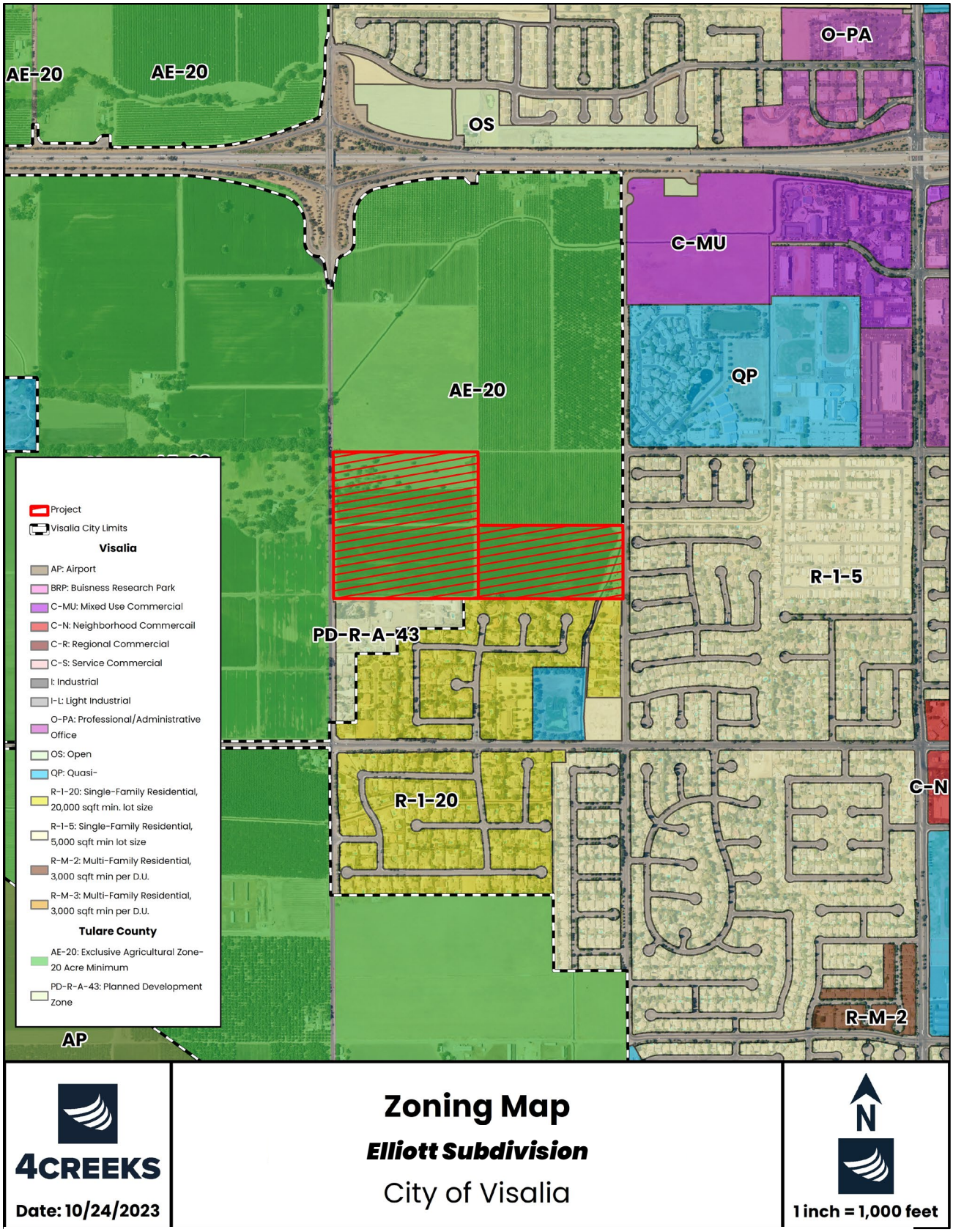


Figure 3-7: Zoning Map

Discussion

a) Would the Project physically divide an established community?

No Impact: The proposed Project will not physically divide an established community. The proposed Project Site is designated for Low Density Residential by the Visalia General Plan and the Project is consistent with this land use designation. The Project would continue to operate as the same designation following Project implementation. There is *no impact.*

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

No Impact: The Project Site is located on land designated for residential use. The proposed Project does not conflict with this land use, or any other policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect. There is *no impact.*

XII. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☑
b) Result in the loss of availability of a locally - important mineral resource recovery Site delineated on a local general plan, specific plan, or other lands use plan?	☐	☐	☐	☑

Environmental Setting

Tulare County contains mineral resources of sand, gravel, and crushed stone, found in alluvial deposits and hard rock quarries. Most of this mining takes place along rivers and at the base of the Sierra foothills. However, the Visalia Planning Area currently contains three former sand and gravel mines, but no currently operating mines and no designated Mineral Resource Zones.

Regulatory Setting

California State Surface Mining and Reclamation Act

The California State Surface Mining and Reclamation Act was adopted in 1975 to regulate surface mining to prevent adverse environmental impacts and to preserve the state's mineral resources. The Act is enforced by the California Department of Conservation's Division of Mine Reclamation.

Discussion

a) Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact: The Project Site has no known mineral resources that would be of a value to the region and the residents of the state, therefore the proposed Project would not result in the loss of impede the mining of regionally or locally important mineral resources. There is *no impact.*

b) Would the Project result in the loss of availability of a locally - important mineral resource recovery Site delineated on a local general plan, specific plan, or other lands use plan?

No Impact: There are no known mineral resources of importance to the region and the Project Site is not designated under the City's or County's General Plan as an important mineral resource recovery site. For that reason, the proposed Project would not result in the loss of availability of known regionally or locally important mineral resources. There is *no impact.*

XIII. NOISE

Would the Project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Generation of a substantial temporary or permeant increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☑	☐
b) Generation of excessive ground-borne vibration or groundborne noise levels?	☐	☐	☑	☐
c) For a Project located within the vicinity of a private airstrip or, an airport land use plan or, where such a plan has not been adopted, within two miles of public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	☐	☐	☑	☐

Environmental Setting

Noise is often described as unwanted sound. Sound is the variation in air pressure that the human ear can detect. If the pressure variations occur at least 20 times per second, they can be detected by the human ear. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second, called Hertz (Hz).

Ambient noise is the "background" noise of an environment. Ambient noise levels on the proposed Project Site are primarily due to agricultural activities and traffic. Construction activities usually result in an increase in sound above ambient noise levels.

Vibration is seismic waves that radiate along the surface of the earth and downward into the earth. The operation of heavy construction equipment, particularly pile driving and other impacts devices such as pavement breakers create this vibration.

Sensitive Receptors

Noise level allowances for various types of land uses reflect the varying noise sensitivities associated with those uses. Residences, hotels/motels, hospitals, schools, and libraries are some of the most sensitive land uses to noise intrusion and therefore have more stringent noise level allowances than most commercial or agricultural uses that are not subject to impacts

such as sleep disturbance. The nearest sensitive receptors are the homes to the south and east of the Site.

Regulatory Setting

City of Visalia Noise Ordinance

The City of Visalia Noise Ordinance provides noise level standards for land use compatibility. Exterior and interior noise levels may not exceed any of the categorical noise level standards shown in Table 3-14. The standards are shown in A-weighted decibels (dBA). For Single Family Residential, the exterior noise during the daytime is to be below 70 dBA, and the indoor noise during the daytime is to be below 55 dBA.

Category	*Cumulative number of minutes in any one hour time period*	*Evening and daytime (6:00 a.m. to 7:00 p.m.)*	*Nighttime (7:00 p.m. to 6:00 a.m.)*
Exterior Levels			
1	30	50	45
2	15	55	50
3	5	60	55
4	1	65	60
5	0	70	65
Interior Levels			
1	5	45	35
2	1	50	40
3	0	55	45

Table 3-14: City of Visalia Noise Standards. Source: City of Visalia Noise Ordinance

City of Visalia General Plan

The current noise element of the City's General Plan establishes goals and policies intended to limit community exposure to excessive noise levels. Visalia's current General Plan identifies noise sources such as roadways, rails, and airports within the city and includes land use compatibility guidelines.

- *N-P-3*: Establish performance standards for noise reduction for new housing that may be exposed to community noise levels above 65 dB DNL/CNEL, as shown on the Noise Contour Maps, based on the target acceptable noise levels for outdoor activity levels and interior spaces in Tables 8-2 and 8-3. Noise mitigation measures that may be considered to achieve these noise level targets include but are not limited to the following:
    - Construct façades with substantial weight and insulation;
    - Use sound-rated windows for primary sleeping and activity areas;
    - Use sound-rated doors for all exterior entries at primary sleeping and activity areas;

- Use minimum setbacks and exterior barriers;
- Use acoustic baffling of vents for chimneys, attics, and gable ends;
- Install a mechanical ventilation system that provides fresh air under closed window conditions.

Discussion

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

Less than Significant Impact: Project construction is anticipated to last approximately 66 months and will involve temporary noise sources in the vicinity of the project. The average noise levels generated by construction equipment that will likely be used in the proposed Project are provided in Table 3-15.

The nearest residence and sensitive receptor are the single-family homes to the south and east. The City requires that mitigation measures be implemented if noise levels exceed 70 dB in sensitive outdoor areas or if interior noise levels exceed 55 dB. As shown in Figure 3-7, it was found that a residence must be at least 250 feet from construction in the exterior and 100 feet from construction in the interior to avoid noise levels exceeding these thresholds.

With the Project bordering another residential community, a noise disturbance is unavoidable. However, the construction would comply with Visalia Municipal Code Chapter 8.36 to ensure that the construction noise impacts would be less than significant. Measures such as maintaining minimum setback distances between construction equipment and receptors, only having construction during weekday daytime hours, and noise barriers would be implemented to avoid significant construction noise impacts.

Long term noise levels resulting from the Project would be produced by single family residential homes, which are not normally associated with high operational noise levels. Because noise generated during Project construction would be intermittent, short term, and would not exceed the thresholds established by the Visalia Noise Ordinance for sensitive receptors and the Project does not propose uses that would typically generate high noise levels, the impact is *less than significant*.

Type of Equipment	Exterior Lmax at 50 feet (dBA)
Tractors	84
Loaders	80
Backhoes	80
Excavators	85
Generator Sets	82
Air Compressors	80
Rubber Tired Dozers	85
Forklifts	75
Welders	73
Graders	85
Scrapers	85
Cranes	85
Paving Equipment	85
Rollers	85

Table 3-15. Noise levels of noise-generating construction equipment at various distances. Source: FHA Construction Noise Handbook (dBA at 50 feet). Noise levels beyond 50 feet were estimated using the inverse square law based on given values for dBA at 50 feet

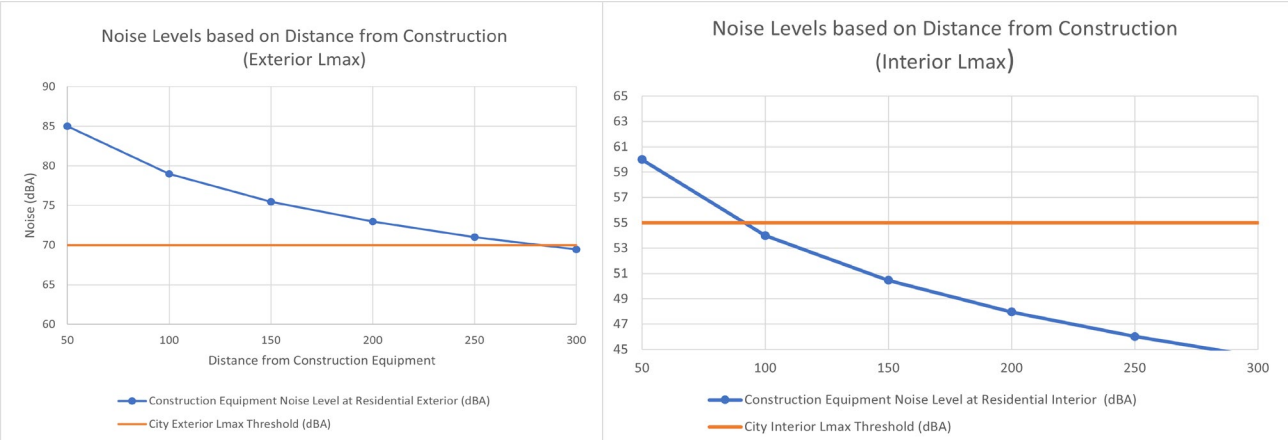


Figure 3-8: Construction Related Noise Levels Based on Distance from Construction Equipment. Interior Noise=Assume 25 dB Exterior to Interior Noise Reduction

b) Would the Project result in generation of excessive ground-borne vibration or groundborne noise levels?

Less than Significant Impact: Although Project operations would not include uses or activities that typically generate excessive groundborne vibration or groundborne noise levels, Project construction could introduce temporary groundborne vibration to the Project Site and the surrounding area. Sources that may produce perceptible vibrations are provided in Table 3-16.

Equipment	Peak Particle Velocity (inches/second) at 25 feet	Approximate Vibration Level (LV) at 25 feet
Pile driver (impact)	1.518 (upper range)/0.644 (typical)	112/104
Pile driver (sonic)	0.734 (upper range)/0.170 (typical)	105/93
Clam shovel drop (slurry wall)	0.202	94
Hydromill (slurry wall)	0.008 in soil/0.017 in rock	66/75
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

Table 3-16. Vibration Levels Generated by Construction Equipment. Source: Transit Noise and Vibration Impact Assessment, Federal Transit Administration, September 2018.

The primary source of vibration during Project construction would likely be from a bulldozer (tractor), which would generate 0.089 inch per second PPV at 25 feet with an approximate vibration level of 87 VdB. Vibration from the bulldozer would be intermittent and not a source of continual vibration. There are no adopted City standards or thresholds of significance for vibration. The evaluation of potential impacts related to construction vibration levels is based on the published data in the 2018 FTA Guidelines. At 25 feet, the buildings most susceptible to vibration could be impacted at .12 inch/second. Because vibrations generated by Project construction would not exceed 0.12 inch/second, the impact is *less than significant.*

c) For a Project located within the vicinity of a private airstrip or, an airport land use plan or, where such a plan has not been adopted, within two miles of public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?

Less than Significant Impact: The proposed Project is located approximately .95 miles northeast of the nearest public airport (Visalia Municipal Airport). However, according to the Airport Master plan, the Project Site would not be impacted by the airport. Noise contours developed for 2019 show that the airport would produce less than 65 dB. All land uses located outside of the 65 dB contours are considered less than significant. Implementation of the proposed Project would not result in a safety hazard for people residing or working in the Project area. There is a *less than significant impact.*

XIV. POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☑
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

Environmental Setting

The United States Census Bureau estimated the population in the City of Visalia to be 143,966 as of July 2022. This is an increase from the 2010 Census, which counted the population in the City of Visalia to be 124,442. Factors that influence population growth in Visalia include job availability, housing availability, and the capacity of proposed and existing infrastructure.

Regulatory Setting

The City of Visalia population size is controlled by the development code and Housing Element of the General Plan. These documents regulate the number of dwelling units per acre allowed on various land uses and establish minimum and maximum lot sizes, which has a direct impact on the City's population size.

City of Visalia 2030 General Plan Housing Element

The 2030 General Plan includes the policies related to population and housing that correlate to the proposed project:

- *LU-P-50*: Provide development standards to ensure residential development is not negatively affected by adjacent non-residential land uses.
- *LU-P-71*: Ensure that noise, traffic, and other potential conflicts that may arise in a mix of commercial and residential uses are mitigated through good Site planning, building design, and/or appropriate operational measures.

Discussion

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

No Impact: The United States Census Bureau stated the population in the City of Visalia to be 143,966 as of July 2022. The Project proposes to construct 225 new single family residential units. The US Census Bureau states that the Visalia's average household size is 3.05 persons. Based on this average household size, the anticipated population increase because of the proposed Project is 683 persons. The construction of housing at this location would not be unplanned, as the Visalia General Plan designated the proposed Project Site for Low Density Residential. Additionally, the City is planning for more businesses, services, and infrastructure to accommodate the new population. Overall, the Project will not constitute an unplanned increase in growth and population. There is *no impact.*

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

No Impact: There Project would not displace any existing housing. Overall, this will increase the amount of available housing in the community. There is *No Impact*.

XV. PUBLIC SERVICES

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable serve ratios, response times of other performance objectives for any of the public services:				
a. Fire protection?	☐	☐	☑	☐
b. Police protection?	☐	☐	☑	☐
c. Schools?	☐	☐	☑	☐
d. Parks?	☐	☐	☑	☐
e. Other public facilities?	☐	☐	☑	☐

Environmental Setting

Fire

Visalia and Project Site is served by The Visalia Fire Department (VFD), which operates 5 fire stations within the City of Visalia. The VFD will continue to provide fire protection services to the proposed Project Site following Project implementation. VFD Fire Station #53 is the nearest fire station to the site, approximately .7 miles to the southeast.

Police

Law enforcement services are provided to the Project Site via The Visalia Police Department (VPD). The VPD will continue to provide police protection services to the proposed Project Site following Project implementation. The VPD headquarters are located approximately 3.4 miles northeast of the proposed Project site. VPD Substation District 2 is located approximately 2.6 miles southeast of the Project Site.

Schools

The proposed Project Site is located within the Visalia Unified School District (VUSD) from Kindergarten through 12th Grade. The District includes 25 elementary schools, four middle schools, four traditional high schools, and alternative education programs. The nearest schools are located approximately .2 miles northeast (Central Valley Christian Schools) and .65 miles southeast (El Diamonte High School).

Regulatory Setting

California Fire Code

The California Fire Code (Title 24, Part 9 of the California Code of Regulations) establishes regulations to safeguard against hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout the State of California. The Fire Code includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas.

City of Visalia Fire Department Plan Check and Hydrant Ordinance

Visalia's requirements for new construction include provisions for the Fire Department to review building and Site plans prior to the issuance of any permit. The Fire Department ensures that proposed projects will be adequately served by water, and accessible to emergency vehicles. The Department also enforces the City's Hydrant Ordinance, which states that subdividers are responsible for the installation of water mains and hydrants and determines the minimum spacing for fire hydrants. Street dimensions are scrutinized to ensure that space will be preserved for ladder trucks to be stabilized, and for emergency vehicles to turn around. Basic requirements in the City's subdivision ordinance include 52-foot minimum right-of-way widths and a 53-foot turning radius for cul-de-sacs.

Discussion

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

a. Fire protection?

Less than Significant Impact: The VFD will provide fire protection services to the proposed development. The closest fire station is Station #53, located .7 miles southeast of the Project Site at 5025 W Walnut Ave. The Fire Department uses the National Fire Protection Association (NFPA) standard for fire protection services, which requires 1 responder per 1,000 residents. The addition of 225 residential units will increase the demand for fire protection services. The City currently has .48 responders per 1,000 residents. By 2030, the city expects growth up to a total of 210,000 residents. This would result in .32 responders per 1,000 residents. This will require an additional 85

on-duty responders by 2030 to meet 1 responder per 1,000 residents, or 41 new responders to meet the current ratio. The existing fire stations are placed to provide optimum service, however new stations will be needed to support the expanding city. To support the expansion of fire services, a development impact fee will be paid for fire services.

The timing of when new fire service facilities would be required or details about size and location cannot be known until such facilities are planned and proposed, and any attempt to analyze impacts to a potential future facility would be speculative. As new or expanded fire service facilities become necessary, construction or expansion projects would be subject to their own separate CEQA review in order to identify and mitigate any potential environmental impacts. Therefore, the impact is *less than significant.*

b. Police protection?

Less than Significant Impact: The VPD will provide services to the proposed development. The VPD headquarters are located approximately 3.4 miles northeast of the proposed Project Site. VPD Substation District 2 is located approximately 2.6 miles southeast of the Project Site. The development would increase the demand for police service with the addition of 225 residential units. The VPD does not establish service standards either in terms of officers per thousand residents or in incident response time but plans to maintain the current ratio of 1.7 officers per 1,000 residents. The Department has 143 sworn officers working out of two districts, as well as seven reserve sworn officers, 64 civilian officers, and 65 volunteers. The demand for additional officers and equipment will be compensated for by the development impact fee.

The timing of when new police service facilities would be required or details about size and location cannot be known until such facilities are planned and proposed, and any attempt to analyze impacts to a potential future facility would be speculative. As new or expanded police service facilities become necessary, construction or expansion projects would be subject to their own separate CEQA review in order to identify and mitigate any potential environmental impacts. Therefore, the impact is *less than significant*.

c. Schools?

Less than Significant Impact: The proposed Project is within the (VUSD) from Kindergarten through 12th Grade. The District includes 25 elementary schools, four middle schools, four traditional high schools, and alternative education programs. The City of Visalia predicts the generation rates shown below in Table 3-17.

School Type	Single Family Generation Rate	Students
Elementary School	0.448	101
Middle School	.092	21
High School	.156	35

Table 3-17: Student Generation Rates, City of Visalia General Plan

Since the proposed Project includes the addition of 225 single family homes, the number of students will increase by approximately 157. The proposed Project Site is located within the Visalia Planning Area and therefore, growth associated with the Project has been planned and expected. In addition to the goals and policies of the City's General Plan, future development is required to pay development impact fees to the school districts at the time of building permit issuance. These impact fees are used by the school districts to maintain existing and develop new facilities, as needed. Therefore, the impact is *less than significant.*

d. Parks?

Less than Significant Impact: The addition of 225 new residential units would result in additional usage of existing parks. Parks within a one-mile radius that would service the proposed development include Sunset Park and Constitution Park, as well as Plaza Park slightly over a mile away. The Project plans to include a 4.15-acre park in the southeast corner of the Site. Since the proposed Project would contribute its fair share to parks facilities as well as any development fees, the impact is *less than significant.*

e. Other public facilities?

Less than Significant Impact: The proposed Project would be required to pay a development impact fee for Public Facilities, including for the civic center, corporation yard, and libraries. Additional development fees will be paid to offset the increased demand for public services related to transportation, water, wastewater, groundwater recharge, storm drainage, and general governmental services. Fees for transportation, water, wastewater, and general government are based on building square footage and will be calculated prior to the issuance of building permits. Fees for groundwater recharge and storm drainage are based on site acreage. While the payment of development fees could result in the construction of new or altered public service facilities, no specific projects have been identified at this time. As new or expanded public service facilities become necessary, construction or expansion projects would be subject to their own separate CEQA review in order to identify and mitigate any potential environmental impacts. Therefore, the impact is *less than significant*.

XVI. PARKS AND RECREATION

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

Environmental Setting

There are 40 park facilities totaling 678 acres within the Visalia Planning Area. The City of Visalia provides diverse types of parks and open space facilities, or park types, to meet park and open space recreation needs of the community. Park types include:

- Pocket Parks: A park typically between one-half and two acres in size intended to serve the needs of a specific neighborhood within a half-mile radius. There are currently 17 pocket parks in Visalia.
- Neighborhood Parks: A park typically 2 to 5 acres in size that provides basic recreation activities for one or more neighborhoods. There are currently 19 neighborhood parks in Visalia.
- Community Parks: A park typically ranging from 5 to 12 acres in size or larger, which are intended to serve the recreational needs of a larger area of the city. There are currently 4 community parks in Visalia.
- Large City Parks: A park generally larger than 40 acres in size intended to serve the recreational needs of all city residents and to create opportunities for contact with the natural environment. These parks may include a concentration of sports fields, golf courses, and areas for picnicking and passive enjoyment of open space. There are currently 2 large city parks in Visalia.
- Natural Corridors and Greenways: A network of greenways of varying size intended to serve the recreational needs of city residents. These parks may include facilities such

as bikeways, walkways, and riding trails, and are primarily developed along the city's waterways. There is a total of 196 acres of natural corridors and greenways.

The Visalia Planning Area additionally contains two county parks and a public golf course. The golf course is not counted to the total amount of parkland. The Visalia General Plan states a total parkland standard of five acres of city parkland per 1,000 residents.

Regulatory Setting

Quimby Act

The 1975 Quimby Act (California Government Code section 66477) authorized cities and counties to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. The Act states that the dedication requirement of parkland can be a minimum of three acres per thousand residents or more and up to five acres per thousand residents if the existing ratio is greater than the minimum standard. Revenues generated through in-lieu fees collected and the Quimby Act cannot be used for the operation and maintenance of park facilities. In 1982, the Act was substantially amended. The amendments further defined acceptable uses of or restrictions on Quimby funds, provided acreage/population standards and formulas for determining the exaction, and indicated that the exactions must be closely tied (nexus) to a project's impacts as identified through studies required by the California Environmental Quality Act (CEQA).

City of Visalia General Plan

The 2030 General Plan includes the policies related to parks and recreation that correlate to the proposed project:

- *PSCU-P-2*: Strive to achieve and maintain a citywide standard of at least five acres of neighborhood and community parks per 1,000 residents.
- *PSCU-P-7*: Promote development of small pocket parks or play lots dispersed throughout new neighborhoods and in existing neighborhoods, where needed, on a voluntary basis in coordination with new infill development, consistent with the following planning guidelines:
    - Size: 0.5 to 2 acres; and
    - Facilities: the specific features of pocket parks should address the anticipated needs of nearby residents and/or workers. In a residential environment, the needs of small children and seniors should be emphasized. In mixed-use or commercial areas, lunchtime use by office workers and shoppers should be facilitated.

- *PSCU-P-10*: Adopt and implement parkland dedication requirements for all subdivisions, consistent with the Quimby Act and Policy PSCU-P-2. This requirement will be integrated with the City's Park Acquisition Development Fee Program.

Discussion

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

Less than Significant Impact: The proposed Project is anticipated to increase the Visalia population by approximately 683 residents. Based on the desired parkland ratio of five acres per 1000 residents identified in the Visalia General Plan, the Project would need to provide approximately 3.42 acres of parkland/open space. The Project has 4.15 acres of parkland, more than the required amount. The impact is *less than significant.*

b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact: The proposed Project does not include any recreational facilities or require the construction or expansion of any recreational facilities that would have an adverse physical effect on the environment. There is *no impact.*

XVII. TRANSPORTATION

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☑	☐	☐
b) Conflict or be inconsistent with the CEQA guidelines Section 15064.3, Subdivision (b)?	☐	☐	☑	☐
d) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☑
e) Result in inadequate emergency access?	☐	☐	☐	☑

Environmental Setting

Vehicular Access

Vehicular access to the Project is available via South Roeben Street on the East side of the site, and South Shirk Road (Road 92) on the West side of the site. The Project includes a network of local streets that provide full access to the Project site.

Parking

Each Single-Family home will contain at least a two-car garage, as well as room for two more cars in the driveway. Street parking will be limited due to reduced street widths. During construction, workers will utilize existing parking areas and/or temporary construction staging areas for parking vehicles and equipment.

Regulatory Setting

CEQA Guidelines Section 15064.3, Subdivision (b): Criteria for Analyzing Transportation Impacts

(1) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact.

Projects that decrease vehicle miles traveled in the Project area compared to existing conditions should be considered to have a less than significant transportation impact.

(2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, a lead agency may tier from that analysis as provided in Section 15152.

(3) Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular Project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.

(4) Methodology. A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.

City of Visalia Standard Specifications

The City of Visalia Standard Specifications are developed and enforced by the City of Visalia Public Works Department to guide the development and maintenance of streets within the City. The cross-section drawings contained in the City's Standard Specifications dictate the development of roads within the City.

City of Visalia General Plan:

The 2030 General Plan includes the policies related to transportation that correlate to the proposed project:

- *T-P-3*: Design and build future roadways that complement and enhance the existing network, as shown on the General Plan Circulation Diagram, to ensure that each new and existing roadway continues to function as intended.
- *T-P-5*: Take advantage of opportunities to consolidate driveways, access points, and curb cuts along existing arterials when a change in development or a change in intensity occurs or when traffic operation or safety warrants.
- *T-P-10*: Manage local residential streets to limit average daily vehicle volumes to 1,500 or less and maintain average vehicle speeds between 15 and 25 miles per hour.

- *T-P-22*: Require all residential subdivisions to be designed to discourage use of local streets as a bypass to congested arterials, and when feasible, require access to residential development to be from collector streets.
- *T-P-23*: Require that all new developments provide right-of-way, which may be dedicated or purchased, and improvements (including necessary grading, installation of curbs, gutters, sidewalks, parkway/landscape strips, bike, and parking lanes) other city street design standards. Design standards will be updated following General Plan adoption.
- *T-P-24*: Require that proposed developments make necessary off-Site improvements if the location and traffic generation of a proposed development will result in congestion on major streets or failure to meet LOS D during peak periods or if it creates safety hazards.
- *T-P-26*: Require that future commercial developments or modifications to existing developments be designed with limited points of automobile ingress and egress, including shared access, onto major streets.
- *T-P-40*: Develop a community-wide trail system along selected planning area waterways, consistent with the Waterways and Trails Master Plan and General Plan diagrams.

Discussion

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

Less than Significant Impact with Mitigation Incorporated: The existing General Plan established LOS "D" as the minimum acceptable LOS standard on city facilities. A traffic study prepared for the Project (Appendix D) concluded that the Project would not result in a significant increase in vehicle or truck trips.

Table 3-18 shows the estimated vehicle trips generated for the proposed project. The proposed Project is expected to generate approximately 2,119 daily trips, including 155 AM peak hour trips (39 inbound, 116 outbound) and 212 PM peak hour trips (134 inbound, 78 outbound).

	Total Units	Daily*	AM Peak Hour*				PM Peak Hour*			
		Trips	% In: Out	In	Out	Total	% In: Out	In	Out	Total
Single-Family Detached Housing (ITE Code 210)	224	2119	25:75	39	116	155	63:37	134	78	212

Table 3-18: Proposed Project Trip Generation

Based on the number of peak hour trips calculated (between 200-499 residential trips in the peak hour), the study falls into Category II traffic impact analysis. Category II requires all signalized and major intersections be studied within a 1/2-mile radius of the Project.

Following are the intersections included in the study:

- Road 92/Shirk Street & State Route 198 Eastbound Ramps
- Road 92/Shirk Street & State Route 198 Westbound Ramps
- Road 92/Shirk Street & Tulare Avenue
- Road 92/Shirk Street & Walnut Avenue
- Roeben Street & Tulare Avenue
- Roeben Street & Walnut Avenue
- Street 3 and Tulare Avenue
- Street 6 and Tulare Avenue
- Avenue 4 and Shirk Street
- Avenue 6 and Roeben Street

In accordance with Category II requirements, analysis will be provided for the following scenarios:

- Existing: The current traffic conditions without any modifications or the proposed project.
- 2028 Cumulative (Opening Year): Projected traffic conditions for the year 2028 without the proposed project.
- 2028 Cumulative + Project: Projected traffic conditions for the year 2028 including the traffic generated by the proposed project.
- 2028 Cumulative + Project with Mitigation: Projected traffic conditions for the year 2028 including the traffic generated by the proposed project and any mitigation measures applied.
- 2033 Cumulative: Projected traffic conditions for the year 2033 without the proposed project.
- 2033 Cumulative + Project: Projected traffic conditions for the year 2033 including the traffic generated by the proposed project
- 2033 Cumulative + Project with Mitigation: Projected traffic conditions for the year 2033 including the traffic generated by the proposed project and any mitigation measures applied.

Based on the results of the Level of Service (LOS) analysis and the eight-hour vehicular volume warrants, and the City of Visalia thresholds for mitigation, it is recommended that signals be constructed at three intersections in order to operate at an acceptable level of service by the year 2033.

- Shirk Street and SR 198 WB Ramps
- Shirk Street and SR 138 EB Ramps
- Shirk Street and Walnut Avenue

The Project will pay its fair share of traffic impact fees to support payment of the signals. The Project will incorporate mitigation measure TRAN-1, which is constructing signals at Shirk Street and SR 198 WB Ramps, Shirk Street and SR 138 EB Ramps, and Shirk Street and Walnut Avenue by the year 2028 to operate at an acceptable level of service by the year 2033, with the Project contributing its fair share of traffic impact fees. There is *a less than significant impact with mitigation incorporated.*

b) Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b)?

Less than Significant Impact: The City of Visalia's *VMT Thresholds and Implementation Guidelines* (Guidelines) document, prepared by LSA and adopted on March 15, 2021, provides guidance for determining a project's transportation impacts based on vehicle miles traveled (VMT). The Guidelines acknowledge that certain activities and projects may result in a reduction in VMT and GHG emissions and, therefore, a less than significant impact to transportation and circulation. A variety of projects may be screened out of a complicated VMT analysis due to the presumption described in the TA regarding the occurrence of less than significant impacts.

The Guidelines state: *"Residential, office, or mixed-use projects that are consistent with the City's General Plan and located within green-colored VMT zones, as shown in Figures 6, 7, and 8, respectively, are presumed to have similar low VMT profiles and could be screened out from further VMT analysis."*

The State of California Governor's Office of Planning and Research document entitled Technical Advisory on Evaluating Transportation Impacts in CEQA dated December 2018 (OPR Guidelines) provides the reasoning for the screen out. The OPR Guidelines state:

"Residential and office projects that are located in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT. Maps created with VMT data, for example from a travel survey or a travel demand model, can illustrate areas that are currently below the threshold VMT. Because new development in such locations would likely result in a similar level of VMT, such maps may be used to screen out residential and office projects from needing to prepare a detailed VMT analysis."

A Traffic Study for the proposed Project was prepared by Ruettgers & Schuler, and an evaluation of project vehicle miles traveled (VMT) was conducted based on VMT analysis guidelines adopted by the City of Visalia. The guidelines provide "screening thresholds" for identifying whether a land use project should be expected to result in a less than significant transportation impact under CEQA. Projects meeting one or more of these criteria would not be required to undergo a detailed VMT analysis. One of the screening criteria is "Project Location Screening". Development projects that are located in a low VMT zone would be expected to generate similar low vehicle miles travelled. Using the City of Visalia online VMT screening application, the project was determined to be located in TAZ 1358. Utilizing the "VMT Per Capita" metric due to residential project, the average VMT was determined to be 8.61 miles per capita. The average VMT per service population for Tulare County is 11.9. Therefore, the project is determined to be in a low VMT zone and the project would be expected to result in a *less than significant* transportation impact under CEQA. (See Figures 3-8 and 3-9).

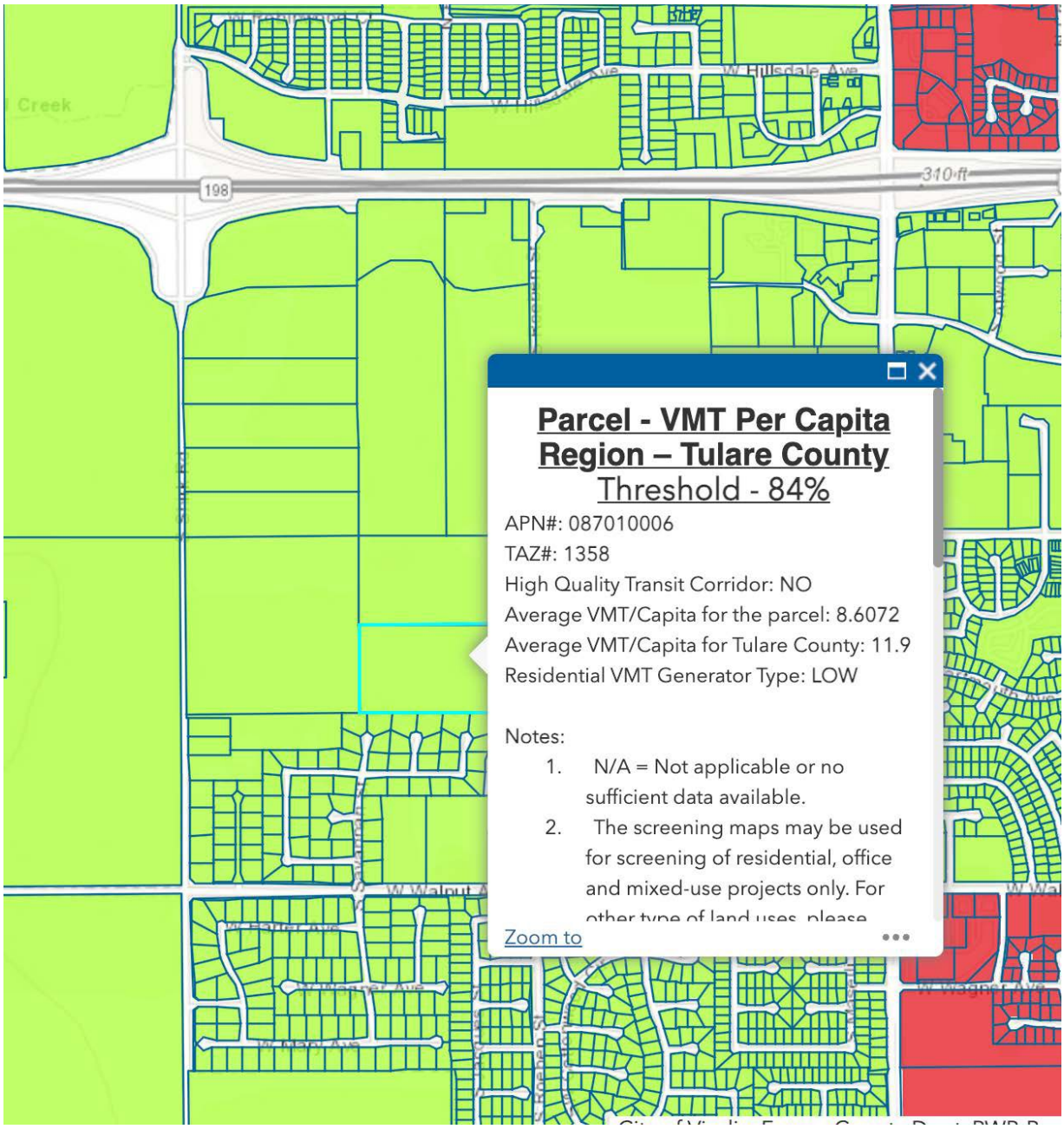


Figure 3-9: Visalia Existing VMT per Capita – First Parcel

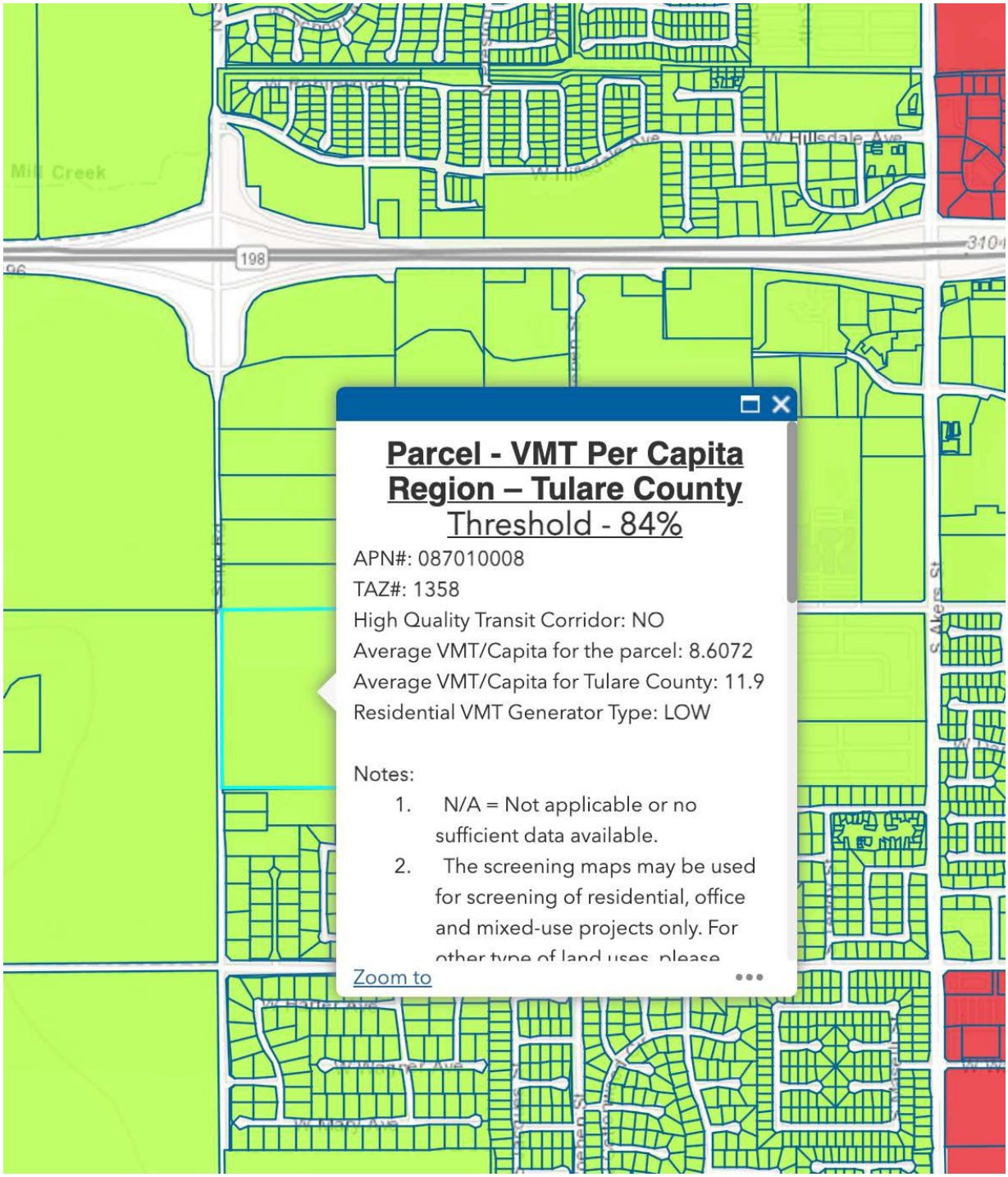


Figure 3-10: Visalia Existing VMT per Capita - Second Parcel

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

No Impact: The Project does not propose any incompatible uses or include any design features that could increase traffic hazards. The Project does include three new vehicle access points on S Roeben Street, W Tulare Avenue, and S Shirk Road. This improvement will be subject to review by the City's engineer to ensure the new access point does not pose any safety risks due to the Project design. The proposed Project would not substantially increase hazards in or around the Project area there is *no impact.*

d) Would the Project result in inadequate emergency access?

No Impact: This Project would not result in inadequate emergency access. Emergency access to the Site would be via S Roeben Street, W Tulare Avenue, and S Shirk Road. During the first phase of construction, the access on S Shirk Road would not be built yet. A network of local roads within the proposed Project property provides full access to all buildings within the development. The Project would have no impact on emergency access.

Mitigation Measures for Impacts to Transportation:

Mitigation Measure TRAN-1: Based on the results of the Level of Service (LOS) analysis and the eight-hour vehicular volume warrants, and the City of Visalia thresholds for mitigation, signals shall be constructed at the following three intersections by 2028 in order to operate at an acceptable level of service by the year 2033:

- Shirk Street and SR 198 WB Ramps
- Shirk Street and SR 138 EB Ramps
- Shirk Street and Walnut Avenue

The Project applicant will pay its fair share of traffic impact fees to support payment of the signals.

XVIII. TRIBAL CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☑	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☑	☐	☐

Environmental Setting

Penutian-speaking Yokuts tribal groups occupied the southern San Joaquin Valley region and much of the nearby Sierra Nevada. Yokuts villages apparently extended up to, but not into, the mouths of the canyons on the northern and western fronts of the Tehachapi Mountains, well into the foothills and lower elevations of the Sierra Nevada on the east, and to the crest of the Temblor Range on the west. The Yokuts are Penutian speakers and are linguistically related to northern occupants of the San Joaquin Valley. The Yokuts settlement pattern was largely consistent, regardless of the specific tribe involved. Winter villages were typically located along lakeshores and major stream courses (as these existed circa AD 1800), with dispersal phase family camps located at elevated spots on the valley floor and near gathering areas in the foothills. Throughout Native California, and Yokuts territory in general, the acorn was a primary dietary component, along with a variety of gathered seeds. Valley tribes augmented this

resource with lacustrine and riverine foods, especially fish and wildfowl. Although population estimates vary and population size was greatly affected by the introduction of Euro-American diseases and social disruption, the Yokuts were one of the largest, most successful groups in Native California. Cook (1978) estimates that the Yokuts region contained 27 percent of the aboriginal population in the state at the time of contact; other estimates are even higher. Many Yokuts people continue to reside in the southern San Joaquin Valley today.

Cultural Resources Record Search

On October 13, 2023, Soar submitted a records search request to the Southern San Joaquin Valley Information Center (SSJVIC) located at the California State University, Bakersfield (Appendix A of the Cultural Resources Assessment). The purpose of this request was to identify any prehistoric or historical resources on or near the Project Site that had been previously recorded within the Project boundary and a 0.5-mile radius of the Project area and identify and review prior cultural resource investigations completed in or near the Project boundary. SSJVIC staff researched historical USGS topographic maps, reports of previous cultural resource investigations, archaeological Site and survey base maps, cultural resource records (DPR forms) as well as listings of the Historic Properties Directory of the Office of Historic Preservation, General Land Office Maps, Archaeological Determinations of Eligibility, and the California Inventory of Historic Resources. The results from the records search indicate two (2) cultural resource studies have been conducted within the Project area. According to the information on file, there is one (1) resource within the Project area. There are two (2) recorded resources within the 0.5-mile record search radius. There were seven (7) reports identified within a 0.5-mile radius of the Project area. There are no recorded tribal cultural resources within the Project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks.

Native American Consultation

The State requires lead agencies to consider the potential effects of proposed projects and consult with California Native American tribes during the local planning process for the purpose of protecting Traditional Tribal Cultural Resources through the California Environmental Quality Act (CEQA) Guidelines. Pursuant to PRC Section 21080.3.1, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe which is either on or eligible for inclusion in the California Historic Register or local historic register, or, the lead agency, at its discretion, and support by substantial evidence, choose to treat the resources as a Tribal Cultural Resources (PRC Section 21074(a) (1-2)).

Additional information may also be available from the California Native American Heritage Commission's Sacred Lands File per PRC Section 5097.96 and the California Historical

Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.

The site contains agricultural uses, vacant land, and an oak grove. If any artifacts are inadvertently discovered during ground-disturbing activities, existing federal, State, and local laws, and regulations as well as the mitigation measures will require construction activities to cease until such artifacts are properly examined and determined not to be of significance by a qualified cultural resource professional.

The California Native American Heritage Commission (NAHC) was contacted by SOAR Environmental Consulting on October 13, 2023, to conduct a Sacred Lands File (SLF) search, and to obtain a list of tribes culturally and geographically affiliated with the Project area. On December 1st, 2023, the NAHC indicated there are no Native American traditional cultural places or sacred sites within or near the Project area. The NAHC provided a list of five (5) Tulare County Native American groups and individuals affiliated with the local tribes. On December 4th, 2023, Ms. Froshour sent letters to all individuals describing the location, and the nature of the project. In each letter, Ms. Froshour included a request for information regarding prehistoric, historic, ethnographic land use, as well as contemporary Native American values. Soar Environmental did not receive comments from the Tulare County Native American groups or affiliated individuals regarding the proposed development at the project location.

Following AB 52, Native American Tribes that could potentially be impacted by the Project were contacted. The Tribes that were formally noticed of this Project were:

- Big Sandy Rancheria of Western Mono Indians
- Dunlap Band of Mono Indians
- Kern Valley Indian Community
- Santa Rosa Rancheria Tachi Yokut Tribe
- Tubatulabals of Kern Valley
- Tule River Indian Tribe
- Wuksache Indian Tribe/Eshom Valley Band

The City did not receive any comments for this project.

Regulatory Setting

Historical Resources

Historical resources are defined by CEQA as resources that are listed in or eligible for the California Register of Historical Resources, resources that are listed in a local historical resource register, or resources that are otherwise determined to be historical under California Public Resources Code Section 21084.1 or California Code of Regulations Section 15064.5. Under these definitions Historical Resources can include archaeological resources, Tribal cultural resources, and Paleontological Resources.

Archaeological Resources

As stated above, archaeological resources may be considered historical resources. If they do not meet the qualifications under the California Public Resources Code 21084.1 or California Code of Regulations Section 15064.5, they are instead determined to be "unique" as defined by the CEQA Statute Section 21083.2. A unique archaeological resource is an artifact, object, or Site that: (1) contains information (for which there is a demonstrable public interest) needed to answer important scientific research questions; (2) has a special and particular quality, such as being the oldest of its type or the best available example of its type; or (3) is directly associated with a scientifically recognized important prehistoric or historic event or person.

Tribal Cultural Resource (TCR)

Tribal Cultural Resources can include Site features, places, cultural landscapes, sacred places, or objects, which are of cultural value to a Tribe. It is either listed on or eligible for the CA Historic Register or a local historic register or determined by the lead agency to be treated as TCR.

Paleontological Resources

For the purposes of this section, "paleontological resources" refers to the fossilized plant and animal remains of prehistoric species. Paleontological Resources are a limited scientific and educational resource and are valued for the information they yield about the history of the earth and its ecology. Fossilized remains, such as bones, teeth, shells, and leaves, are found in geologic deposits (i.e., rock formations). Paleontological resources generally include the geologic formations and localities in which the fossils are collected.

Native American Reserve (NAR)

This designation recognizes tribal trust and reservation lands managed by a Native American Tribe under the United States Department of the Interior's Bureau of Indian Affairs over which the County has no land use jurisdiction. The County encourages adoption of tribal management plans for these areas that consider compatibility and impacts upon adjacent area facilities and plans.

National Historic Preservation Act

The National Historic Preservation Act was adopted in 1966 to preserve historic and archeological sites in the United States. The Act created the National Register of Historic Places, the list of National Historic Landmarks, and the State Historic Preservation offices.

California Historic Register

The California Historic Register was developed as a program to identify, evaluate, register, and protect Historical Resources in California. Historical resources may include, but are not limited to, "any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically or archaeologically significant" (PRC §5020.1[j]). In addition, a resource included in a local register of historical resources or identified as significant in a local

survey conducted in accordance with the state guidelines are also considered historic resources under California Public Resources Code (PRC) Section 5020.1.
According to CEQA guidelines §15064.5 (a)(3), criteria for listing on the California Register of Historical Resources includes the following:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- Is associated with the lives of persons important in our past.
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- Has yielded, or may be likely to yield, information important in prehistory or history.

According to CEQA guidelines §21074 (a)(1), criteria for tribal cultural resources includes the following:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
    - Included or determined to be eligible for inclusion in the California Register of Historical Resources.
    - Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

Protection of cultural resources within California is additionally regulated by PRC §5097.5, which prohibits destruction, defacing, or removal of any historic or prehistoric cultural features on land under the jurisdiction of State or local authorities.

City of Visalia General Plan

The 2030 General Plan includes the policies related to tribal resources that correlate to the proposed project:

- *OSC-P-42*: Establish requirements to avoid potential impacts to sites suspected of being archeologically, paleontologically, or historically significant or of concern, by:
- Requiring a records review for development proposed in areas that are considered archaeologically or paleontologically sensitive;
- Determining the potential effects of development and construction on archaeological or paleontological resources (as required by CEQA);
- Requiring pre-construction surveys and monitoring during any ground disturbance for all development in areas of historical and archaeological sensitivity (defined as areas identified according to the National Historic Preservation Act as part of the Section 106 process); and

- Implementing appropriate measures to avoid the identified impacts, as conditions of Project approval.

Discussion

a) Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

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

Less Than Significant Impact with Mitigation: The Project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources. Based on the results of the records search, no previously recorded tribal cultural resources are located within the Project site. Although no tribal cultural resources were identified, the presence of remains or unanticipated cultural resources under the ground surface is possible. Therefore, Tribes that can potentially be impacted were consulted. The City did not receive any comments for this project. Implementation of Mitigation Measures CUL-1, CUL-2, CUL-3, and CUL-4 will ensure that impacts to this checklist item will be *less than significant with mitigation* incorporation.

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

Less Than Significant Impact with Mitigation: The lead agency has not determined there to be any known tribal cultural resources located within the Project area. Additionally, there are not believed to be any paleontological resources or human remains buried within the Project area's vicinity. However, if resources were found to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American Tribe. Implementation of Mitigation Measures CUL-1 and CUL-2 will ensure that any impacts resulting from Project implementation remain *less than significant with mitigation* incorporation.

Mitigation Measures for Impacts to Cultural Resources:

Mitigation Measure CUL-1: If previously unknown resources are encountered before or during grading activities, construction shall stop in the immediate vicinity of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance.

If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the Site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.

Mitigation Measure CUL-2: In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

Mitigation Measure CUL-3: Prior to the start of construction, an archaeological firm shall be hired to conduct a pre-construction survey and submit a comprehensive report to the lead agency for review and approval prior to the start of construction. This report should document the findings of the pre-construction survey and include an assessment of the potential impacts of the proposed Project on any identified archaeological resources. The

plan should outline specific measures that will be implemented, such as construction phasing, Site buffering, and artifact preservation, to protect the cultural resources, if any are discovered. To ensure compliance, the Project approval should require that the archaeological survey report and the associated plan be prepared by a qualified archaeologist and that the survey and monitoring activities be conducted in accordance with relevant state and federal regulations and best practices. By requiring a comprehensive archaeological survey report and a detailed mitigation plan, the lead agency can ensure that any impacts to archaeological resources are avoided or minimized to the fullest extent possible.

Mitigation Measure CUL-4: During any ground disturbing activities, an archaeological firm shall be hired to monitor the Project Site. The monitoring should be conducted by a qualified archaeologist with experience in the region and in compliance with relevant state and federal regulations and best practices. The monitoring should include regular Site inspections to identify any archaeological resources that may have been uncovered during ground-disturbing activities. If any resources are identified, the monitoring should also include documentation, mapping, and analysis of the resources, as well as the development of a mitigation plan to address any potential impacts to the resources.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relation of which could cause significant environmental effects?	☐	☐	☑	☐
b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☑	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☑	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☑
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☑

Environmental Setting

Wastewater

Sewer services will be provided to the Site by the City of Visalia. The City owns a Water Conservation Plant (WCP) to treat wastewater. Presently, the WCP's permitted capacity as established by the Regional Water Quality Control Board (RWQCB) is 20 million gallons per day (mgd). A planned upgrade will increase the capacity to 26 mgd. The WCP currently has a daily flow of 13 mgd. The City of Visalia operates a sewer system divided into eight service areas. The system currently has over 468 miles of sewer pipe.

A Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS) Calculation memo was prepared for this project to calculate the assumed volume of effluent (Appendix F). The result showed the Project would have an expected flow of 48,000 Gallons per day and produce a total BOD of 1,009.21 lbs/day and 889.60 lbs/day of TSS.

Solid Waste

The City of Visalia provides residential waste pickup but has contracts with companies for other aspects. Sunset Waste Systems provides waste collection for commercial uses and processes recyclable material. Tulare County Compost and Biomass processes green waste.

The Tulare County Resource Management Agency manages solid waste disposal. Programs include household hazardous waste disposal, electronics recycling, tire recovery, yard waste recycling, metal recycling and appliance recovery programs. The county landfills approximately 300,000 tons of waste per year, which is equivalent to about 5 pounds per person per day or one ton per county resident per year. The County operates two disposal sites: the Visalia Disposal Site, northwest of Visalia; and the Woodville Disposal Site, southeast of Tulare. These sites have a remaining capacity of 23,115,774 cubic yards, with a total capacity of 30,555,116 cubic yards.

Water

The California Water Service Company (Cal Water) distributes groundwater supply. Cal Water's Visalia District supply wells extract groundwater from the Kaweah Groundwater Subbasin. The Cal Water system includes 75 operational groundwater wells, about one third of which have auxiliary power for backup. There are 519 miles of main pipeline in the system. The system includes two elevated 300,000-gallon storage tanks, an ion exchange treatment plant, four granular activated carbon filter plants and one nitrate blending facility.

The system currently has the capacity to pump 100,829 acre-feet per year (AFY), all from groundwater. This will be able to supply a growing population, as in 2010, 31,762 AF was needed. By 2030, the City is expected to use 43,002 AFY.

Regulatory Setting

CalRecycle

California Code of Regulations, Title 14, Natural Resources – Division 7 contains all current CalRecycle regulations regarding nonhazardous waste management in the state. These regulations include standards for the handling of solid waste, standards for the handling of compostable materials, design standards for disposal facilities, and disposal standards for specific types of waste.

Central Valley RWQCB

The Central Valley RWQCB requires a Stormwater Pollution Prevention Plan (SWPPP) for projects disturbing more than one acre of total land area. Because the Project is greater than one acre, a SWPPP to manage stormwater generated during Project construction will be required.

The Central Valley RWQCB regulates Wastewater Discharges to Land by establishing thresholds for discharged pollutants and implementing monitoring programs to evaluate program compliance. This program regulates approximately 1500 dischargers in the region.

The Central Valley RWQCB is also responsible for implementing the federal program, the National Pollutant Discharge Elimination System (NPDES). The NPDES Program is the federal permitting program that regulates discharges of pollutants to surface waters of the U.S. Under this program, a NPDES permit is required to discharge pollutants into Waters of the U.S. There are 350 permitted facilities within the Central Valley Region.

Cal Water Urban Water Management Plan (UWMP) – Visalia District

The UWMP describes the Visalia District service area, system demand and usage, available water resources, reliability of the water supply, and contingency planning for water shortage. It also contains a conservation section in compliance with SB X7-7 describing water usage reduction targets and implementation measures. The UWMP identifies five core programs for water conservation in the District that involve promotion of high-efficiency fixtures in residential settings, promotion of high-efficiency irrigation systems, and public information and education.

City of Visalia General Plan

The 2030 General Plan includes the objectives and policies related to utilities and service systems that correlate to the proposed project:

- *PSCU-O-14*: Provide for long-range community water needs by adopting best management practices for water use, conservation, groundwater recharge and wastewater and stormwater management.
- *PSCU-P-46*: Adopt and implement a Water Efficient Landscaping Ordinance for new and/or refurbished development that exceeds mandated sizes, and ensure that all new City parks, streetscapes, and landscaped areas conform to the Ordinance's requirements. The Ordinance should include provisions to optimize outdoor water use by:
    - Promoting appropriate use of plants and landscaping;
    - Establishing limitations on use of turf including size of turf areas and use of cool-season turf such as Fescue grasses, with exceptions for specified uses (e.g., recreation playing fields, golf courses, and parks);
    - Establishing water budgets and penalties for exceeding them;
    - Requiring automatic irrigation systems and schedules, including controllers that incorporate weather-based or other self-adjusting technology;
    - Promoting the use of recycled water; and
    - Minimizing overspray and runoff.
- *PSCU-P-59*: Require new developments to incorporate floodwater detention basins into Project designs where consistent with the Stormwater Master Plan and the Groundwater Recharge Plan.

- *PSCU-P-60*: Control urban and stormwater runoff and point and non-point discharge of pollutants. As part of the City's Stormwater Management Program, adopt and implement a Stormwater Management Ordinance to minimize stormwater runoff rates and volumes, control water pollution, and maximize groundwater recharge. New development will be required to include Low Impact Development features that reduce impermeable surface areas and increase infiltration. Such features may include, but are not limited to:
    - Canopy trees or shrubs to absorb rainwater;
    - Grading that lengthens flow paths over permeable surfaces and increases runoff travel time to reduce the peak hour flow rate;
    - Partially removing curbs and gutters from parking areas where appropriate to allow stormwater sheet flow into vegetated areas;
    - Use of permeable paving in parking lots and other areas characterized by significant impervious surfaces;
    - On-Site stormwater detention, use of bioswales and bioretention basins to facilitate infiltration; and
    - Integrated or subsurface water retention facilities to capture rainwater for use in landscape irrigation and other non-potable uses.

Discussion

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

Less than Significant Impact: The proposed Project would result in new water services. However, the proposed Site has no change of use proposal. Visalia's current system for water and wastewater has the capacity to manage the projected growth expected from the land uses in the General Plan. To compensate for these services, new development will be required to pay impact fees. It is not anticipated that implementation of the proposed Project would result in increased demand for any utility services beyond the planned conditions. There is *a less than significant impact.*

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

Less than Significant Impact: Cal Water will provide water services. The City's water supply source is comprised of 75 operational groundwater wells. The system currently has the capacity to pump 100,829 acre-feet per year (AFY), all from groundwater. This system can

support an expanding population, evidenced by the requirement for 31,762 acre-feet (AF) of resources in 2010. By 2030, the city is expected to use 43,002 AFY. Using average per-person water use in Visalia (183 gallons; 2020 Urban Water Management Plan) and the average household size in Visalia (3.05 persons; US Census Bureau), water demand for the proposed 225-unit residential development is estimated to be approximately 125,584 gallons of water daily, or about 141-acre feet per year. With the system capacity of 100,829 AFY, there will be enough water supply for the proposed project. The Project does not propose any new or expanded uses against the Visalia General Plan. The available water supply is expected to be enough to supply the projected population. In 2030, the projected demand is expected to 35,276 AF of groundwater, in 2035, there is expected to be 38,310 AF of groundwater, and in 2040 there is expected to be 41,258 AF of groundwater. To compensate for these services, new development will be required to pay impact fees for new water services, along with the reduced water use implementations from the polices set forth in the Visalia General Plan. Therefore, the impact is *less than significant.*

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

Less than Significant Impact: The Project does not propose any new or expanded uses and is therefore not anticipated to result in increased demand for wastewater treatment services beyond existing conditions in the Visalia General Plan. Additionally, the City's General Plan EIR has evaluated the site's current and future wastewater service demand. The current capacity of the wastewater system is approximately 20 mgd. It currently receives 13 mgd, leaving an available 7 mgd. In addition, a future upgrade plans to increase the capacity to 26 mgd. From the calculations in Appendix F, the project is expected to produce a total flow of 48,000 GPD.

Because the City's sewer system has the capacity to meet the Project site's expected demand for wastewater treatment, and it is not anticipated that the Project will increase the site's demand for wastewater treatment, it can be inferred that the existing wastewater treatment system has adequate capacity to serve the proposed project. There is a *less than significant impact.*

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

No Impact: The Project does not propose any new or expanded uses and is therefore not anticipated to result in increased generation of solid waste beyond existing conditions. Additionally, the disposal sites are at less than half capacity. Because the City's existing infrastructure has the capacity to accommodate the solid waste currently planned in the General Plan for expanded population, it can be inferred that the existing solid waste

infrastructure has adequate capacity to serve the proposed project. The Project would not generate solid waste more than State or Local Standards and there is *no impact.*

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

No Impact: This proposed Project conforms to all applicable statutes and regulations related to solid waste disposal. The proposed Project will comply with the adopted policies related to solid waste, and will comply with all applicable federal, state, and local statutes and regulations pertaining to disposal of solid waste, including recycling. Therefore, the proposed Project would have *no impact* on solid waste regulations.

XX. WILDFIRE

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

Environmental Setting

There are no State Responsibility Areas (SRAs) within the vicinity of the Project site, and the Project Site is not categorized as a "Very High" Fire Hazard Severity Zone (FHSZ) by CalFire. This CEQA topic only applies to areas within an SRA or a Very High FHSZ.

Regulatory Setting

Fire Hazard Severity Zones: geographical areas designated pursuant to California Public Resources Codes Sections 4201 through 4204 and classified as Very High, High, or Moderate in State Responsibility Areas or as Local Agency Very High Fire Hazard Severity Zones designated pursuant to California Government Code, Sections 51175 through 51189.

Discussion

a) Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact: The Project would not substantially impair an adopted emergency response plan or emergency evacuation plan. The Visalia Fire Department will review the Project to ensure the Project does not impair emergency response or emergency evacuation. Additionally, the proposed Project Site is not located within an SRA or a Very High FHSZ. There is *no impact.*

b) Due to slope, prevailing winds, and other factors, would the Project exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact: The Project is located on a flat area of agricultural and urban land which is at little risk of fire. Additionally, the proposed Project Site is not located within an SRA or a Very High FHSZ. There is *no impact.*

c) Would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Less than Significant Impact: The construction of the Project involves adding new local residential streets, and new and relocated utilities. Utilities such as emergency water sources and power lines would be included as part of the proposed development, however all improvements would be subject to City standards and Fire Chief approval. The proposed Project would not exacerbate fire risk and the impact would be *less than significant.*

d) Would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes?

No Impact: The Project Site is not located in an area designated as a Fire Hazard Severity Zone and lands associated with the Project Site are relatively flat. Therefore, the Project would not be susceptible to downslope or downstream flooding or landslides as a result of post-fire instability or drainage changes. There is *no impact.*

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

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

Discussion

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

Less than Significant Impact with Mitigation: This initial study/mitigated negative declaration found the Project could have significant impacts on traffic, biological resources, hydrology and water quality, historical, and Tribal cultural resources. However, implementation of the identified mitigation measures for each respective section would ensure that impacts are *less than significant with mitigation incorporation.*

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

Less than Significant Impact: CEQA Guidelines Section 15064(h) states that a Lead Agency shall consider whether the cumulative impact of a Project is significant and whether the effects of the Project are cumulatively considerable. The assessment of the significance of the cumulative effects of a Project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the Project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. The proposed Project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increased need for housing, increase in traffic, air pollutants, etc). Impacts would be *less than significant*.

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

Less Than Significant Impact: The analyses of environmental issues contained in this Initial Study indicate that the Project is not expected to have substantial impact on human beings, either directly or indirectly. Mitigation measures have been incorporated in the Project design to reduce all potentially significant impacts to less than significant, which results in a *less than significant* impact to this checklist item.

3.6 MITIGATION MONITORING AND REPORTING PROGRAM

As required by Public Resources Code Section 21081.6, subd. (a)(1), a Mitigation Monitoring and Reporting Program (MMRP) has been prepared for the Project in order to monitor the implementation of the mitigation measures that have been adopted for the project. This Mitigation Monitoring and Reporting Program (MMRP) has been created based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) for the Elliott Property Subdivision Project in the City of Visalia.

The first column of the table identifies the mitigation measure. The second column names the party responsible for carrying out the required action. The third column, "Timing of Mitigation Measure" identifies the time the mitigation measure should be initiated. The fourth column, "Responsible Party for Monitoring," names the party ensuring that the mitigation measure is implemented. The last column will be used by the City to ensure that the individual mitigation measures have been monitored.

Plan checking and verification of mitigation compliance shall be the responsibility of the City of Visalia.

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
Mitigation Measure BIO-1: Swainson's Hawk Nesting Habitat: If construction, grading, or Project-related improvements are to commence between March 1 and September 15, a focused survey for Swainson's hawk nests on the site and within ¼ mile of the site shall be conducted by a qualified biologist no later than 30 days prior to the start of construction work (including clearing and grubbing). If active nests are found, the California Fish and Wildlife shall be contacted to determine appropriate protective measures, and these measures shall be implemented prior to the start of any ground-disturbing activities. If no active nests are found during the focused survey, no further mitigation will be required.	Project Applicant	Prior to the Start of Construction	Contractor/ Lead Agency	
Mitigation Measure BIO-1a: Nesting Bird and Roosting Bat Survey: If Project-related activities are scheduled between February 1 to August 31 (the typical nesting season), a focused survey for nests shall be conducted by a Designated Biologist within three (3) calendar days prior to the beginning of Project-related activities. The Designated Biologist shall survey a minimum radius of 500-feet for MBTA birds around the Project Area and for sign of roosting bats. If no active nests or roosts are found, project activities may proceed as scheduled.	Project Applicant	Prior to the Start of Construction	Contractor/ Lead Agency	
Mitigation Measure BIO-1b: Active Nests or Roosts: If an active nest or roost is found, active nests should be avoided, and a no disturbance or destruction buffer shall be determined and established by a Designated Biologist through consultation with CDFW. A report will be prepared documenting any active nest(s) and CDFW will be contacted and consulted in order to approve an adequate buffer size for the species. The buffer shall be kept in place until after the breeding nesting season or the Designated Biologist confirms the young have fledged, are foraging independently, and the nest is no longer active for the season. The extent of these buffers shall be determined by CDFW and established by the Designated Biologist and will depend on the species present, the level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers.	Project Applicant	Prior to the Start of Construction		

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
Mitigation Measure BIO-1c: Project Delay: If a lapse in project-related work of fourteen (14) calendar days or longer occurs, the Designated Biologist shall complete another focused survey before Project work can be reinitiated.	Project Applicant	Ongoing During Construction	Contractor/ Lead Agency	
Mitigation Measure CUL-1: If previously unknown resources are encountered before or during grading activities, construction shall stop in the immediate vicinity of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance. If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the Site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.	Project Applicant	Ongoing during construction	Contractor/ Lead Agency	
Mitigation Measure CUL-2: In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the	Project Applicant	Ongoing during construction	Contractor/ Lead Agency	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.				
Mitigation Measure CUL-3: Prior to the start of construction, an archaeological firm shall be hired to conduct a pre-construction survey and submit a comprehensive report to the lead agency for review and approval prior to the start of construction. This report should document the findings of the pre-construction survey and include an assessment of the potential impacts of the proposed Project on any identified archaeological resources. The plan should outline specific measures that will be implemented, such as construction phasing, Site buffering, and artifact preservation, to protect the cultural resources, if any are discovered. To ensure compliance, the Project approval should require that the archaeological survey report and the associated plan be prepared by a qualified archaeologist and that the survey and monitoring activities be conducted in accordance with relevant state and federal regulations and best practices. By requiring a comprehensive archaeological survey report and a detailed mitigation plan, the lead agency can ensure that any impacts to archaeological resources are avoided or minimized to the fullest extent possible.	Project Applicant	Prior to the Start of Construction	Contractor/ Lead Agency	
Mitigation Measure CUL-4: During any ground disturbing activities, an archaeological firm shall be hired to monitor the Project Site. The monitoring should be conducted by a qualified archaeologist with experience in the region and in compliance with relevant state and federal regulations and best practices. The monitoring should include regular Site inspections to identify any archaeological resources that may have been uncovered during ground-disturbing	Project Applicant	Ongoing during construction	Contractor/ Lead Agency	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
activities. If any resources are identified, the monitoring should also include documentation, mapping, and analysis of the resources, as well as the development of a mitigation plan to address any potential impacts to the resources.				
Mitigation Measure HYD-1: Prior to the issuance of any construction/grading permit and/or the commencement of any clearing, grading, or excavation, the Applicant shall submit a Notice of Intent (NOI) for discharge from the Project Site to the California SWRCB Storm Water Permit Unit. • Prior to issuance of grading permits for Phase 1 the Applicant shall submit a copy of the NOI to the City. • The City shall review noticing documentation prior to approval of the grading permit. City monitoring staff will inspect the Site during construction for compliance.	Project Applicant	Prior to the Start of Construction	Contractor/ Lead Agency	
Mitigation Measure HYD-2: The Applicant shall require the building contractor to prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to the City 45 days prior to the start of work for approval. The contractor is responsible for understanding the State General Permit and instituting the SWPPP during construction. A SWPPP for Site construction shall be developed prior to the initiation of grading and implemented for all construction activity on the Project Site in excess of one (1) acre, or where the area of disturbance is less than one acre but is part of the Project's plan of development that in total disturbs one or more acres. The SWPPP shall identify potential pollutant sources that may affect the quality of discharges to storm water and shall include specific BMPs to control the discharge of material from the site. The following BMP methods shall include, but would not be limited to: • Dust control measures will be implemented to ensure success of all onsite activities to control fugitive dust; • A routine monitoring plan will be implemented to ensure success of all onsite erosion and sedimentation control measures; • Provisional detention basins, straw bales, erosion control blankets, mulching, silt fencing, sand bagging, and soil stabilizers will be used; • Soil stockpiles and graded slopes will be covered after two weeks of inactivity and 24		45 Days Prior to the Start of Construction	Contractor/ Lead Agency	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
hours prior to and during extreme weather conditions; and, • BMPs will be strictly followed to prevent spills and discharges of pollutants onsite, such as material storage, trash disposal, construction entrances, etc.				
Mitigation Measure HYD-3: A Development Maintenance Manual for the Project shall include comprehensive procedures for maintenance and operations of any stormwater facilities to ensure long-term operation and maintenance of post-construction stormwater controls. The maintenance manual shall require that stormwater BMP devices be inspected, cleaned, and maintained in accordance with the manufacturer's maintenance conditions. The manual shall require that devices be cleaned prior to the onset of the rainy season (i.e., mid-October) and immediately after the end of the rainy season (i.e., mid-May). The manual shall also require that all devices be checked after major storm events. The Development Maintenance Manual shall include the following: • Runoff shall be directed away from trash and loading dock areas; • Bins shall be lined or otherwise constructed to reduce leaking of liquid wastes; • Trash and loading dock areas shall be screened or walled to minimize offsite transport of trash; and • Impervious berms, trench catch basin, drop inlets, or overflow containment structures nearby docks and trash areas shall be installed to minimize the potential for leaks, spills or wash down water to enter the drainage system.	Project Applicant	Prior to the Start of Construction	Contractor/ Lead Agency	
Mitigation Measure TRAN-1: Based on the results of the Level of Service (LOS) analysis and the eight-hour vehicular volume warrants, and the City of Visalia thresholds for mitigation, signals shall be constructed at the following three intersections by 2028 in order to operate at an acceptable level of service by the year 2033: • Shirk Street and SR 198 WB Ramps • Shirk Street and SR 138 EB Ramps • Shirk Street and Walnut Avenue The Project applicant will pay its fair share of traffic impact fees to support payment of the signals.	Project Applicant	Prior to the Start of Construction	Contractor/ Lead Agency	

3.7 Supporting Information and Sources

1. AB 3098 List
2. EMFAC2014
3. Tulare County General Plan
4. City of Visalia General Plan
5. City of Visalia General Plan MEIR
6. City of Visalia Greenhouse Gas Reduction Plan
7. City of Visalia Zoning Ordinance
8. Engineering Standards, City of Visalia
9. SJVAPCD Regulations and Guidelines, Ambient Air Quality Standards & Attainment Status
10. FEMA Flood Maps
11. California Air Resources Board's (CARB's) Air Quality and Land Use Handbook
12. 2019 California Environmental Quality Act CEQA Guidelines
13. California Building Code
14. California Stormwater Pollution Prevention Program (SWPPP)
15. "Construction Noise Handbook." U.S. Department of Transportation/Federal Highway Administration.
16. Government Code Section 65962.5
17. California Environmental Protection Agency (CEPA) San Joaquin Valley Air Pollution Control District Mitigation Measures (http://www.valleyair.org/transportation/Mitigation-Measures.pdf
18. Southern California Edison 2019 Power Content Label
19. Transit Noise and Vibration Impact Assessment, Federal Transit Administration, September 2018.
20. 2020 U.S. Census
21. California Department of Transportation Scenic Roadways
22. EPA, Intergovernmental Panel on Climate Change
23. 2020 Cal Water Urban Water Management Plan (UWMP) – Visalia District
24. State of California Governor's Office of Planning and Research
25. Phase I Cultural Resource Assessment – SOAR Environmental Consulting
26. Biological Resource Assessment – SOAR Environmental Consulting
27. Traffic Study/VMT Assessment - Ruettgers & Schuler Civil Engineers

Section 4

List of Preparers

City of Visalia
315 E Acequia Ave
Visalia, CA 93291

SECTION 4
List of Preparers

Project Title: Elliott Property Subdivision

List of Preparers

4-Creeks Inc.

- David Duda, AICP, GISP
- Molly Baumeister, Planner/Project Manager
- Nate Antepenko, Associate Planner
- Lisa M. Wallis-Dutra, Sr. Traffic Engineer

Persons and Agencies Consulted

The following individuals and agencies contributed to this Initial Study/Mitigated Negative Declaration:

City of Visalia

- Cristobal Carrillo, Planning Division
- Brandon Smith, Planning Division
- Leslie Blair, Senior Civil Engineer
- Adrian Rubalcaba, Associate Engineer

SOAR Environmental Consulting

- Heather Froshour, M.A., R.P.A., Senior Archaeologist

Ruettgers & Schuler Civil Engineers

- Ian Parks, PE

California Historic Resources Information System

- Celeste Thomson, Coordinator

Appendix A

CalEEMod Report

Part 1

Projected Emissions from CalEEMod

Elliot Subdivision - Tulare County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Elliot Subdivision

Tulare County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	224.00	Dwelling Unit	59.13	403,200.00	641

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	51
Climate Zone	7			**Operational Year**	2030
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot Acreage Established

Construction Phase -

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	72.73	59.13
tblWoodstoves	NumberCatalytic	59.13	0.00
tblWoodstoves	NumberNoncatalytic	59.13	0.00

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.0231	0.2313	0.1597	3.3000e-004	0.1866	0.0105	0.1971	0.0882	9.6200e-003	0.0978	0.0000	29.3733	29.3733	9.2300e-003	3.0000e-005	29.6126
2025	0.2963	2.7064	2.8528	6.3000e-003	0.8076	0.1091	0.9168	0.3353	0.1011	0.4364	0.0000	553.8911	553.8911	0.1456	5.4600e-003	559.1575
2026	0.2107	1.7848	2.3655	4.7800e-003	0.1049	0.0701	0.1750	0.0284	0.0660	0.0943	0.0000	420.7664	420.7664	0.0731	0.0104	425.6828
2027	0.2085	1.7819	2.3499	4.7500e-003	0.1049	0.0701	0.1750	0.0284	0.0659	0.0943	0.0000	417.8063	417.8063	0.0729	0.0101	422.6322
2028	0.2058	1.7728	2.3281	4.7000e-003	0.1045	0.0698	0.1743	0.0283	0.0657	0.0939	0.0000	413.4940	413.4940	0.0725	9.7800e-003	418.2194
2029	0.1859	1.6243	2.2350	4.3200e-003	0.0840	0.0664	0.1505	0.0227	0.0622	0.0850	0.0000	379.5904	379.5904	0.0755	7.3900e-003	383.6802
2030	3.8004	0.0828	0.1903	3.5000e-004	5.6200e-003	3.0900e-003	8.7100e-003	1.4900e-003	3.0900e-003	4.5900e-003	0.0000	30.0568	30.0568	1.2600e-003	9.0000e-005	30.1157
Maximum	**3.8004**	**2.7064**	**2.8528**	**6.3000e-003**	**0.8076**	**0.1091**	**0.9168**	**0.3353**	**0.1011**	**0.4364**	**0.0000**	**553.8911**	**553.8911**	**0.1456**	**0.0104**	**559.1575**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.0231	0.2313	0.1597	3.3000e-004	0.1866	0.0105	0.1971	0.0882	9.6200e-003	0.0978	0.0000	29.3733	29.3733	9.2300e-003	3.0000e-005	29.6126
2025	0.2963	2.7064	2.8528	6.3000e-003	0.8076	0.1091	0.9168	0.3353	0.1011	0.4364	0.0000	553.8906	553.8906	0.1456	5.4600e-003	559.1569
2026	0.2107	1.7848	2.3655	4.7800e-003	0.1049	0.0701	0.1750	0.0284	0.0660	0.0943	0.0000	420.7661	420.7661	0.0731	0.0104	425.6824
2027	0.2085	1.7819	2.3499	4.7500e-003	0.1049	0.0701	0.1750	0.0284	0.0659	0.0943	0.0000	417.8059	417.8059	0.0729	0.0101	422.6318
2028	0.2058	1.7728	2.3281	4.7000e-003	0.1045	0.0698	0.1743	0.0283	0.0657	0.0939	0.0000	413.4936	413.4936	0.0725	9.7800e-003	418.2191
2029	0.1859	1.6243	2.2350	4.3200e-003	0.0840	0.0664	0.1505	0.0227	0.0622	0.0850	0.0000	379.5900	379.5900	0.0755	7.3900e-003	383.6799
2030	3.8004	0.0828	0.1903	3.5000e-004	5.6200e-003	3.0900e-003	8.7100e-003	1.4900e-003	3.0900e-003	4.5900e-003	0.0000	30.0568	30.0568	1.2600e-003	9.0000e-005	30.1157
Maximum	**3.8004**	**2.7064**	**2.8528**	**6.3000e-003**	**0.8076**	**0.1091**	**0.9168**	**0.3353**	**0.1011**	**0.4364**	**0.0000**	**553.8906**	**553.8906**	**0.1456**	**0.0104**	**559.1569**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
2	**12-1-2024**	**2-28-2025**	0.8845	0.8845
3	**3-1-2025**	**5-31-2025**	1.0169	1.0169
4	**6-1-2025**	**8-31-2025**	0.6930	0.6930
5	**9-1-2025**	**11-30-2025**	0.4991	0.4991

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6	**12-1-2025**	**2-28-2026**	0.4934	0.4934
7	**3-1-2026**	**5-31-2026**	0.5025	0.5025
8	**6-1-2026**	**8-31-2026**	0.5018	0.5018
9	**9-1-2026**	**11-30-2026**	0.4977	0.4977
10	**12-1-2026**	**2-28-2027**	0.4921	0.4921
11	**3-1-2027**	**5-31-2027**	0.5012	0.5012
12	**6-1-2027**	**8-31-2027**	0.5005	0.5005
13	**9-1-2027**	**11-30-2027**	0.4964	0.4964
14	**12-1-2027**	**2-29-2028**	0.4964	0.4964
15	**3-1-2028**	**5-31-2028**	0.5001	0.5001
16	**6-1-2028**	**8-31-2028**	0.4994	0.4994
17	**9-1-2028**	**11-30-2028**	0.4953	0.4953
18	**12-1-2028**	**2-28-2029**	0.4899	0.4899
19	**3-1-2029**	**5-31-2029**	0.4990	0.4990
20	**6-1-2029**	**8-31-2029**	0.4983	0.4983
21	**9-1-2029**	**11-30-2029**	0.3807	0.3807
22	**12-1-2029**	**2-28-2030**	1.6537	1.6537
23	**3-1-2030**	**5-31-2030**	2.3305	2.3305
		Highest	2.3305	2.3305

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.0126	0.1029	1.6945	6.2000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	99.7553	99.7553	4.4500e-003	1.7800e-003	100.3967
Energy	0.0287	0.2453	0.1044	1.5700e-003		0.0198	0.0198		0.0198	0.0198	0.0000	599.4291	599.4291	0.0321	8.4300e-003	602.7440
Mobile	0.7910	1.2261	7.5014	0.0185	2.1955	0.0142	2.2097	0.5871	0.0133	0.6004	0.0000	1,706.5533	1,706.5533	0.0840	0.0880	1,734.8701
Waste						0.0000	0.0000		0.0000	0.0000	46.8422	0.0000	46.8422	2.7683	0.0000	116.0496
Water						0.0000	0.0000		0.0000	0.0000	4.6302	19.7162	24.3464	0.4772	0.0114	39.6834
Total	**2.8322**	**1.5743**	**9.3003**	**0.0207**	**2.1955**	**0.0500**	**2.2455**	**0.5871**	**0.0492**	**0.6362**	**51.4724**	**2,425.4539**	**2,476.9262**	**3.3660**	**0.1096**	**2,593.7437**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.0126	0.1029	1.6945	6.2000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	99.7553	99.7553	4.4500e-003	1.7800e-003	100.3967
Energy	0.0287	0.2453	0.1044	1.5700e-003		0.0198	0.0198		0.0198	0.0198	0.0000	599.4291	599.4291	0.0321	8.4300e-003	602.7440
Mobile	0.7910	1.2261	7.5014	0.0185	2.1955	0.0142	2.2097	0.5871	0.0133	0.6004	0.0000	1,706.5533	1,706.5533	0.0840	0.0880	1,734.8701
Waste						0.0000	0.0000		0.0000	0.0000	46.8422	0.0000	46.8422	2.7683	0.0000	116.0496
Water						0.0000	0.0000		0.0000	0.0000	4.6302	19.7162	24.3464	0.4772	0.0114	39.6834
Total	**2.8322**	**1.5743**	**9.3003**	**0.0207**	**2.1955**	**0.0500**	**2.2455**	**0.5871**	**0.0492**	**0.6362**	**51.4724**	**2,425.4539**	**2,476.9262**	**3.3660**	**0.1096**	**2,593.7437**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	12/7/2024	1/31/2025	5	40	
2	Grading	Grading	2/1/2025	7/4/2025	5	110	
3	Building Construction	Building Construction	7/5/2025	10/5/2029	5	1110	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Paving	Paving	10/6/2029	1/18/2030	5	75	
5	Architectural Coating	Architectural Coating	1/19/2030	5/3/2030	5	75	

Acres of Grading (Site Preparation Phase): 60

Acres of Grading (Grading Phase): 330

Acres of Paving: 0

Residential Indoor: 816,480; Residential Outdoor: 272,160; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	7.00	231	0.29
Grading	Excavators	2	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	81.00	24.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1854	0.0000	0.1854	0.0879	0.0000	0.0879	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0226	0.2310	0.1559	3.2000e-004		0.0105	0.0105		9.6100e-003	9.6100e-003	0.0000	28.4385	28.4385	9.2000e-003	0.0000	28.6684
Total	**0.0226**	**0.2310**	**0.1559**	**3.2000e-004**	**0.1854**	**0.0105**	**0.1958**	**0.0879**	**9.6100e-003**	**0.0975**	**0.0000**	**28.4385**	**28.4385**	**9.2000e-003**	**0.0000**	**28.6684**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9000e-004	3.3000e-004	3.8200e-003	1.0000e-005	1.2200e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9348	0.9348	3.0000e-005	3.0000e-005	0.9441
Total	**4.9000e-004**	**3.3000e-004**	**3.8200e-003**	**1.0000e-005**	**1.2200e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**0.9348**	**0.9348**	**3.0000e-005**	**3.0000e-005**	**0.9441**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1854	0.0000	0.1854	0.0879	0.0000	0.0879	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0226	0.2310	0.1559	3.2000e-004		0.0105	0.0105		9.6100e-003	9.6100e-003	0.0000	28.4385	28.4385	9.2000e-003	0.0000	28.6684
Total	**0.0226**	**0.2310**	**0.1559**	**3.2000e-004**	**0.1854**	**0.0105**	**0.1958**	**0.0879**	**9.6100e-003**	**0.0975**	**0.0000**	**28.4385**	**28.4385**	**9.2000e-003**	**0.0000**	**28.6684**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9000e-004	3.3000e-004	3.8200e-003	1.0000e-005	1.2200e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9348	0.9348	3.0000e-005	3.0000e-005	0.9441
Total	**4.9000e-004**	**3.3000e-004**	**3.8200e-003**	**1.0000e-005**	**1.2200e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**0.9348**	**0.9348**	**3.0000e-005**	**3.0000e-005**	**0.9441**

3.2 Site Preparation - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2396	0.0000	0.2396	0.1176	0.0000	0.1176	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0284	0.2902	0.2060	4.4000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	38.4870	38.4870	0.0125	0.0000	38.7982
Total	**0.0284**	**0.2902**	**0.2060**	**4.4000e-004**	**0.2396**	**0.0125**	**0.2521**	**0.1176**	**0.0115**	**0.1291**	**0.0000**	**38.4870**	**38.4870**	**0.0125**	**0.0000**	**38.7982**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1000e-004	3.9000e-004	4.7600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2219	1.2219	4.0000e-005	4.0000e-005	1.2335
Total	**6.1000e-004**	**3.9000e-004**	**4.7600e-003**	**1.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.2219**	**1.2219**	**4.0000e-005**	**4.0000e-005**	**1.2335**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2396	0.0000	0.2396	0.1176	0.0000	0.1176	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0284	0.2902	0.2060	4.4000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	38.4870	38.4870	0.0125	0.0000	38.7982
Total	**0.0284**	**0.2902**	**0.2060**	**4.4000e-004**	**0.2396**	**0.0125**	**0.2521**	**0.1176**	**0.0115**	**0.1291**	**0.0000**	**38.4870**	**38.4870**	**0.0125**	**0.0000**	**38.7982**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1000e-004	3.9000e-004	4.7600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2219	1.2219	4.0000e-005	4.0000e-005	1.2335
Total	**6.1000e-004**	**3.9000e-004**	**4.7600e-003**	**1.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.2219**	**1.2219**	**4.0000e-005**	**4.0000e-005**	**1.2335**

3.3 Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.5062	0.0000	0.5062	0.2010	0.0000	0.2010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1596	1.5369	1.4482	3.4100e-003		0.0622	0.0622		0.0572	0.0572	0.0000	299.7842	299.7842	0.0970	0.0000	302.2081
Total	**0.1596**	**1.5369**	**1.4482**	**3.4100e-003**	**0.5062**	**0.0622**	**0.5684**	**0.2010**	**0.0572**	**0.2582**	**0.0000**	**299.7842**	**299.7842**	**0.0970**	**0.0000**	**302.2081**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2500e-003	2.0900e-003	0.0253	7.0000e-005	8.7600e-003	4.0000e-005	8.8000e-003	2.3300e-003	4.0000e-005	2.3700e-003	0.0000	6.4929	6.4929	1.9000e-004	1.9000e-004	6.5548
Total	**3.2500e-003**	**2.0900e-003**	**0.0253**	**7.0000e-005**	**8.7600e-003**	**4.0000e-005**	**8.8000e-003**	**2.3300e-003**	**4.0000e-005**	**2.3700e-003**	**0.0000**	**6.4929**	**6.4929**	**1.9000e-004**	**1.9000e-004**	**6.5548**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.5062	0.0000	0.5062	0.2010	0.0000	0.2010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1596	1.5369	1.4482	3.4100e-003		0.0622	0.0622		0.0572	0.0572	0.0000	299.7838	299.7838	0.0970	0.0000	302.2077
Total	**0.1596**	**1.5369**	**1.4482**	**3.4100e-003**	**0.5062**	**0.0622**	**0.5684**	**0.2010**	**0.0572**	**0.2582**	**0.0000**	**299.7838**	**299.7838**	**0.0970**	**0.0000**	**302.2077**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2500e-003	2.0900e-003	0.0253	7.0000e-005	8.7600e-003	4.0000e-005	8.8000e-003	2.3300e-003	4.0000e-005	2.3700e-003	0.0000	6.4929	6.4929	1.9000e-004	1.9000e-004	6.5548
Total	**3.2500e-003**	**2.0900e-003**	**0.0253**	**7.0000e-005**	**8.7600e-003**	**4.0000e-005**	**8.8000e-003**	**2.3300e-003**	**4.0000e-005**	**2.3700e-003**	**0.0000**	**6.4929**	**6.4929**	**1.9000e-004**	**1.9000e-004**	**6.5548**

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0875	0.7981	1.0294	1.7300e-003		0.0338	0.0338		0.0318	0.0318	0.0000	148.4285	148.4285	0.0349	0.0000	149.3007
Total	**0.0875**	**0.7981**	**1.0294**	**1.7300e-003**		**0.0338**	**0.0338**		**0.0318**	**0.0318**	**0.0000**	**148.4285**	**148.4285**	**0.0349**	**0.0000**	**149.3007**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6500e-003	0.0689	0.0200	3.0000e-004	0.0102	4.4000e-004	0.0106	2.9400e-003	4.3000e-004	3.3600e-003	0.0000	28.8773	28.8773	1.3000e-004	4.3300e-003	30.1714
Worker	0.0153	9.8700e-003	0.1191	3.3000e-004	0.0413	1.9000e-004	0.0415	0.0110	1.8000e-004	0.0112	0.0000	30.5994	30.5994	9.1000e-004	9.0000e-004	30.8908
Total	**0.0170**	**0.0788**	**0.1391**	**6.3000e-004**	**0.0515**	**6.3000e-004**	**0.0521**	**0.0139**	**6.1000e-004**	**0.0145**	**0.0000**	**59.4767**	**59.4767**	**1.0400e-003**	**5.2300e-003**	**61.0622**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0875	0.7981	1.0294	1.7300e-003		0.0338	0.0338		0.0318	0.0318	0.0000	148.4283	148.4283	0.0349	0.0000	149.3006
Total	**0.0875**	**0.7981**	**1.0294**	**1.7300e-003**		**0.0338**	**0.0338**		**0.0318**	**0.0318**	**0.0000**	**148.4283**	**148.4283**	**0.0349**	**0.0000**	**149.3006**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6500e-003	0.0689	0.0200	3.0000e-004	0.0102	4.4000e-004	0.0106	2.9400e-003	4.3000e-004	3.3600e-003	0.0000	28.8773	28.8773	1.3000e-004	4.3300e-003	30.1714
Worker	0.0153	9.8700e-003	0.1191	3.3000e-004	0.0413	1.9000e-004	0.0415	0.0110	1.8000e-004	0.0112	0.0000	30.5994	30.5994	9.1000e-004	9.0000e-004	30.8908
Total	**0.0170**	**0.0788**	**0.1391**	**6.3000e-004**	**0.0515**	**6.3000e-004**	**0.0521**	**0.0139**	**6.1000e-004**	**0.0145**	**0.0000**	**59.4767**	**59.4767**	**1.0400e-003**	**5.2300e-003**	**61.0622**

3.4 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total	**0.1785**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6549**	**302.6549**	**0.0711**	**0.0000**	**304.4335**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.2800e-003	0.1396	0.0402	6.0000e-004	0.0207	9.0000e-004	0.0216	5.9900e-003	8.6000e-004	6.8500e-003	0.0000	57.7971	57.7971	2.5000e-004	8.6600e-003	60.3832
Worker	0.0289	0.0179	0.2263	6.6000e-004	0.0842	3.7000e-004	0.0846	0.0224	3.4000e-004	0.0227	0.0000	60.3144	60.3144	1.6700e-003	1.7100e-003	60.8661
Total	**0.0322**	**0.1575**	**0.2664**	**1.2600e-003**	**0.1049**	**1.2700e-003**	**0.1062**	**0.0284**	**1.2000e-003**	**0.0296**	**0.0000**	**118.1115**	**118.1115**	**1.9200e-003**	**0.0104**	**121.2493**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.1784**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6545**	**302.6545**	**0.0711**	**0.0000**	**304.4331**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.2800e-003	0.1396	0.0402	6.0000e-004	0.0207	9.0000e-004	0.0216	5.9900e-003	8.6000e-004	6.8500e-003	0.0000	57.7971	57.7971	2.5000e-004	8.6600e-003	60.3832
Worker	0.0289	0.0179	0.2263	6.6000e-004	0.0842	3.7000e-004	0.0846	0.0224	3.4000e-004	0.0227	0.0000	60.3144	60.3144	1.6700e-003	1.7100e-003	60.8661
Total	**0.0322**	**0.1575**	**0.2664**	**1.2600e-003**	**0.1049**	**1.2700e-003**	**0.1062**	**0.0284**	**1.2000e-003**	**0.0296**	**0.0000**	**118.1115**	**118.1115**	**1.9200e-003**	**0.0104**	**121.2493**

3.4 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total	**0.1785**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6549**	**302.6549**	**0.0711**	**0.0000**	**304.4335**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.2200e-003	0.1385	0.0396	5.9000e-004	0.0207	9.0000e-004	0.0216	5.9900e-003	8.6000e-004	6.8400e-003	0.0000	56.6317	56.6317	2.5000e-004	8.4700e-003	59.1622
Worker	0.0269	0.0161	0.2113	6.4000e-004	0.0842	3.4000e-004	0.0845	0.0224	3.2000e-004	0.0227	0.0000	58.5197	58.5197	1.5100e-003	1.6100e-003	59.0365
Total	**0.0301**	**0.1546**	**0.2509**	**1.2300e-003**	**0.1049**	**1.2400e-003**	**0.1061**	**0.0284**	**1.1800e-003**	**0.0295**	**0.0000**	**115.1514**	**115.1514**	**1.7600e-003**	**0.0101**	**118.1987**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.1784**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6545**	**302.6545**	**0.0711**	**0.0000**	**304.4331**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.2200e-003	0.1385	0.0396	5.9000e-004	0.0207	9.0000e-004	0.0216	5.9900e-003	8.6000e-004	6.8400e-003	0.0000	56.6317	56.6317	2.5000e-004	8.4700e-003	59.1622
Worker	0.0269	0.0161	0.2113	6.4000e-004	0.0842	3.4000e-004	0.0845	0.0224	3.2000e-004	0.0227	0.0000	58.5197	58.5197	1.5100e-003	1.6100e-003	59.0365
Total	**0.0301**	**0.1546**	**0.2509**	**1.2300e-003**	**0.1049**	**1.2400e-003**	**0.1061**	**0.0284**	**1.1800e-003**	**0.0295**	**0.0000**	**115.1514**	**115.1514**	**1.7600e-003**	**0.0101**	**118.1987**

3.4 Building Construction - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4953	301.4953	0.0709	0.0000	303.2671
Total	**0.1778**	**1.6211**	**2.0910**	**3.5000e-003**		**0.0686**	**0.0686**		**0.0645**	**0.0645**	**0.0000**	**301.4953**	**301.4953**	**0.0709**	**0.0000**	**303.2671**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1600e-003	0.1372	0.0390	5.8000e-004	0.0206	8.9000e-004	0.0215	5.9600e-003	8.5000e-004	6.8100e-003	0.0000	55.3090	55.3090	2.4000e-004	8.2600e-003	57.7770
Worker	0.0249	0.0145	0.1981	6.2000e-004	0.0839	3.2000e-004	0.0842	0.0223	2.9000e-004	0.0226	0.0000	56.6896	56.6896	1.3800e-003	1.5100e-003	57.1754
Total	**0.0281**	**0.1517**	**0.2371**	**1.2000e-003**	**0.1045**	**1.2100e-003**	**0.1057**	**0.0283**	**1.1400e-003**	**0.0294**	**0.0000**	**111.9987**	**111.9987**	**1.6200e-003**	**9.7700e-003**	**114.9523**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4949	301.4949	0.0709	0.0000	303.2667
Total	**0.1778**	**1.6211**	**2.0910**	**3.5000e-003**		**0.0686**	**0.0686**		**0.0645**	**0.0645**	**0.0000**	**301.4949**	**301.4949**	**0.0709**	**0.0000**	**303.2667**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1600e-003	0.1372	0.0390	5.8000e-004	0.0206	8.9000e-004	0.0215	5.9600e-003	8.5000e-004	6.8100e-003	0.0000	55.3090	55.3090	2.4000e-004	8.2600e-003	57.7770
Worker	0.0249	0.0145	0.1981	6.2000e-004	0.0839	3.2000e-004	0.0842	0.0223	2.9000e-004	0.0226	0.0000	56.6896	56.6896	1.3800e-003	1.5100e-003	57.1754
Total	**0.0281**	**0.1517**	**0.2371**	**1.2000e-003**	**0.1045**	**1.2100e-003**	**0.1057**	**0.0283**	**1.1400e-003**	**0.0294**	**0.0000**	**111.9987**	**111.9987**	**1.6200e-003**	**9.7700e-003**	**114.9523**

3.4 Building Construction - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1367	1.2470	1.6085	2.7000e-003		0.0528	0.0528		0.0496	0.0496	0.0000	231.9195	231.9195	0.0545	0.0000	233.2824
Total	**0.1367**	**1.2470**	**1.6085**	**2.7000e-003**		**0.0528**	**0.0528**		**0.0496**	**0.0496**	**0.0000**	**231.9195**	**231.9195**	**0.0545**	**0.0000**	**233.2824**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3900e-003	0.1048	0.0297	4.3000e-004	0.0159	6.8000e-004	0.0166	4.5900e-003	6.5000e-004	5.2300e-003	0.0000	41.7145	41.7145	1.8000e-004	6.2200e-003	43.5732
Worker	0.0178	0.0102	0.1440	4.6000e-004	0.0645	2.3000e-004	0.0648	0.0172	2.1000e-004	0.0174	0.0000	42.4974	42.4974	9.7000e-004	1.1100e-003	42.8519
Total	**0.0202**	**0.1150**	**0.1738**	**8.9000e-004**	**0.0804**	**9.1000e-004**	**0.0813**	**0.0217**	**8.6000e-004**	**0.0226**	**0.0000**	**84.2119**	**84.2119**	**1.1500e-003**	**7.3300e-003**	**86.4251**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1367	1.2470	1.6085	2.7000e-003		0.0528	0.0528		0.0496	0.0496	0.0000	231.9192	231.9192	0.0545	0.0000	233.2821
Total	**0.1367**	**1.2470**	**1.6085**	**2.7000e-003**		**0.0528**	**0.0528**		**0.0496**	**0.0496**	**0.0000**	**231.9192**	**231.9192**	**0.0545**	**0.0000**	**233.2821**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3900e-003	0.1048	0.0297	4.3000e-004	0.0159	6.8000e-004	0.0166	4.5900e-003	6.5000e-004	5.2300e-003	0.0000	41.7145	41.7145	1.8000e-004	6.2200e-003	43.5732
Worker	0.0178	0.0102	0.1440	4.6000e-004	0.0645	2.3000e-004	0.0648	0.0172	2.1000e-004	0.0174	0.0000	42.4974	42.4974	9.7000e-004	1.1100e-003	42.8519
Total	**0.0202**	**0.1150**	**0.1738**	**8.9000e-004**	**0.0804**	**9.1000e-004**	**0.0813**	**0.0217**	**8.6000e-004**	**0.0226**	**0.0000**	**84.2119**	**84.2119**	**1.1500e-003**	**7.3300e-003**	**86.4251**

3.5 Paving - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0279	0.2617	0.4446	7.0000e-004		0.0128	0.0128		0.0117	0.0117	0.0000	61.0587	61.0587	0.0198	0.0000	61.5524
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0279**	**0.2617**	**0.4446**	**7.0000e-004**		**0.0128**	**0.0128**		**0.0117**	**0.0117**	**0.0000**	**61.0587**	**61.0587**	**0.0198**	**0.0000**	**61.5524**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0100e-003	5.8000e-004	8.1400e-003	3.0000e-005	3.6400e-003	1.0000e-005	3.6600e-003	9.7000e-004	1.0000e-005	9.8000e-004	0.0000	2.4003	2.4003	5.0000e-005	6.0000e-005	2.4203
Total	**1.0100e-003**	**5.8000e-004**	**8.1400e-003**	**3.0000e-005**	**3.6400e-003**	**1.0000e-005**	**3.6600e-003**	**9.7000e-004**	**1.0000e-005**	**9.8000e-004**	**0.0000**	**2.4003**	**2.4003**	**5.0000e-005**	**6.0000e-005**	**2.4203**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0279	0.2617	0.4446	7.0000e-004		0.0128	0.0128		0.0117	0.0117	0.0000	61.0587	61.0587	0.0198	0.0000	61.5524
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0279**	**0.2617**	**0.4446**	**7.0000e-004**		**0.0128**	**0.0128**		**0.0117**	**0.0117**	**0.0000**	**61.0587**	**61.0587**	**0.0198**	**0.0000**	**61.5524**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0100e-003	5.8000e-004	8.1400e-003	3.0000e-005	3.6400e-003	1.0000e-005	3.6600e-003	9.7000e-004	1.0000e-005	9.8000e-004	0.0000	2.4003	2.4003	5.0000e-005	6.0000e-005	2.4203
Total	**1.0100e-003**	**5.8000e-004**	**8.1400e-003**	**3.0000e-005**	**3.6400e-003**	**1.0000e-005**	**3.6600e-003**	**9.7000e-004**	**1.0000e-005**	**9.8000e-004**	**0.0000**	**2.4003**	**2.4003**	**5.0000e-005**	**6.0000e-005**	**2.4203**

3.5 Paving - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.6900e-003	0.0498	0.1110	2.0000e-004		2.3100e-003	2.3100e-003		2.3100e-003	2.3100e-003	0.0000	16.8697	16.8697	7.9000e-004	0.0000	16.8894
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.6900e-003**	**0.0498**	**0.1110**	**2.0000e-004**		**2.3100e-003**	**2.3100e-003**		**2.3100e-003**	**2.3100e-003**	**0.0000**	**16.8697**	**16.8697**	**7.9000e-004**	**0.0000**	**16.8894**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2030

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.2000e-004	1.7800e-003	1.0000e-005	8.4000e-004	0.0000	8.4000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.5380	0.5380	1.0000e-005	1.0000e-005	0.5424
Total	**2.1000e-004**	**1.2000e-004**	**1.7800e-003**	**1.0000e-005**	**8.4000e-004**	**0.0000**	**8.4000e-004**	**2.2000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**0.5380**	**0.5380**	**1.0000e-005**	**1.0000e-005**	**0.5424**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.6900e-003	0.0498	0.1110	2.0000e-004		2.3100e-003	2.3100e-003		2.3100e-003	2.3100e-003	0.0000	16.8696	16.8696	7.9000e-004	0.0000	16.8894
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.6900e-003**	**0.0498**	**0.1110**	**2.0000e-004**		**2.3100e-003**	**2.3100e-003**		**2.3100e-003**	**2.3100e-003**	**0.0000**	**16.8696**	**16.8696**	**7.9000e-004**	**0.0000**	**16.8894**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2030

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.2000e-004	1.7800e-003	1.0000e-005	8.4000e-004	0.0000	8.4000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.5380	0.5380	1.0000e-005	1.0000e-005	0.5424
Total	**2.1000e-004**	**1.2000e-004**	**1.7800e-003**	**1.0000e-005**	**8.4000e-004**	**0.0000**	**8.4000e-004**	**2.2000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**0.5380**	**0.5380**	**1.0000e-005**	**1.0000e-005**	**0.5424**

3.6 Architectural Coating - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.7844					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9000e-003	0.0321	0.0674	1.1000e-004		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004	0.0000	9.5747	9.5747	3.9000e-004	0.0000	9.5844
Total	**3.7893**	**0.0321**	**0.0674**	**1.1000e-004**		**7.6000e-004**	**7.6000e-004**		**7.6000e-004**	**7.6000e-004**	**0.0000**	**9.5747**	**9.5747**	**3.9000e-004**	**0.0000**	**9.5844**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2030

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2300e-003	6.9000e-004	0.0102	3.0000e-005	4.7800e-003	2.0000e-005	4.8000e-003	1.2700e-003	1.0000e-005	1.2900e-003	0.0000	3.0744	3.0744	7.0000e-005	8.0000e-005	3.0995
Total	**1.2300e-003**	**6.9000e-004**	**0.0102**	**3.0000e-005**	**4.7800e-003**	**2.0000e-005**	**4.8000e-003**	**1.2700e-003**	**1.0000e-005**	**1.2900e-003**	**0.0000**	**3.0744**	**3.0744**	**7.0000e-005**	**8.0000e-005**	**3.0995**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.7844					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9000e-003	0.0321	0.0674	1.1000e-004		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004	0.0000	9.5747	9.5747	3.9000e-004	0.0000	9.5844
Total	**3.7893**	**0.0321**	**0.0674**	**1.1000e-004**		**7.6000e-004**	**7.6000e-004**		**7.6000e-004**	**7.6000e-004**	**0.0000**	**9.5747**	**9.5747**	**3.9000e-004**	**0.0000**	**9.5844**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2030

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2300e-003	6.9000e-004	0.0102	3.0000e-005	4.7800e-003	2.0000e-005	4.8000e-003	1.2700e-003	1.0000e-005	1.2900e-003	0.0000	3.0744	3.0744	7.0000e-005	8.0000e-005	3.0995
Total	**1.2300e-003**	**6.9000e-004**	**0.0102**	**3.0000e-005**	**4.7800e-003**	**2.0000e-005**	**4.8000e-003**	**1.2700e-003**	**1.0000e-005**	**1.2900e-003**	**0.0000**	**3.0744**	**3.0744**	**7.0000e-005**	**8.0000e-005**	**3.0995**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7910	1.2261	7.5014	0.0185	2.1955	0.0142	2.2097	0.5871	0.0133	0.6004	0.0000	1,706.5533	1,706.5533	0.0840	0.0880	1,734.8701
Unmitigated	0.7910	1.2261	7.5014	0.0185	2.1955	0.0142	2.2097	0.5871	0.0133	0.6004	0.0000	1,706.5533	1,706.5533	0.0840	0.0880	1,734.8701

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	2,114.56	2,136.96	1915.20	5,889,125	5,889,125
Total	2,114.56	2,136.96	1,915.20	5,889,125	5,889,125

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	38.40	22.60	39.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.548891	0.052350	0.169889	0.142795	0.024546	0.006610	0.012173	0.015857	0.000617	0.000465	0.021714	0.001278	0.002815

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	315.3780	315.3780	0.0266	3.2300e-003	317.0050
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	315.3780	315.3780	0.0266	3.2300e-003	317.0050
NaturalGas Mitigated	0.0287	0.2453	0.1044	1.5700e-003		0.0198	0.0198		0.0198	0.0198	0.0000	284.0511	284.0511	5.4400e-003	5.2100e-003	285.7391
NaturalGas Unmitigated	0.0287	0.2453	0.1044	1.5700e-003		0.0198	0.0198		0.0198	0.0198	0.0000	284.0511	284.0511	5.4400e-003	5.2100e-003	285.7391

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	5.32292e+006	0.0287	0.2453	0.1044	1.5700e-003		0.0198	0.0198		0.0198	0.0198	0.0000	284.0511	284.0511	5.4400e-003	5.2100e-003	285.7391
Total		**0.0287**	**0.2453**	**0.1044**	**1.5700e-003**		**0.0198**	**0.0198**		**0.0198**	**0.0198**	**0.0000**	**284.0511**	**284.0511**	**5.4400e-003**	**5.2100e-003**	**285.7391**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	5.32292e+006	0.0287	0.2453	0.1044	1.5700e-003		0.0198	0.0198		0.0198	0.0198	0.0000	284.0511	284.0511	5.4400e-003	5.2100e-003	285.7391
Total		**0.0287**	**0.2453**	**0.1044**	**1.5700e-003**		**0.0198**	**0.0198**		**0.0198**	**0.0198**	**0.0000**	**284.0511**	**284.0511**	**5.4400e-003**	**5.2100e-003**	**285.7391**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.77832e+006	315.3780	0.0266	3.2300e-003	317.0050
Total		**315.3780**	**0.0266**	**3.2300e-003**	**317.0050**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.77832e+006	315.3780	0.0266	3.2300e-003	317.0050
Total		**315.3780**	**0.0266**	**3.2300e-003**	**317.0050**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.0126	0.1029	1.6945	6.2000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	99.7553	99.7553	4.4500e-003	1.7800e-003	100.3967
Unmitigated	2.0126	0.1029	1.6945	6.2000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	99.7553	99.7553	4.4500e-003	1.7800e-003	100.3967

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3784					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5747					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	9.8100e-003	0.0838	0.0357	5.3000e-004		6.7700e-003	6.7700e-003		6.7700e-003	6.7700e-003	0.0000	97.0385	97.0385	1.8600e-003	1.7800e-003	97.6151
Landscaping	0.0496	0.0191	1.6588	9.0000e-005		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003	0.0000	2.7169	2.7169	2.5900e-003	0.0000	2.7816
Total	**2.0126**	**0.1029**	**1.6945**	**6.2000e-004**		**0.0160**	**0.0160**		**0.0160**	**0.0160**	**0.0000**	**99.7553**	**99.7553**	**4.4500e-003**	**1.7800e-003**	**100.3967**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3784					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5747					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	9.8100e-003	0.0838	0.0357	5.3000e-004		6.7700e-003	6.7700e-003		6.7700e-003	6.7700e-003	0.0000	97.0385	97.0385	1.8600e-003	1.7800e-003	97.6151
Landscaping	0.0496	0.0191	1.6588	9.0000e-005		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003	0.0000	2.7169	2.7169	2.5900e-003	0.0000	2.7816
Total	**2.0126**	**0.1029**	**1.6945**	**6.2000e-004**		**0.0160**	**0.0160**		**0.0160**	**0.0160**	**0.0000**	**99.7553**	**99.7553**	**4.4500e-003**	**1.7800e-003**	**100.3967**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	24.3464	0.4772	0.0114	39.6834
Unmitigated	24.3464	0.4772	0.0114	39.6834

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	14.5945 / 9.20088	24.3464	0.4772	0.0114	39.6834
Total		**24.3464**	**0.4772**	**0.0114**	**39.6834**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	14.5945 / 9.20088	24.3464	0.4772	0.0114	39.6834
Total		**24.3464**	**0.4772**	**0.0114**	**39.6834**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	46.8422	2.7683	0.0000	116.0496
Unmitigated	46.8422	2.7683	0.0000	116.0496

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	230.76	46.8422	2.7683	0.0000	116.0496
Total		**46.8422**	**2.7683**	**0.0000**	**116.0496**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	230.76	46.8422	2.7683	0.0000	116.0496
Total		**46.8422**	**2.7683**	**0.0000**	**116.0496**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Part 2

2005 BAU from CalEEMod

Elliot Subdivision - Tulare County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Elliot Subdivision

Tulare County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	224.00	Dwelling Unit	59.13	403,200.00	641

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	51
Climate Zone	7			**Operational Year**	2005
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot Acreage Established

Construction Phase -

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	72.73	59.13
tblWoodstoves	NumberCatalytic	59.13	0.00
tblWoodstoves	NumberNoncatalytic	59.13	0.00

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
1999	0.8591	6.6281	3.4041	0.3369	0.7184	0.4782	1.1967	0.3018	0.4782	0.7800	0.0000	237.0562	237.0562	0.0702	0.0000	238.8119
2000	1.6357	9.5558	6.6982	0.0577	0.4462	0.6058	1.0519	0.1443	0.6043	0.7487	0.0000	603.0968	603.0968	0.1294	0.0222	612.9590
2001	1.5174	7.5935	6.1112	0.0479	0.1049	0.5358	0.6407	0.0284	0.5340	0.5623	0.0000	519.9681	519.9681	0.1188	0.0280	531.2921
2002	1.5174	7.5935	6.1112	0.0479	0.1049	0.5358	0.6407	0.0284	0.5340	0.5623	0.0000	519.9681	519.9681	0.1188	0.0280	531.2921
2003	1.5174	7.5935	6.1112	0.0479	0.1049	0.5358	0.6407	0.0284	0.5340	0.5623	0.0000	519.9681	519.9681	0.1188	0.0280	531.2921
2004	5.9296	5.7271	4.0681	0.0348	0.0600	0.3862	0.4462	0.0162	0.3852	0.4014	0.0000	364.3529	364.3529	0.0832	0.0155	371.0393
2005	1.4384	0.0394	0.0420	2.7000e-004	1.0800e-003	3.2900e-003	4.3700e-003	2.9000e-004	3.2900e-003	3.5800e-003	0.0000	3.3795	3.3795	7.1000e-004	1.5000e-004	3.4424
Maximum	**5.9296**	**9.5558**	**6.6982**	**0.3369**	**0.7184**	**0.6058**	**1.1967**	**0.3018**	**0.6043**	**0.7800**	**0.0000**	**603.0968**	**603.0968**	**0.1294**	**0.0280**	**612.9590**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
1999	0.8591	6.6281	3.4041	0.3369	0.7184	0.4782	1.1967	0.3018	0.4782	0.7800	0.0000	237.0559	237.0559	0.0702	0.0000	238.8116
2000	1.6357	9.5558	6.6982	0.0577	0.4462	0.6058	1.0519	0.1443	0.6043	0.7487	0.0000	603.0963	603.0963	0.1294	0.0222	612.9585
2001	1.5174	7.5935	6.1112	0.0479	0.1049	0.5358	0.6407	0.0284	0.5339	0.5623	0.0000	519.9677	519.9677	0.1188	0.0280	531.2917
2002	1.5174	7.5935	6.1112	0.0479	0.1049	0.5358	0.6407	0.0284	0.5339	0.5623	0.0000	519.9677	519.9677	0.1188	0.0280	531.2917
2003	1.5174	7.5935	6.1112	0.0479	0.1049	0.5358	0.6407	0.0284	0.5339	0.5623	0.0000	519.9677	519.9677	0.1188	0.0280	531.2917
2004	5.9296	5.7271	4.0681	0.0348	0.0600	0.3862	0.4462	0.0162	0.3852	0.4014	0.0000	364.3526	364.3526	0.0832	0.0155	371.0390
2005	1.4384	0.0394	0.0420	2.7000e-004	1.0800e-003	3.2900e-003	4.3700e-003	2.9000e-004	3.2900e-003	3.5800e-003	0.0000	3.3795	3.3795	7.1000e-004	1.5000e-004	3.4424
Maximum	**5.9296**	**9.5558**	**6.6982**	**0.3369**	**0.7184**	**0.6058**	**1.1967**	**0.3018**	**0.6043**	**0.7800**	**0.0000**	**603.0963**	**603.0963**	**0.1294**	**0.0280**	**612.9585**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-1999**	**11-30-1999**	5.1523	5.1523
2	**12-1-1999**	**2-29-2000**	5.2082	5.2082
3	**3-1-2000**	**5-31-2000**	2.9705	2.9705
4	**6-1-2000**	**8-31-2000**	2.2829	2.2829

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5	**9-1-2000**	**11-30-2000**	2.2764	2.2764
6	**12-1-2000**	**2-28-2001**	2.2603	2.2603
7	**3-1-2001**	**5-31-2001**	2.2922	2.2922
8	**6-1-2001**	**8-31-2001**	2.2829	2.2829
9	**9-1-2001**	**11-30-2001**	2.2764	2.2764
10	**12-1-2001**	**2-28-2002**	2.2603	2.2603
11	**3-1-2002**	**5-31-2002**	2.2922	2.2922
12	**6-1-2002**	**8-31-2002**	2.2829	2.2829
13	**9-1-2002**	**11-30-2002**	2.2764	2.2764
14	**12-1-2002**	**2-28-2003**	2.2603	2.2603
15	**3-1-2003**	**5-31-2003**	2.2922	2.2922
16	**6-1-2003**	**8-31-2003**	2.2829	2.2829
17	**9-1-2003**	**11-30-2003**	2.2764	2.2764
18	**12-1-2003**	**2-29-2004**	2.2854	2.2854
19	**3-1-2004**	**5-31-2004**	2.2922	2.2922
20	**6-1-2004**	**8-31-2004**	1.9650	1.9650
21	**9-1-2004**	**11-30-2004**	3.8961	3.8961
22	**12-1-2004**	**2-28-2005**	3.4923	3.4923
		Highest	5.2082	5.2082

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.2987	0.1100	1.9646	6.2000e-004		0.0149	0.0149		0.0149	0.0149	0.0000	99.7553	99.7553	6.2100e-003	1.7800e-003	100.4407
Energy	0.0287	0.2453	0.1044	1.5700e-003		0.0198	0.0198		0.0198	0.0198	0.0000	599.4291	599.4291	0.0321	8.4300e-003	602.7440
Mobile	4.1217	9.8893	48.2416	0.0624	2.2055	0.1809	2.3864	0.5914	0.1716	0.7630	0.0000	2,916.9180	2,916.9180	0.4342	0.3427	3,029.8993
Waste						0.0000	0.0000		0.0000	0.0000	46.8422	0.0000	46.8422	2.7683	0.0000	116.0496
Water						0.0000	0.0000		0.0000	0.0000	4.6302	19.7162	24.3464	0.4772	0.0114	39.6834
Total	**6.4491**	**10.2446**	**50.3105**	**0.0646**	**2.2055**	**0.2156**	**2.4211**	**0.5914**	**0.2064**	**0.7978**	**51.4724**	**3,635.8186**	**3,687.2909**	**3.7180**	**0.3644**	**3,888.8170**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.2987	0.1100	1.9646	6.2000e-004		0.0149	0.0149		0.0149	0.0149	0.0000	99.7553	99.7553	6.2100e-003	1.7800e-003	100.4407
Energy	0.0287	0.2453	0.1044	1.5700e-003		0.0198	0.0198		0.0198	0.0198	0.0000	599.4291	599.4291	0.0321	8.4300e-003	602.7440
Mobile	4.1217	9.8893	48.2416	0.0624	2.2055	0.1809	2.3864	0.5914	0.1716	0.7630	0.0000	2,916.9180	2,916.9180	0.4342	0.3427	3,029.8993
Waste						0.0000	0.0000		0.0000	0.0000	46.8422	0.0000	46.8422	2.7683	0.0000	116.0496
Water						0.0000	0.0000		0.0000	0.0000	4.6302	19.7162	24.3464	0.4772	0.0114	39.6834
Total	**6.4491**	**10.2446**	**50.3105**	**0.0646**	**2.2055**	**0.2156**	**2.4211**	**0.5914**	**0.2064**	**0.7978**	**51.4724**	**3,635.8186**	**3,687.2909**	**3.7180**	**0.3644**	**3,888.8170**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/1999	10/26/1999	5	40	
2	Grading	Grading	10/27/1999	3/28/2000	5	110	
3	Building Construction	Building Construction	3/29/2000	6/29/2004	5	1110	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Paving	Paving	6/30/2004	10/12/2004	5	75	
5	Architectural Coating	Architectural Coating	10/13/2004	1/25/2005	5	75	

Acres of Grading (Site Preparation Phase): 60

Acres of Grading (Grading Phase): 330

Acres of Paving: 0

Residential Indoor: 816,480; Residential Outdoor: 272,160; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	81.00	24.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 1999

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3931	0.0000	0.3931	0.2021	0.0000	0.2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3153	2.2990	0.8397	0.1193		0.1779	0.1779		0.1779	0.1779	0.0000	80.0092	80.0092	0.0258	0.0000	80.6535
Total	**0.3153**	**2.2990**	**0.8397**	**0.1193**	**0.3931**	**0.1779**	**0.5711**	**0.2021**	**0.1779**	**0.3800**	**0.0000**	**80.0092**	**80.0092**	**0.0258**	**0.0000**	**80.6535**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 1999

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					2.4800e-003	0.0000	2.4800e-003	6.1000e-004	0.0000	6.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**2.4800e-003**	**0.0000**	**2.4800e-003**	**6.1000e-004**	**0.0000**	**6.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3931	0.0000	0.3931	0.2021	0.0000	0.2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3153	2.2990	0.8397	0.1193		0.1779	0.1779		0.1779	0.1779	0.0000	80.0091	80.0091	0.0258	0.0000	80.6534
Total	**0.3153**	**2.2990**	**0.8397**	**0.1193**	**0.3931**	**0.1779**	**0.5711**	**0.2021**	**0.1779**	**0.3800**	**0.0000**	**80.0091**	**80.0091**	**0.0258**	**0.0000**	**80.6534**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 1999

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					2.4800e-003	0.0000	2.4800e-003	6.1000e-004	0.0000	6.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**2.4800e-003**	**0.0000**	**2.4800e-003**	**6.1000e-004**	**0.0000**	**6.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Grading - 1999

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3195	0.0000	0.3195	0.0983	0.0000	0.0983	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5438	4.3291	2.5644	0.2176		0.3003	0.3003		0.3003	0.3003	0.0000	157.0469	157.0469	0.0445	0.0000	158.1584
Total	**0.5438**	**4.3291**	**2.5644**	**0.2176**	**0.3195**	**0.3003**	**0.6198**	**0.0983**	**0.3003**	**0.3987**	**0.0000**	**157.0469**	**157.0469**	**0.0445**	**0.0000**	**158.1584**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 1999

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					3.3100e-003	0.0000	3.3100e-003	8.1000e-004	0.0000	8.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**3.3100e-003**	**0.0000**	**3.3100e-003**	**8.1000e-004**	**0.0000**	**8.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3195	0.0000	0.3195	0.0983	0.0000	0.0983	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5438	4.3291	2.5644	0.2176		0.3003	0.3003		0.3003	0.3003	0.0000	157.0467	157.0467	0.0445	0.0000	158.1582
Total	**0.5438**	**4.3291**	**2.5644**	**0.2176**	**0.3195**	**0.3003**	**0.6198**	**0.0983**	**0.3003**	**0.3987**	**0.0000**	**157.0467**	**157.0467**	**0.0445**	**0.0000**	**158.1582**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 1999

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					3.3100e-003	0.0000	3.3100e-003	8.1000e-004	0.0000	8.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**3.3100e-003**	**0.0000**	**3.3100e-003**	**8.1000e-004**	**0.0000**	**8.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Grading - 2000

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3617	0.0000	0.3617	0.1215	0.0000	0.1215	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4688	3.7744	1.9082	0.0212		0.1991	0.1991		0.1991	0.1991	0.0000	202.8523	202.8523	0.0381	0.0000	203.8051
Total	**0.4688**	**3.7744**	**1.9082**	**0.0212**	**0.3617**	**0.1991**	**0.5607**	**0.1215**	**0.1991**	**0.3206**	**0.0000**	**202.8523**	**202.8523**	**0.0381**	**0.0000**	**203.8051**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0158	0.0209	0.1540	9.0000e-005	4.9400e-003	2.2000e-004	5.1600e-003	1.3100e-003	2.1000e-004	1.5200e-003	0.0000	5.7860	5.7860	1.2200e-003	9.7000e-004	6.1047
Total	**0.0158**	**0.0209**	**0.1540**	**9.0000e-005**	**4.9400e-003**	**2.2000e-004**	**5.1600e-003**	**1.3100e-003**	**2.1000e-004**	**1.5200e-003**	**0.0000**	**5.7860**	**5.7860**	**1.2200e-003**	**9.7000e-004**	**6.1047**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3617	0.0000	0.3617	0.1215	0.0000	0.1215	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4688	3.7744	1.9082	0.0212		0.1991	0.1991		0.1991	0.1991	0.0000	202.8520	202.8520	0.0381	0.0000	203.8049
Total	**0.4688**	**3.7744**	**1.9082**	**0.0212**	**0.3617**	**0.1991**	**0.5607**	**0.1215**	**0.1991**	**0.3206**	**0.0000**	**202.8520**	**202.8520**	**0.0381**	**0.0000**	**203.8049**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0158	0.0209	0.1540	9.0000e-005	4.9400e-003	2.2000e-004	5.1600e-003	1.3100e-003	2.1000e-004	1.5200e-003	0.0000	5.7860	5.7860	1.2200e-003	9.7000e-004	6.1047
Total	**0.0158**	**0.0209**	**0.1540**	**9.0000e-005**	**4.9400e-003**	**2.2000e-004**	**5.1600e-003**	**1.3100e-003**	**2.1000e-004**	**1.5200e-003**	**0.0000**	**5.7860**	**5.7860**	**1.2200e-003**	**9.7000e-004**	**6.1047**

3.4 Building Construction - 2000

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.8638	4.7779	2.2135	0.0301		0.3756	0.3756		0.3756	0.3756	0.0000	260.2324	260.2324	0.0704	0.0000	261.9911
Total	**0.8638**	**4.7779**	**2.2135**	**0.0301**		**0.3756**	**0.3756**		**0.3756**	**0.3756**	**0.0000**	**260.2324**	**260.2324**	**0.0704**	**0.0000**	**261.9911**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0831	0.7127	0.4306	5.0800e-003	0.0157	0.0280	0.0437	4.5400e-003	0.0268	0.0313	0.0000	59.3909	59.3909	3.9700e-003	8.7600e-003	62.1006
Worker	0.2043	0.2699	1.9919	1.1800e-003	0.0639	2.9000e-003	0.0668	0.0170	2.6900e-003	0.0197	0.0000	74.8353	74.8353	0.0158	0.0125	78.9576
Total	**0.2874**	**0.9826**	**2.4225**	**6.2600e-003**	**0.0796**	**0.0309**	**0.1105**	**0.0215**	**0.0294**	**0.0510**	**0.0000**	**134.2262**	**134.2262**	**0.0198**	**0.0213**	**141.0581**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.8638	4.7779	2.2135	0.0301		0.3756	0.3756		0.3756	0.3756	0.0000	260.2321	260.2321	0.0704	0.0000	261.9907
Total	**0.8638**	**4.7779**	**2.2135**	**0.0301**		**0.3756**	**0.3756**		**0.3756**	**0.3756**	**0.0000**	**260.2321**	**260.2321**	**0.0704**	**0.0000**	**261.9907**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0831	0.7127	0.4306	5.0800e-003	0.0157	0.0280	0.0437	4.5400e-003	0.0268	0.0313	0.0000	59.3909	59.3909	3.9700e-003	8.7600e-003	62.1006
Worker	0.2043	0.2699	1.9919	1.1800e-003	0.0639	2.9000e-003	0.0668	0.0170	2.6900e-003	0.0197	0.0000	74.8353	74.8353	0.0158	0.0125	78.9576
Total	**0.2874**	**0.9826**	**2.4225**	**6.2600e-003**	**0.0796**	**0.0309**	**0.1105**	**0.0215**	**0.0294**	**0.0510**	**0.0000**	**134.2262**	**134.2262**	**0.0198**	**0.0213**	**141.0581**

3.4 Building Construction - 2001

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.1386	6.2982	2.9179	0.0397		0.4951	0.4951		0.4951	0.4951	0.0000	343.0336	343.0336	0.0927	0.0000	345.3518
Total	**1.1386**	**6.2982**	**2.9179**	**0.0397**		**0.4951**	**0.4951**		**0.4951**	**0.4951**	**0.0000**	**343.0336**	**343.0336**	**0.0927**	**0.0000**	**345.3518**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2001

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1095	0.9395	0.5676	6.7000e-003	0.0207	0.0369	0.0576	5.9800e-003	0.0353	0.0413	0.0000	78.2880	78.2880	5.2300e-003	0.0116	81.8599
Worker	0.2693	0.3558	2.6257	1.5600e-003	0.0842	3.8300e-003	0.0880	0.0224	3.5500e-003	0.0259	0.0000	98.6465	98.6465	0.0208	0.0165	104.0804
Total	**0.3788**	**1.2953**	**3.1933**	**8.2600e-003**	**0.1049**	**0.0407**	**0.1456**	**0.0284**	**0.0388**	**0.0672**	**0.0000**	**176.9345**	**176.9345**	**0.0260**	**0.0280**	**185.9403**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.1386	6.2982	2.9178	0.0397		0.4951	0.4951		0.4951	0.4951	0.0000	343.0332	343.0332	0.0927	0.0000	345.3514
Total	**1.1386**	**6.2982**	**2.9178**	**0.0397**		**0.4951**	**0.4951**		**0.4951**	**0.4951**	**0.0000**	**343.0332**	**343.0332**	**0.0927**	**0.0000**	**345.3514**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2001

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1095	0.9395	0.5676	6.7000e-003	0.0207	0.0369	0.0576	5.9800e-003	0.0353	0.0413	0.0000	78.2880	78.2880	5.2300e-003	0.0116	81.8599
Worker	0.2693	0.3558	2.6257	1.5600e-003	0.0842	3.8300e-003	0.0880	0.0224	3.5500e-003	0.0259	0.0000	98.6465	98.6465	0.0208	0.0165	104.0804
Total	**0.3788**	**1.2953**	**3.1933**	**8.2600e-003**	**0.1049**	**0.0407**	**0.1456**	**0.0284**	**0.0388**	**0.0672**	**0.0000**	**176.9345**	**176.9345**	**0.0260**	**0.0280**	**185.9403**

3.4 Building Construction - 2002

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.1386	6.2982	2.9179	0.0397		0.4951	0.4951		0.4951	0.4951	0.0000	343.0336	343.0336	0.0927	0.0000	345.3518
Total	**1.1386**	**6.2982**	**2.9179**	**0.0397**		**0.4951**	**0.4951**		**0.4951**	**0.4951**	**0.0000**	**343.0336**	**343.0336**	**0.0927**	**0.0000**	**345.3518**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2002

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1095	0.9395	0.5676	6.7000e-003	0.0207	0.0369	0.0576	5.9800e-003	0.0353	0.0413	0.0000	78.2880	78.2880	5.2300e-003	0.0116	81.8599
Worker	0.2693	0.3558	2.6257	1.5600e-003	0.0842	3.8300e-003	0.0880	0.0224	3.5500e-003	0.0259	0.0000	98.6465	98.6465	0.0208	0.0165	104.0804
Total	**0.3788**	**1.2953**	**3.1933**	**8.2600e-003**	**0.1049**	**0.0407**	**0.1456**	**0.0284**	**0.0388**	**0.0672**	**0.0000**	**176.9345**	**176.9345**	**0.0260**	**0.0280**	**185.9403**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.1386	6.2982	2.9178	0.0397		0.4951	0.4951		0.4951	0.4951	0.0000	343.0332	343.0332	0.0927	0.0000	345.3514
Total	**1.1386**	**6.2982**	**2.9178**	**0.0397**		**0.4951**	**0.4951**		**0.4951**	**0.4951**	**0.0000**	**343.0332**	**343.0332**	**0.0927**	**0.0000**	**345.3514**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2002

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1095	0.9395	0.5676	6.7000e-003	0.0207	0.0369	0.0576	5.9800e-003	0.0353	0.0413	0.0000	78.2880	78.2880	5.2300e-003	0.0116	81.8599
Worker	0.2693	0.3558	2.6257	1.5600e-003	0.0842	3.8300e-003	0.0880	0.0224	3.5500e-003	0.0259	0.0000	98.6465	98.6465	0.0208	0.0165	104.0804
Total	**0.3788**	**1.2953**	**3.1933**	**8.2600e-003**	**0.1049**	**0.0407**	**0.1456**	**0.0284**	**0.0388**	**0.0672**	**0.0000**	**176.9345**	**176.9345**	**0.0260**	**0.0280**	**185.9403**

3.4 Building Construction - 2003

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.1386	6.2982	2.9179	0.0397		0.4951	0.4951		0.4951	0.4951	0.0000	343.0336	343.0336	0.0927	0.0000	345.3518
Total	**1.1386**	**6.2982**	**2.9179**	**0.0397**		**0.4951**	**0.4951**		**0.4951**	**0.4951**	**0.0000**	**343.0336**	**343.0336**	**0.0927**	**0.0000**	**345.3518**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2003

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1095	0.9395	0.5676	6.7000e-003	0.0207	0.0369	0.0576	5.9800e-003	0.0353	0.0413	0.0000	78.2880	78.2880	5.2300e-003	0.0116	81.8599
Worker	0.2693	0.3558	2.6257	1.5600e-003	0.0842	3.8300e-003	0.0880	0.0224	3.5500e-003	0.0259	0.0000	98.6465	98.6465	0.0208	0.0165	104.0804
Total	**0.3788**	**1.2953**	**3.1933**	**8.2600e-003**	**0.1049**	**0.0407**	**0.1456**	**0.0284**	**0.0388**	**0.0672**	**0.0000**	**176.9345**	**176.9345**	**0.0260**	**0.0280**	**185.9403**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.1386	6.2982	2.9178	0.0397		0.4951	0.4951		0.4951	0.4951	0.0000	343.0332	343.0332	0.0927	0.0000	345.3514
Total	**1.1386**	**6.2982**	**2.9178**	**0.0397**		**0.4951**	**0.4951**		**0.4951**	**0.4951**	**0.0000**	**343.0332**	**343.0332**	**0.0927**	**0.0000**	**345.3514**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2003

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1095	0.9395	0.5676	6.7000e-003	0.0207	0.0369	0.0576	5.9800e-003	0.0353	0.0413	0.0000	78.2880	78.2880	5.2300e-003	0.0116	81.8599
Worker	0.2693	0.3558	2.6257	1.5600e-003	0.0842	3.8300e-003	0.0880	0.0224	3.5500e-003	0.0259	0.0000	98.6465	98.6465	0.0208	0.0165	104.0804
Total	**0.3788**	**1.2953**	**3.1933**	**8.2600e-003**	**0.1049**	**0.0407**	**0.1456**	**0.0284**	**0.0388**	**0.0672**	**0.0000**	**176.9345**	**176.9345**	**0.0260**	**0.0280**	**185.9403**

3.4 Building Construction - 2004

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.5628	3.1129	1.4422	0.0196		0.2447	0.2447		0.2447	0.2447	0.0000	169.5454	169.5454	0.0458	0.0000	170.6911
Total	**0.5628**	**3.1129**	**1.4422**	**0.0196**		**0.2447**	**0.2447**		**0.2447**	**0.2447**	**0.0000**	**169.5454**	**169.5454**	**0.0458**	**0.0000**	**170.6911**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2004

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0541	0.4643	0.2805	3.3100e-003	0.0102	0.0182	0.0285	2.9600e-003	0.0174	0.0204	0.0000	38.6941	38.6941	2.5800e-003	5.7100e-003	40.4595
Worker	0.1331	0.1759	1.2978	7.7000e-004	0.0416	1.8900e-003	0.0435	0.0111	1.7500e-003	0.0128	0.0000	48.7563	48.7563	0.0103	8.1500e-003	51.4421
Total	**0.1872**	**0.6402**	**1.5783**	**4.0800e-003**	**0.0519**	**0.0201**	**0.0720**	**0.0140**	**0.0192**	**0.0332**	**0.0000**	**87.4504**	**87.4504**	**0.0129**	**0.0139**	**91.9015**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.5628	3.1129	1.4422	0.0196		0.2447	0.2447		0.2447	0.2447	0.0000	169.5452	169.5452	0.0458	0.0000	170.6909
Total	**0.5628**	**3.1129**	**1.4422**	**0.0196**		**0.2447**	**0.2447**		**0.2447**	**0.2447**	**0.0000**	**169.5452**	**169.5452**	**0.0458**	**0.0000**	**170.6909**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2004

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0541	0.4643	0.2805	3.3100e-003	0.0102	0.0182	0.0285	2.9600e-003	0.0174	0.0204	0.0000	38.6941	38.6941	2.5800e-003	5.7100e-003	40.4595
Worker	0.1331	0.1759	1.2978	7.7000e-004	0.0416	1.8900e-003	0.0435	0.0111	1.7500e-003	0.0128	0.0000	48.7563	48.7563	0.0103	8.1500e-003	51.4421
Total	**0.1872**	**0.6402**	**1.5783**	**4.0800e-003**	**0.0519**	**0.0201**	**0.0720**	**0.0140**	**0.0192**	**0.0332**	**0.0000**	**87.4504**	**87.4504**	**0.0129**	**0.0139**	**91.9015**

3.5 Paving - 2004

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2505	1.7919	0.7274	0.0101		0.1090	0.1090		0.1090	0.1090	0.0000	90.3732	90.3732	0.0204	0.0000	90.8832
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2505**	**1.7919**	**0.7274**	**0.0101**		**0.1090**	**0.1090**		**0.1090**	**0.1090**	**0.0000**	**90.3732**	**90.3732**	**0.0204**	**0.0000**	**90.8832**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2004

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0143	0.0189	0.1397	8.0000e-005	4.4800e-003	2.0000e-004	4.6800e-003	1.1900e-003	1.9000e-004	1.3800e-003	0.0000	5.2494	5.2494	1.1100e-003	8.8000e-004	5.5386
Total	**0.0143**	**0.0189**	**0.1397**	**8.0000e-005**	**4.4800e-003**	**2.0000e-004**	**4.6800e-003**	**1.1900e-003**	**1.9000e-004**	**1.3800e-003**	**0.0000**	**5.2494**	**5.2494**	**1.1100e-003**	**8.8000e-004**	**5.5386**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2505	1.7919	0.7274	0.0101		0.1090	0.1090		0.1090	0.1090	0.0000	90.3731	90.3731	0.0204	0.0000	90.8831
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2505**	**1.7919**	**0.7274**	**0.0101**		**0.1090**	**0.1090**		**0.1090**	**0.1090**	**0.0000**	**90.3731**	**90.3731**	**0.0204**	**0.0000**	**90.8831**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2004

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0143	0.0189	0.1397	8.0000e-005	4.4800e-003	2.0000e-004	4.6800e-003	1.1900e-003	1.9000e-004	1.3800e-003	0.0000	5.2494	5.2494	1.1100e-003	8.8000e-004	5.5386
Total	**0.0143**	**0.0189**	**0.1397**	**8.0000e-005**	**4.4800e-003**	**2.0000e-004**	**4.6800e-003**	**1.1900e-003**	**1.9000e-004**	**1.3800e-003**	**0.0000**	**5.2494**	**5.2494**	**1.1100e-003**	**8.8000e-004**	**5.5386**

3.6 Architectural Coating - 2004

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.8777					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0254	0.1476	0.0653	8.6000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	7.4045	7.4045	2.0700e-003	0.0000	7.4562
Total	**4.9031**	**0.1476**	**0.0653**	**8.6000e-004**		**0.0120**	**0.0120**		**0.0120**	**0.0120**	**0.0000**	**7.4045**	**7.4045**	**2.0700e-003**	**0.0000**	**7.4562**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2004

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0118	0.0156	0.1153	7.0000e-005	3.7000e-003	1.7000e-004	3.8600e-003	9.8000e-004	1.6000e-004	1.1400e-003	0.0000	4.3302	4.3302	9.1000e-004	7.2000e-004	4.5687
Total	**0.0118**	**0.0156**	**0.1153**	**7.0000e-005**	**3.7000e-003**	**1.7000e-004**	**3.8600e-003**	**9.8000e-004**	**1.6000e-004**	**1.1400e-003**	**0.0000**	**4.3302**	**4.3302**	**9.1000e-004**	**7.2000e-004**	**4.5687**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.8777					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0254	0.1476	0.0653	8.6000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	7.4044	7.4044	2.0700e-003	0.0000	7.4562
Total	**4.9031**	**0.1476**	**0.0653**	**8.6000e-004**		**0.0120**	**0.0120**		**0.0120**	**0.0120**	**0.0000**	**7.4044**	**7.4044**	**2.0700e-003**	**0.0000**	**7.4562**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2004

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0118	0.0156	0.1153	7.0000e-005	3.7000e-003	1.7000e-004	3.8600e-003	9.8000e-004	1.6000e-004	1.1400e-003	0.0000	4.3302	4.3302	9.1000e-004	7.2000e-004	4.5687
Total	**0.0118**	**0.0156**	**0.1153**	**7.0000e-005**	**3.7000e-003**	**1.7000e-004**	**3.8600e-003**	**9.8000e-004**	**1.6000e-004**	**1.1400e-003**	**0.0000**	**4.3302**	**4.3302**	**9.1000e-004**	**7.2000e-004**	**4.5687**

3.6 Architectural Coating - 2005

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.4297					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3900e-003	0.0364	0.0177	2.5000e-004		3.2600e-003	3.2600e-003		3.2600e-003	3.2600e-003	0.0000	2.1703	2.1703	5.2000e-004	0.0000	2.1834
Total	**1.4361**	**0.0364**	**0.0177**	**2.5000e-004**		**3.2600e-003**	**3.2600e-003**		**3.2600e-003**	**3.2600e-003**	**0.0000**	**2.1703**	**2.1703**	**5.2000e-004**	**0.0000**	**2.1834**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2005

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3900e-003	3.0500e-003	0.0243	1.0000e-005	1.0800e-003	3.0000e-005	1.1100e-003	2.9000e-004	3.0000e-005	3.1000e-004	0.0000	1.2092	1.2092	1.9000e-004	1.5000e-004	1.2591
Total	**2.3900e-003**	**3.0500e-003**	**0.0243**	**1.0000e-005**	**1.0800e-003**	**3.0000e-005**	**1.1100e-003**	**2.9000e-004**	**3.0000e-005**	**3.1000e-004**	**0.0000**	**1.2092**	**1.2092**	**1.9000e-004**	**1.5000e-004**	**1.2591**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.4297					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3900e-003	0.0364	0.0177	2.5000e-004		3.2600e-003	3.2600e-003		3.2600e-003	3.2600e-003	0.0000	2.1703	2.1703	5.2000e-004	0.0000	2.1833
Total	**1.4361**	**0.0364**	**0.0177**	**2.5000e-004**		**3.2600e-003**	**3.2600e-003**		**3.2600e-003**	**3.2600e-003**	**0.0000**	**2.1703**	**2.1703**	**5.2000e-004**	**0.0000**	**2.1833**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2005

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3900e-003	3.0500e-003	0.0243	1.0000e-005	1.0800e-003	3.0000e-005	1.1100e-003	2.9000e-004	3.0000e-005	3.1000e-004	0.0000	1.2092	1.2092	1.9000e-004	1.5000e-004	1.2591
Total	**2.3900e-003**	**3.0500e-003**	**0.0243**	**1.0000e-005**	**1.0800e-003**	**3.0000e-005**	**1.1100e-003**	**2.9000e-004**	**3.0000e-005**	**3.1000e-004**	**0.0000**	**1.2092**	**1.2092**	**1.9000e-004**	**1.5000e-004**	**1.2591**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.1217	9.8893	48.2416	0.0624	2.2055	0.1809	2.3864	0.5914	0.1716	0.7630	0.0000	2,916.9180	2,916.9180	0.4342	0.3427	3,029.8993
Unmitigated	4.1217	9.8893	48.2416	0.0624	2.2055	0.1809	2.3864	0.5914	0.1716	0.7630	0.0000	2,916.9180	2,916.9180	0.4342	0.3427	3,029.8993

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	2,114.56	2,136.96	1915.20	5,889,125	5,889,125
Total	2,114.56	2,136.96	1,915.20	5,889,125	5,889,125

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	38.40	22.60	39.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.445143	0.090887	0.165130	0.187970	0.045320	0.007055	0.014780	0.012618	0.000711	0.000220	0.019746	0.001150	0.009270

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	315.3780	315.3780	0.0266	3.2300e-003	317.0050
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	315.3780	315.3780	0.0266	3.2300e-003	317.0050
NaturalGas Mitigated	0.0287	0.2453	0.1044	1.5700e-003		0.0198	0.0198		0.0198	0.0198	0.0000	284.0511	284.0511	5.4400e-003	5.2100e-003	285.7391
NaturalGas Unmitigated	0.0287	0.2453	0.1044	1.5700e-003		0.0198	0.0198		0.0198	0.0198	0.0000	284.0511	284.0511	5.4400e-003	5.2100e-003	285.7391

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	5.32292e+006	0.0287	0.2453	0.1044	1.5700e-003		0.0198	0.0198		0.0198	0.0198	0.0000	284.0511	284.0511	5.4400e-003	5.2100e-003	285.7391
Total		**0.0287**	**0.2453**	**0.1044**	**1.5700e-003**		**0.0198**	**0.0198**		**0.0198**	**0.0198**	**0.0000**	**284.0511**	**284.0511**	**5.4400e-003**	**5.2100e-003**	**285.7391**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	5.32292e+006	0.0287	0.2453	0.1044	1.5700e-003		0.0198	0.0198		0.0198	0.0198	0.0000	284.0511	284.0511	5.4400e-003	5.2100e-003	285.7391
Total		**0.0287**	**0.2453**	**0.1044**	**1.5700e-003**		**0.0198**	**0.0198**		**0.0198**	**0.0198**	**0.0000**	**284.0511**	**284.0511**	**5.4400e-003**	**5.2100e-003**	**285.7391**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.77832e+006	315.3780	0.0266	3.2300e-003	317.0050
Total		**315.3780**	**0.0266**	**3.2300e-003**	**317.0050**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.77832e+006	315.3780	0.0266	3.2300e-003	317.0050
Total		**315.3780**	**0.0266**	**3.2300e-003**	**317.0050**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.2987	0.1100	1.9646	6.2000e-004		0.0149	0.0149		0.0149	0.0149	0.0000	99.7553	99.7553	6.2100e-003	1.7800e-003	100.4407
Unmitigated	2.2987	0.1100	1.9646	6.2000e-004		0.0149	0.0149		0.0149	0.0149	0.0000	99.7553	99.7553	6.2100e-003	1.7800e-003	100.4407

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.6307					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5747					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	9.8100e-003	0.0838	0.0357	5.3000e-004		6.7700e-003	6.7700e-003		6.7700e-003	6.7700e-003	0.0000	97.0385	97.0385	1.8600e-003	1.7800e-003	97.6151
Landscaping	0.0835	0.0262	1.9290	9.0000e-005		8.1500e-003	8.1500e-003		8.1500e-003	8.1500e-003	0.0000	2.7169	2.7169	4.3500e-003	0.0000	2.8256
Total	**2.2987**	**0.1100**	**1.9646**	**6.2000e-004**		**0.0149**	**0.0149**		**0.0149**	**0.0149**	**0.0000**	**99.7553**	**99.7553**	**6.2100e-003**	**1.7800e-003**	**100.4407**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.6307					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5747					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	9.8100e-003	0.0838	0.0357	5.3000e-004		6.7700e-003	6.7700e-003		6.7700e-003	6.7700e-003	0.0000	97.0385	97.0385	1.8600e-003	1.7800e-003	97.6151
Landscaping	0.0835	0.0262	1.9290	9.0000e-005		8.1500e-003	8.1500e-003		8.1500e-003	8.1500e-003	0.0000	2.7169	2.7169	4.3500e-003	0.0000	2.8256
Total	**2.2987**	**0.1100**	**1.9646**	**6.2000e-004**		**0.0149**	**0.0149**		**0.0149**	**0.0149**	**0.0000**	**99.7553**	**99.7553**	**6.2100e-003**	**1.7800e-003**	**100.4407**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	24.3464	0.4772	0.0114	39.6834
Unmitigated	24.3464	0.4772	0.0114	39.6834

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	14.5945 / 9.20088	24.3464	0.4772	0.0114	39.6834
Total		**24.3464**	**0.4772**	**0.0114**	**39.6834**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	14.5945 / 9.20088	24.3464	0.4772	0.0114	39.6834
Total		**24.3464**	**0.4772**	**0.0114**	**39.6834**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	46.8422	2.7683	0.0000	116.0496
Unmitigated	46.8422	2.7683	0.0000	116.0496

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	230.76	46.8422	2.7683	0.0000	116.0496
Total		**46.8422**	**2.7683**	**0.0000**	**116.0496**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	230.76	46.8422	2.7683	0.0000	116.0496
Total		**46.8422**	**2.7683**	**0.0000**	**116.0496**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix B

Biological Evaluation

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Biological Resources Assessment

Elliot Housing Subdivision Project
Assessor Parcel Numbers 087-010-006 and 087-010-008
Visalia, CA

Prepared for

4CREEKS
324 South Santa Fe Street, Suite A
Visalia, CA 93292

Prepared by

SOAR ENVIRONMENTAL CONSULTING
1322 E Shaw, Suite 400
Fresno, CA 93710

November 3, 2023

Executive Summary

4Creeks, Inc. (4Creeks) has tasked Soar Environmental Consulting Inc. (Soar Environmental) to provide a Biological Resource Assessment (BRA) as part of an Initial Study, for a Housing Subdivision Development Project (Project) in the City of Visalia, (City) in accordance with the California Environmental Quality Act (CEQA) prior to implementation of the proposed Project. The proposed Project is to construct 224 housing units on 59.13 acres of land on Assessor Parcel Numbers (APN) 087-010-006, and 087-010-008. These parcels are comprised of fallow agricultural fields on the outskirts of the city.

The objectives of this assessment are to: 1) provide a general characterization of biological resources on the property; 2) inventory plant and wildlife species; 3) evaluate the potential for special-status plant and animal species to occur or be impacted by project activities; and 4) describe the property's sensitive biological resources.

This BRA provides information concerning the biological resources within the Project Area. Prior to conducting a Habitat Assessment site survey, Soar Environmental researched the California Natural Diversity Database (CNDDB) and the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC), and the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants of California, to compile a list of special-status species that could potentially be present in the vicinity of the Project Area. Suitable habitat requirements for the species identified in the records search were reviewed by a Soar Environmental biologist, including species listing status, and proximal observations of special-status plant and wildlife species identified in this report.

No special-status plant or wildlife species were observed in the Project Area during the Habitat Assessment survey. However, based on suitable habitat present, and proximity of documented occurrences of special-status species from the data records search and Literature Review section of this report, it was determined that there is potential for Swainson's hawk (*Buteo swainsoni*) to occur within the vicinity of the Project Area. Based on the findings of this assessment, the proposed development of this property may affect but is unlikely to adversely affect Swainson's hawk, or any other listed species identified in this report . Mitigation measures are listed in Section 6 of this report to further minimize the potential for adverse effects to listed species, and their habitats.

Contents

Figures and Diagram

Tables

Appendices

1. Introduction

The proposed Project is the construction of a housing development on 59.13 acres within the City of Visalia, California. Soar Environmental Consulting Inc. (Soar Environmental) is tasked with providing this Biological Resource Assessment (BRA) in accordance with CEQA requirements.

This Biological Resource Assessment presents the findings of our literature review (including scientific literature and previous reports detailing studies conducted in the area) and the California Department of Fish and Wildlife's (CDFW) Natural Diversity Data Base (CNDDB), the California Native Plant Society (CNPS) online electronic inventory of rare and endangered plants of California, and the U.S. Fish and Wildlife Service (USFWS) IPaC for reported occurrences of special status vegetation communities, plants and animals. Based on a review of these resources it was determined that a Biological Assessment was necessary to search for the potential suitable habitat or presence for the following special-status species:

Special-Status Wildlife Species

- California tiger salamander (*Ambystoma californiense*)
- Western Spadefoot toad (*Spea hammondii*)
- Loggerhead Shrike (*Lanius ludovicianus*)
- Swainson's hawk (*Buteo swainsoni*)
- Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*)
- San Joaquin Kit Fox (*Vulpes macrotis mutica*)
- Western Mastiff Bat (*Eumops perotis californicus*)
- Western Pond Turtle (*Actinemys marmorata*)

Special-Status Plant Species

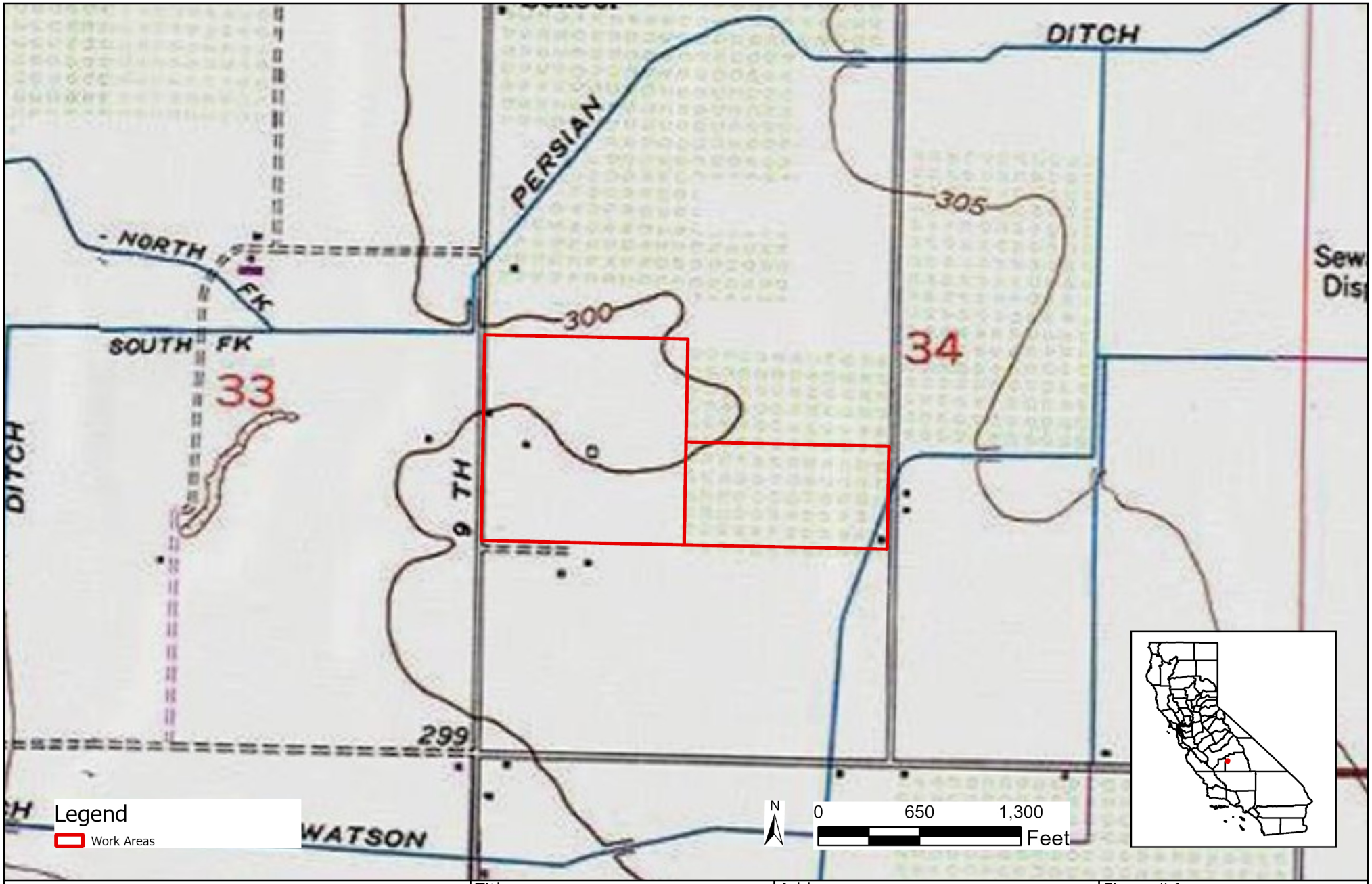
- California Jewelflower (*Caulanthus californicus*)
- Ewan's Larkspur (*Delphinium hansen*ii ssp. *ewanianum*)
- Heartscale (*Atriplex cordulata* var. *cordulata*)
- Lesser Saltscale (*Atriplex minuscula*)
- Recurved Larkspur (*Delphinium recurvatum*)
- Subtle Orache (*Atriplex subtilis*)

A Habitat Assessment was conducted in the Project Area on October 13, 2023, by a Soar Environmental qualified biologist. The purpose of the Biological Assessment survey was to search for the suitable habitat conditions, or presence of special-status species that have historically been observed within, or surrounding, the Project Area, as well as any other biological or environmentally sensitive resources. The Project Area is mostly fallow agricultural fields, with approximately 5.6 acres of valley oak woodland and 4.4 acres of maintained annual grassland habitat in the northwestern section of the property. No special-status species were observed during the site visit, and no wetlands, seasonal wetlands, alkali grassland or shrubland occur in the Project Area.

1.1 Project Location

The Project Area is located in the Central Valley of California on the east side of Road 92 (Shirk Road), approximately 0.5 mile south of State Route (SR) 198 in the City of Visalia, California, Tulare County and is comprised of Assessor Parcel Numbers (APN) 087-010-006 and 807-010-008. The Project Area is in the southwestern quadrant of the city limits, approximately 2.5 miles east of SR-99 and a mile south of SR-198, between Road 92 (Shirk Road) and Roeben St.

Located in the USGS 7.5-minute quadrangle of *Visalia* in Township 18 South, Range 24 East, in the western half of Section 34. The Saint Johns River is approximately 4.5 miles northeast of the Project Area, and the Valley Oaks Golf Course is approximately 1.3 miles west. The Project Area is surrounded by residential houses and agricultural land.



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Four Creeks Elliot Housing Subdivision Project, Visalia, CA

Client
4Creeks

Address
Subdivision Bounded by Shirk and Tulare roads and Roeben Street. APNs 087-010-006, 087-010-008.

Figure # 1
Project Location

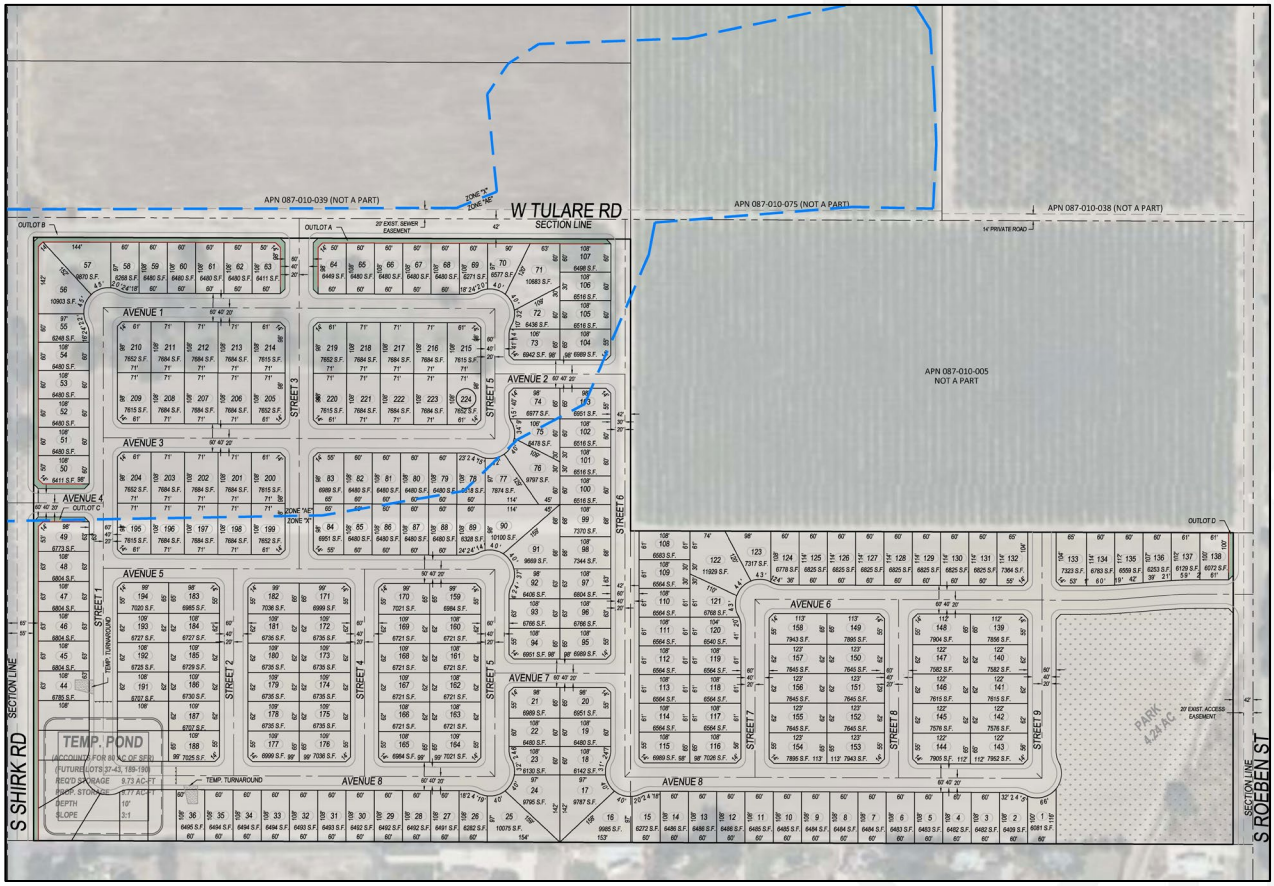
Revision Date
10/23/2023

1.2 Project Description

The proposed Project is the construction of a 224 unit housing subdivision at the southeast corner of Tulare Avenue and Shirk Road, in the City of Visalia. The Project Area is limited to a 59.13-acre property, with 2.24 acres allocated to the development of a park dedicated to the City. Grading will be accomplished using a backhoe and grader.

The project will require the development of roads and sidewalks around and throughout the property. A stormwater retention basin will be maintained in the southwest corner of the Project Area for all on site drainage. On the east side of the property bounded by Roeben Street, three existing overhead powerlines will be undergrounded, and five powerline poles on the Shirk Road boundary will be relocated. Since the entire property will be graded for the housing project during construction activities, the trees in the northwest section of the property would be removed. The majority of the property has been used for agricultural production and the entire lot has been cleared and maintained aside from the trees. (**Diagram A– Site Plan**)

Diagram A Site Plan



A detailed development plan is shown in Appendix F

1.3 Environmental Setting

The Project Area is surrounded by mostly grassy fields to the north and west, and residential complexes to the east and south. This area is on the southeastern side of Visalia in the Central Valley near the Sierra Nevada foothills. The property was being used for growing corn earlier in the year and significant portions of the property were disced prior to the biological survey.

The Project Area is a 59.13-acre disturbed vacant field, composed primarily of non-native annual herbs and grasses. A well- established canal exists along the southeastern boundary. The topography is relatively flat, ranging from 305 feet above sea level to the east, sloping down to 301 feet above sea level to the west (0 to 2% slopes). According to the USDA-NRCS Soil Survey (**Appendix E**) the active agricultural field portion of the Project Area is 101 Akers-Akers saline-sodic complex, and the northwestern portion of the property is mapped as 130 Nord fine sandy loam.

On the northwestern portion of the property there are some tree groves covering 5.6 acres, comprised of approximately 30 valley oaks *(Quercus lobata).* The largest valley oak tree in this stand is approximately 30 inches in diameter at breast height (dbh), the rest are approximately 12 to 24 inch dbh. No bird nests were observed in any of the trees in the Project Area. Another large valley oak that is a multi-trunked tree that is greater than 36” dbh occurs in the middle of the property on the southern edge.

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Figure #2
Project Boundary

Revision Date
10/23/2023

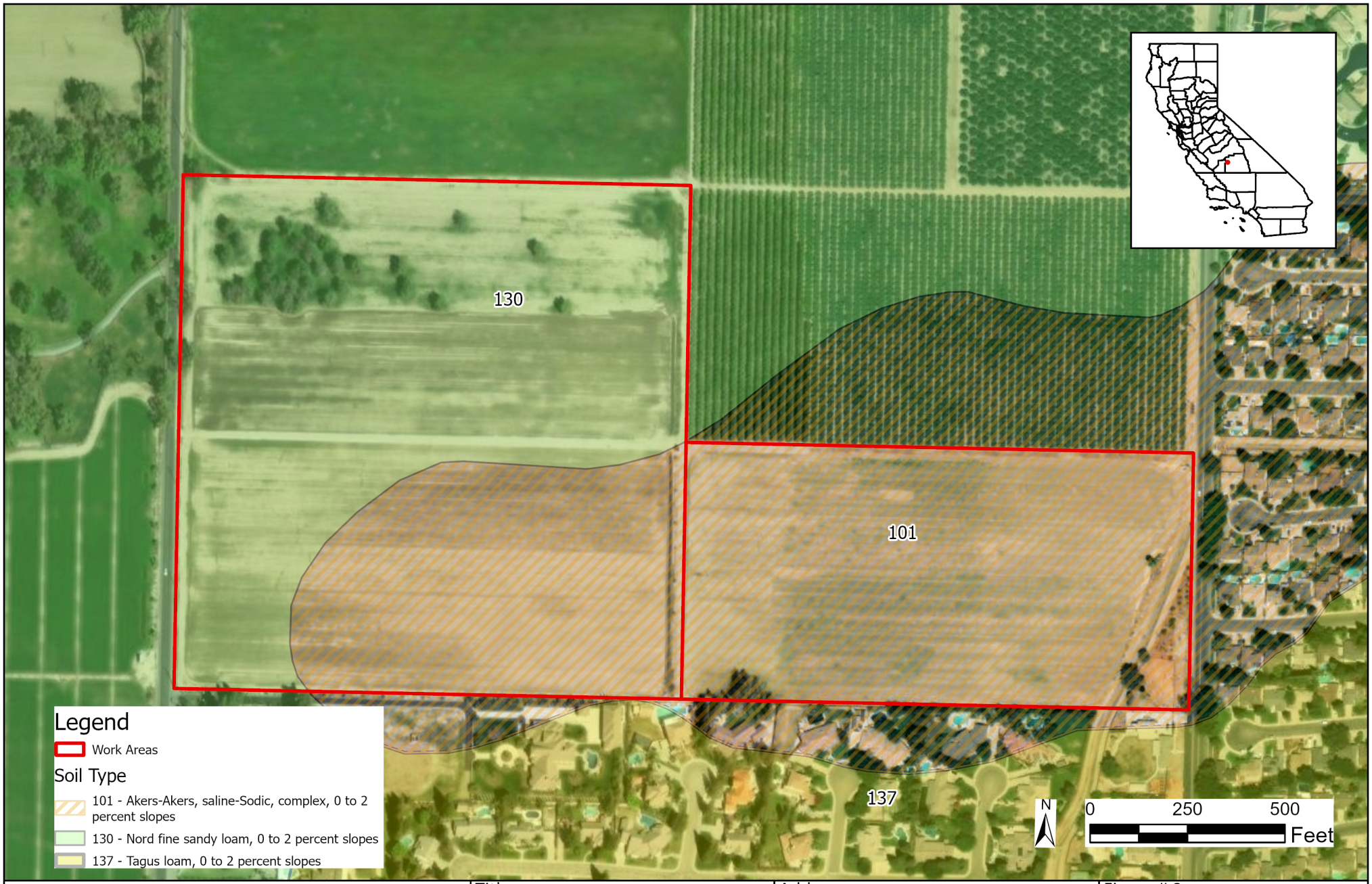

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Figure # 3
Soil Types Occurring in the Project Area

Revision Date
10/23/2023

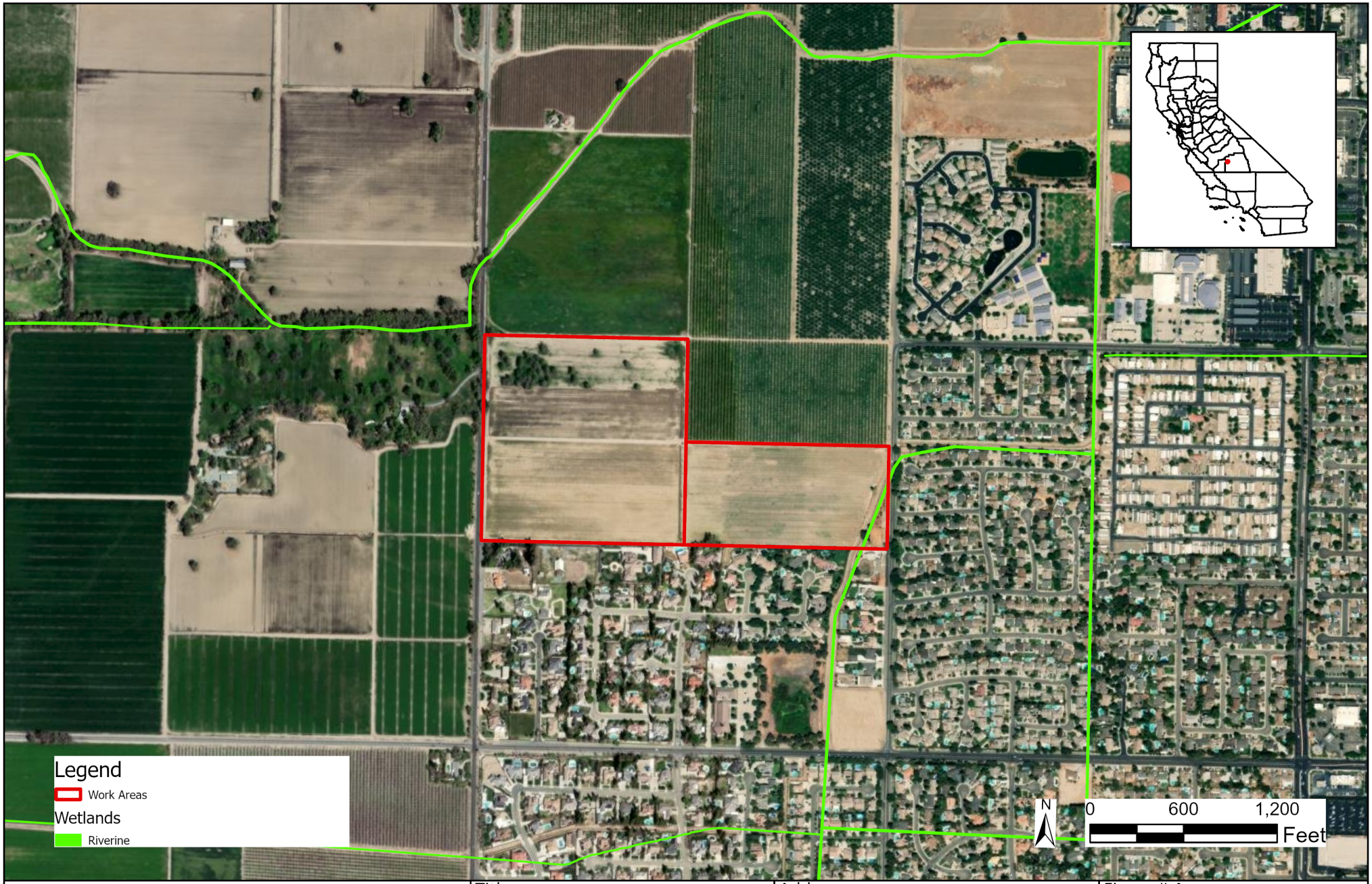

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Figure # 4
USFWS NWI Map

Revision Date
10/23/2023

2. Methods

2.1 Literature Review

Prior to performing the Biological Assessment, Soar Environmental conducted soil survey analysis (**Appendix E**) a survey of the USFWS National Wetlands Inventory (**Figure 4**) and a CNDDB records search (**Figure 5**) for threatened or endangered species that could potentially occur in the vicinity of the Project Area. The records search included a review of the California Natural Diversity Database (CNDDB), the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC), and the California Native Plant Society (CNPS) Online Rare Plant Inventory. The area covered by the data records search included the USGS 7.5-minute quadrangles of *Visalia, Exeter, Goshen, Ivanhoe, Monson, Cairns Corner, Paige, Traver* and *Tulare*. From these sources a list of special-status plant and animal species was generated. Proximal locations of known special-status plant and animal species located within 5 miles of the Project Area are shown in **Figure 5**.

A records search of the CNDDB and IPaC databases indicated 10 special-status wildlife species most likely to occur within or near the Project Area would include:

1) California tiger salamander (*Ambystoma californiense*)
2) Western Spadefoot toad (*Spea hammondii*)
3) Loggerhead Shrike (*Lanius ludovicianus*)
4) Swainson's hawk (*Buteo swainsoni*)
5) Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*)
6) San Joaquin Kit Fox (*Vulpes macrotis mutica*)
7) Western Mastiff Bat (*Eumops perotis californicus*)
8) Western Pond Turtle (*Actinemys marmorata*)

A search of the CNPS Online Rare Plant Inventory identified 21 regionally occurring special-status plant species with potential to occur within or near the Project Area. Of these, 6 plant species were determined to have a low potential to occur within portions of the Project Area. The 15 other species determined to have no potential to occur in the Project Area were excluded from further analysis.

1) California Jewelflower (*Caulanthus californicus*)
2) Ewan's Larkspur (*Delphinium hansen*ii ssp. ewanianum)
3) Heartscale (*Atriplex cordulata* var. cordulata)
4) Lesser Saltscale (*Atriplex miniscula*)
5) Recurved Larkspur (*Delphinium recurvatum*)
6) Subtle Orache (*Atriplex subtilis*)

2.2 Field Reconnaissance Methodology

The Habitat Assessment is a diurnal, non-protocol survey. The purpose of the Habitat Assessment Survey was to search for the presence of special-status species or suitable habitat for special-status

species identified in the data records search. The site visit for the Habitat Assessment includes observation and noting the plant and wildlife species occurring on and around the Project Area, habitat suitability for the species named in the **Literature Review**, present environmental conditions, and habitat, including microhabitat (only observable from the ground level).

The Habitat Assessment was conducted on October 13, 2023, by Soar Biologist Ben Arax to assess habitat quality for species listed in Section 2.1. Survey efforts emphasized the search for suitable habitats, or presence of special-status species that had documented occurrences in the data records search of the CNDDB, IPaC, and CNPS databases. The site visit consists of walking the perimeter of the property and meandering transects throughout the Project Area. During the site visit, the surveyor identified vegetation, searched for bird nests, possible small mammal dens, vernal pools and other signs of wildlife occupancy or associated suitable habitats. Plants were surveyed during the late blooming period or surveyed outside the blooming period. The biologist also surveyed the surrounding area by vehicle in accessible areas within 0.5 miles of the Project Area to look for biological resources and features that may be conducive for suitable habitat of the identified special-status species. During the survey, the biologist collected photos of the Project boundaries and other points of interest depicting the habitat and potential biological resources (**Appendix A**).

3. Biological Assessment Results

During the site visit, there were no observations of special-status plant or wildlife species. Plant and wildlife species that were observed on the property are listed in **Tables 1 & 2**. Approximately 49 acres of the Project Area is a bare dirt active agricultural field dominated in places by non-native annual grasses or ruderal weeds. Corn was grown on the property this year. Approximately five acres of low-mowed grassland adjoined by 5.6 acres of oak woodland with approximately 22 trees are on the northwestern edge. No bird nests were observed in the trees, grass thickets or powerline poles in the surrounding area. Herbaceous cover in the understory of the oak trees is dominated by absent to dense grass cover and few small mammal burrows were observed. The ground is relatively flat and cleared to the surface.

The survey was conducted by a qualified biologist outside of the blooming period for most of the sensitive plant species listed in the Literature Review. However, no special-status plant species were observed within or in the vicinity of the Project Area, and conditions for these species do not appear to be conducive, due to active agriculture uses and fire abatement activities including annual disking activities on the property, and in the surrounding urbanized environment.

No special-status plant or wildlife species were observed during the site visit. However, the Soar Biologist observed some common bird species flying around the area, listed in Table 1 below, along with plant species observed onsite. No other wildlife species were observed during the Biological Assessment.

Table 1– Wildlife Species Observed on the Project Area

Wildlife Species	Listing Status
American crow (*Corvus Brachyrynchos*)	None
Black Phoebe (*Sayornis nigricans*)	None
European Starling (*Sturnus vulgaris*)	None
House Finch (*Carpodacus mexicanus*)	MBTA
House Sparrow (*Passer domesticus*)	MBTA
Killdeer (*Charadrius montanus*)	MBTA
Lesser Goldfinch (*Carduelis psaltria*)	MBTA
Mourning dove (*Zenaida macroura*)	MBTA
Northern Flicker (*Colaptes auratus*)	None

Wildlife Species	Listing Status
Northern Mockingbird (*Mimus polyglottos*)	MBTA
Nuttall's Woodpecker (*Picoides nuttallii*)	None
Orange-crowned Warbler (*Vermivora celata*)	MBTA
Red-breasted Nuthatch (*Sitta canadensis*)	MBTA
Red-Tail Hawk (*Buteo jamaicensis*)	MBTA
Western Scrub Jay (*Aphelocoma californica*)	None
White-crowned Sparrow (*Zonotrichia leucophrys*)	MBTA
Yellow-rumped Warbler (*Dendroica coronata*)	MBTA

Table 2 – Plant Species Observed on the Project Area

Plant Species	Listing Status
Tree of Heaven (*Ailanthus altissima*)	Non-native
Tumbleweed (*Amaranthus albus*)	Non-native
Prostrate Pigweed (*Amaranthus blitoides*)	Non-native
Wild Oats (*Avena barbata*)	Non-native
Ripgut Brome (*Bromus diandrus*)	Non-native
Shepherd's Purse (*Capsella bursa-pastoris*)	Non-native
Lambsquarters (*Chenopodium album*)	Non-native

Plant Species	Listing Status
Mexican Sprangletop (*Leptochloa fusca* ssp. *uninervia*)	Native
Common knotgrass (*Polygonum aviculare*)	None
Cheeseweed (*Malva neglecta*)	Non-native
Bur clover (*Medicago polymorpha*)	Non-native
Forget me Not (*Myosotis discolor*)	Non-native
Wild Rice (*Zizania palustris*)	
Dallis Grass (*Paspalum dilatatum*)	Non-native

Bindweed (*Convolvulus arvensis*)	Non-native
Willowherb (*Epilobium brachycarpum*)	Native
Fireweed (*Epilobium ciliatum*)	Native
Fig tree (*Ficus* sp.)	Ornamental
Flax-leaved Horseweed (*Erigeron bonariensis*)	Non-native
Canadian horseweed (*Erigeron canadensis*)	Non-native
English Ivy (*Hedera helix*)	Invasive non-native
Prickly Lettuce (*Lactuca serriola*)	Non-native

Common plantain (*Plantago major*)	Non-native
knotweed (*Polygonum aviculare*)	None
Valley Oak (*Quercus lobata*)	Native
Sow Thistle (*Sonchus oleraceus*)	Non-native
Johnson Grass (*Sorghum halapense*)	None
Puncture Vine (*Tribulus terrestris*)	Non-native
Creeping clover (*Trifolium repens*)	Non-native
Corn (*Zea mays*)	Cultivated

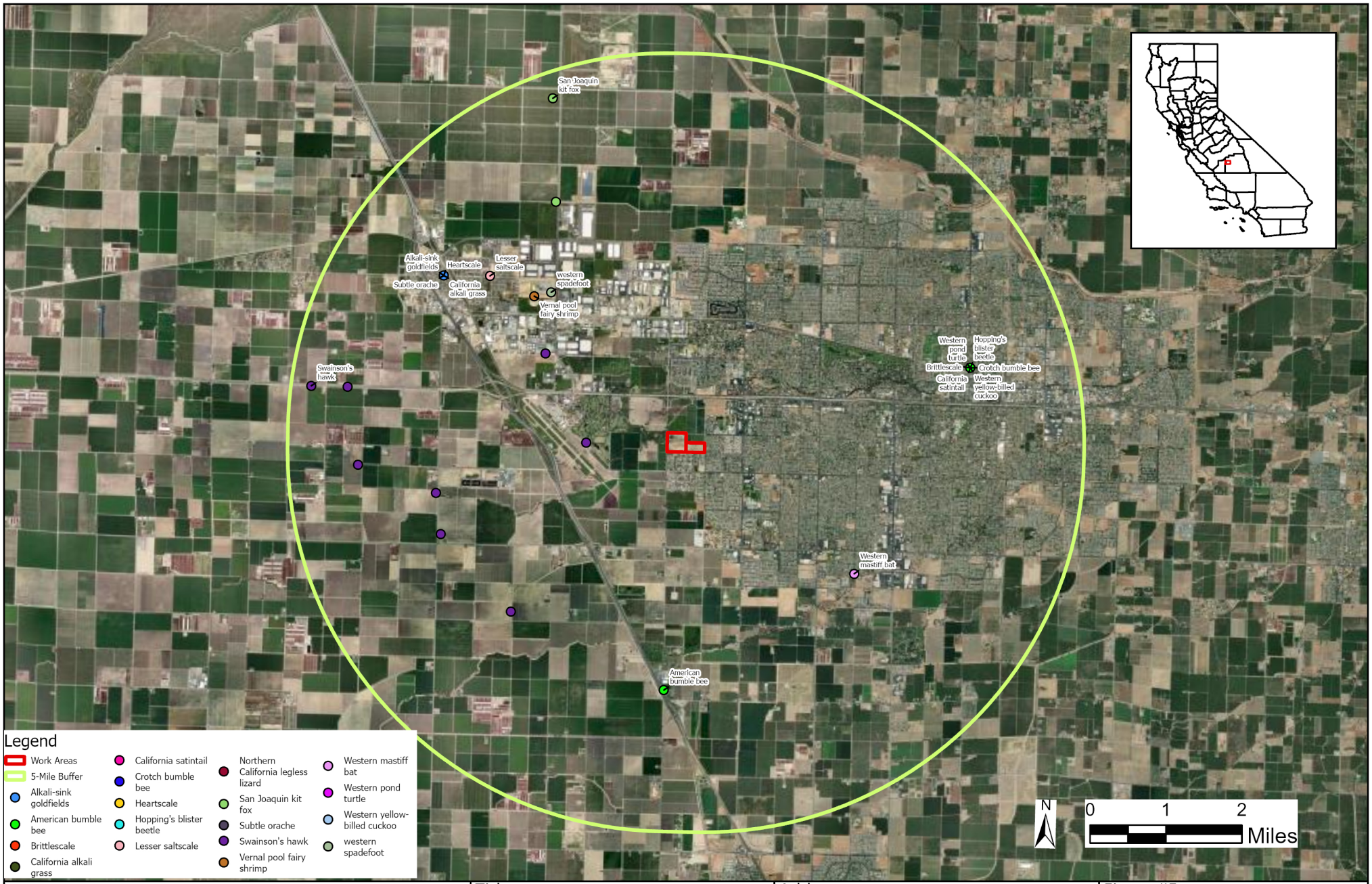

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Figure #5
CNDDB Map

Revision Date
10/23/2023

4. Special-Status Species

Special-status plants and animals that have a reasonable possibility to occur in the Project Area based on habitat suitability and requirements, elevation and geographic range, soils, topography, surrounding land uses, and/or proximity of known occurrences in the CNDDB, IPaC, and CNPS databases to the Project Area are listed in Tables 3 & 4. The likelihood for occurrence of special-status species was assessed using information from the various sources listed in Section 2.1, as well as the Habitat Assessment field survey. Narratives are supplied for species for which there are land use planning and regulatory implications.

Results from the data records search identified 46 special-status species: 25 wildlife and 21 plant species. However, an analysis of recent occurrences, habitat suitability and proximity within 5-miles to the Project Area indicated one special-status wildlife species with high potential to occur and 18 special-status species (12 wildlife species and 6 plant species) with low potential for occurrence. Special-status species for which there are no regulatory implications (i.e., lack of suitable habitat, or no record of historical occurrences within 5 miles) are excluded from further analysis.

Species with High Potential for Occurrence:

- Swainson's Hawk (*Buteo swainsonii*)

Special-status species and sensitive habitats include plant and wildlife taxa, or other unique biological features afforded special protection by local land use policies, and/or state and federal regulations. Special-status plant and animal species are those listed as rare, threatened, or endangered under the state or federal Endangered Species Acts or those who are rare enough to become listed in the foreseeable future (Cal. Code Regs. tit. 14 § 15380). Vegetation communities may warrant special status if they are of limited distribution, have high wildlife value, or are particularly vulnerable to disturbance. Listed and special-status species are defined as:

- Listed or proposed for listing under the state or Federal Endangered Species acts.
- Protected under other regulations (e.g., Migratory Bird Treaty Act).
- California Department of Fish & Wildlife (CDFW) Species of Special Concern.
- Listed as species of concern by CNPS or USFWS; and/or
- Receive consideration during environmental review under CEQA.

All species from the Section 2.1 search results are listed below including common and non-listed species. The analysis and following determination are based on Habitat Assessment results and the most recent occurrence and proximity to the Project Area per Section 2.1 (Table 1, Table 2).

- **Present:** Species known to occur on the site, based on CNDDB records, and/or was observed on the site during the field survey.

- **High:** Species known to occur on or near the site (based on CNDDB record within 5 miles), and there is suitable habitat on the site.

- **Low:** Species known to occur on or near the site (based on CNDDB record within 5 miles), but there is no suitable habitat onsite.

- **None:** Species is not known to occur on within 5 miles of the site and there is no suitable habitat on the site. -OR- Species was surveyed for during the appropriate season with negative results.

Table 3 – Regionally Occurring Special-Status Wildlife Species

Common/ Scientific Name	*Listing Status	Habitat Requirements	Potential for Occurrence
Amphibians			
California tiger salamander (*Ambystoma californiense*) Central California DPS	FT/ST/CWL	Grasslands, oak savannah riparian woodlands and lower elevations of coniferous forests, ditches, vernal pools, and wetlands.	**Low:** Limited potential upland dispersal or estivating habitat occurs in the northwest 10 acres of the Project Area and the species has not been reported previously within five miles of the Project Area.
Western Spadefoot toad (*Spea hammondii*)	-/-/SSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	**Low:** The spadefoot toad has low potential to occur in the Project Area. Though the species occurs within 2 miles of the Project Area, no breeding habitat occurs on the property and limited unfarmed upland dispersal habitat.
Birds			
Belding's Savannah Sparrow (*Passerculus sandwichensis beldingi*)	-/-/BCC/MBTA	Inhabits coastal salt marshes, from Santa Barbara south through San Diego County. Nests in Salicornia on and about margins of tidal flats.	**None**. No salt marsh or pickleweed nesting habitat occur in the Project Area. No tidal flats.
Bullock's Oriole (*Icterus bullockii*)	-/-/BCC/MBTA	Found in open broadleaf woods, foraging among leaves in trees.	**None**. Species is not known to occur on within 5 miles of the site and there is no suitable habitat on the site.
Burrowing Owl (*Athene cunicularia*)	-/-/ SSC/BCC/MBTA	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	**None**. Species is not known to occur on within 5 miles of the site and there is no suitable habitat on the site.

California Gull (*Larus californicus*)	-/-/CWL/BCC/MBTA	Littoral waters, sandy beaches, waters and shorelines of bays, tidal mudflats, marshes, lakes, etc. Colonial nester on islets in large interior lakes, either fresh or strongly alkaline.	**None:** No habitat occurs for this aquatic bird species.
Clark's Grebe (*Aechmopohrus clarkii*)	-/-/CWL/MBTA	Ponds, seasonal pools, open water	**None:** No habitat occurs for this aquatic bird species.
Loggerhead Shrike (*Lanius ludovicianus*)	-/-/SSC/MBTA	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	**None**. Species is not known to occur on within 5 miles of the site and there is no suitable habitat on the site.
Nuttall's Woodpecker (*Dryobates nuttallii*)	-/-/BCC/MBTA	Forages for acorns and insects and nests in oak woods.	**Low:** Only limited oak trees occur in the northwest Project Area.
Oak titmouse (*Baeolophus inornatus*)	-/-/BCC/MBTA	Oak forests of the Pacific slope between southern Oregon and Baja California, especially around the Central Valley of California. Strongly associated with oaks.	**Low:** Only limited oak trees occur in the northwest Project Area.
Short-billed Dowitcher (*Limnodromus griseus*)	-/-/BCC/MBTA	Forages on mudflats and shallow ponds. Vernal pools.	**None:** No aquatic, wetland or mudflat pond habitat occurs in the Project Area.
Swainson's hawk (*Buteo swainsoni*)	-/ST/SSC BCC/MBTA	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	**High**: Species known from 9 historic occurrences within 5 miles of site to the west, northwest and southwest. Closest occurrence is within one mile of the site, and there is limited suitable nesting and abundant foraging habitat on the site.

Tricolored blackbird (*Agelaius tricolor*)	-/ST/SSC BCC/MBTA	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony	**None:** No pond or wetland habitat occurs with broadleaf cattail or tule stands for nesting colony.
Western Grebe (*Aechmophorus occidentalis*)	-/-/BCC/MBTS	Ponds, seasonal pools, mudflats	**None:** No aquatic seasonal pool or ponds occur in the Project Area.
Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*)	FT/SE/MBTA	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	**Low:** No nesting habitat occurs in Project Area. Limited oak woodland foraging habitat.
Invertebrates			
Crotch Bumble Bee (*Bombus crotchii*)	-/SSC/-	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia*, and *Eriogonum*.	**None:** The Project Area lacks the native wildflower field nectar habitat needed to support this species.
Hopping's Blister Beetle (*Lytta hoppingi*)	-/SSC	Inhabits the foothills at the southern end of the Central Valley. Found on flowers and plants.	**None:** Limited plant cover is available on the property in the northwest portion of the Project Area. Area is cleared and maintained.
Monarch Butterfly (*Danaus plexippus*)	FC/-/-	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	**None:** No roosting, foraging (nectar-flowers) or reproductive host plant habitat (Milkweed, (Asclepias sp.) is present in the Project Area.

Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*)	FT/-/-	Only occurs in the Central Valley of California, in association with blue elderberry (*Sambucus mexicana*), in riparian scrub. Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	**None:** No elderberry shrub host plant potential habitat occurs in the Project Area.
Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT/-/-	Endemic to the vernal pools in grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	**None:** No seasonal aquatic habitat for this species, such as vernal pools, occurs in the Project Area.
Vernal pool tadpole shrimp (*Lepidurus packardi*)	FE/-/-	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass-bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.	**None:** No seasonal aquatic habitat for this species, such as vernal pools, occurs in the Project Area.
Mammals			
American Badger (*Taxidea taxus*)	-/-/SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	**None:** The site lacks potential undisturbed grassland habitat. The site is maintained and disced regularly with active agriculture use.
Pallid bat (*Antrozous pallidus*)	-/-/SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**None**. Species is not known to occur on within 5 miles of the site and there is no suitable habitat on the site.

San Joaquin Kit Fox (*Vulpes macrotis mutica*)	FE/ST	Annual grasslands or grassy open stages with scattered shrubby vegetation. Need loose-textured sandy soils for burrowing, and suitable prey base.	**Low:** Site has dispersal habitat, but has limited foraging or denning habitat and two previous records occur 3 and 4.7 miles northwest of the Project Area.
Tipton Kangaroo Rat (*Dipodomys nitratoides nitratoides*)	FE/SE	Saltbrush scrub and sink scrub communities in the Tulare Lake Basin of the southern San Joaquin Valley. Needs soft friable soils which escape seasonal flooding. Digs burrows in elevated soil mounds at bases of shrubs.	**None:** No alkali scrub or sink scrub habitat occurs in the Project Area. No seed forage habitat occurs in the Project Area. The Project Area is an active agricultural field.
Western Mastiff Bat (*Eumops perotis californicus*)	-/-/SSC	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	**Low:** Limited oak woodland roosting and moderate grassland foraging habitat for this species in the Project Area. The area is heavily farmed and maintained. Species is known from one record 2 miles southeast of Project Area.
Reptiles			
Blunt-nosed Leopard Lizard (*Gambelia sila*)	FE/SE/FP	Resident of sparsely vegetated alkali and desert scrub habitats, in areas of low topographic relief. Seeks cover in mammal burrows, under shrubs or structures such as fence posts; they do not excavate their own burrows.	**None:** No alkali scrub or desert scrub habitat occurs in the Project Area. The Project Area is an active agricultural field.
Northern California Legless Lizard (*Anniela pulchra*)	-/-/SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	**None:** No sand outcrops or sandy habitat occurs in the Project Area. The Project Area is an agricultural field.
Western Pond Turtle (*Actinemys marmorata*)	-/-/SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland	**Low:** Low quality potential habitat in the form of an open water unvegetated canal on the eastern edge and another just offsite to the northwest leave potential for this species to occur nearby. One historic occurrence of the

		habitat up to 0.5 km from water for egg-laying.	species is known from four miles east of Project Area.

*Listing Status Notes:

Federal:
FE – Federally listed Endangered
FT – Federally listed Threatened
FC – Federal Candidate Species
FWL – USFWS Watch list
BCC – USFWS Bird of Conservation Concern
MTBA – Migratory Bird Treaty Act

State:
SE – State listed Endangered
ST – State listed Threatened
SC – State Candidate Species
SR – State Rare Species
SA – State Special Animal
FP – CDFW Fully Protected Species
SSC – CDFW Species of Special Concern
CWL – CDFW Watch List

Table 4 – Regionally Occurring Special-Status Plant Species

Common/ Scientific Name	*Status Fed/CA/CNPS/ Bloom Period	Habitat Description	Potential to Occur
Alkali-sink Goldfields (*Lasthenia chrysantha*)	-/-/1B.1 Feb-Apr	Vernal pools, alkaline microhabitat. Found at elevations between 0 and 655 ft.	**None:** No vernal pool habitat occurs in the Project Area.
Brittlescale (*Atriplex depressa*)	-/-/1B.2 Apr-Oct	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland, and vernal pools. Alkaline and clay microhabitat. Found at elevations between 5 and 1050 ft.	**None:** No native habitat or vernal pool habitat occurs in the Project Area.
California Alkali Grass (*Pucinellia simplex*)	-/-/1B.2 Mar-May	Chenopod scrub, meadows and seeps, valley and foothill grassland and vernal pools. Sinks, alkaline, flats, lake margins, and vernally mesic microhabitats. Found at elevations between 5 and 3050 ft.	**None:** No vernal pool habitat or chenopod scrub occurs in the Project Area.
California Jewelflower (*Caulanthus californicus*)	FE/CE/1B.1 Feb-May	Chenopod scrub, pinyon and juniper woodland, valley and foothill grassland. Found at elevations between 200 and 3280 feet.	**Low:** Limited grassland potential habitat occurs in the Project Area.
California Satintail (*Imperata brevifolia*)	-/-/2B.1 Sep-May	Chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali), and riparian scrub. Mesic microhabitat. Found at	**None:** No wetland habitat or shrub-dominated habitat occurs in the Project Area.

		elevations between 0 and 3985 ft.	
Coulter's Goldfields (*Lasthenia glaberata ssp. coulteri*)	-/-/1B.1 Feb-Jun	Marshes and swamps (coastal salt), playas and vernal pools. Found at elevations between 5 and 4005 ft.	**None:** No vernal pools, marshes or swamps occur in the Project Area.
Earlimart Orache (*Atriplex cordulata var. erecticaulis*)	-/-/1B.2 Aug-Sep (Nov)	Valley and foothill grassland. Vernally mesic microhabitat. Found at elevations between 130 and 330 ft.	**None:** Though some grassland occurs in the Project Area it is not within vernal pool or vernal swale habitat. Species not observed during current survey effort.
Ewan's Larkspur (*Delphinium hansenii ssp. ewanianum*)	-/-/4.2 Mar-May	Cismontane woodland, valley and foothill grassland. Found at elevations between 195 and 1970 ft.	**Low:** Limited heavily maintained oak woodland and grassland occur in the Project Area.
Heartscale (*Atriplex cordulata var. cordulata*)	-/-/1B.2 Apr-Oct	Chenopod scrub, meadows and seeps, valley and foothill grassland. Microhabitats sometimes saline, sometime alkaline. Found at elevations between 0-1835 ft.	**Low:** Limited maintained grassland in the northern Project Area. Species not observed during current survey effort.
Hoover's Spurge (*Euphorbia hooveri*)	FT/-/1B.2 Jul-Sep (Oct)	Vernal pools. Found at elevations between 80 and 820 feet.	**None:** No vernal pool habitat occurs in the Project Area.
Lesser Saltscale (*Atriplex miniscula*)	-/-/1B.1 May-Oct	Chenopod scrub, playas, valley and foothill grassland. Microhabitats are alkaline or sandy. Found at elevations between 50 and 655 ft.	**Low:** Limited maintained grassland in the northern Project Area. Species not observed during current survey effort.
Recurved Larkspur (*Delphinium recurvatum*)	-/-/1B.2 Mar-Jun	Chenopod scrub, cismontane woodland, valley and foothill grassland. Alkaline microhabitat. Found at elevations between 10 and 2590 ft.	**Low:** Limited maintained grassland and woodland in the northern Project Area. Species not observed during current survey effort.
Sanford's Arrowhead (*Sagittaria sanfordii*)	-/-/1B.2 May-Oct (Nov)	Marshes and swamps (shallow freshwater). Found at elevations between 0 and 2135 ft.	**None:** No marsh or swamp habitat occurs in the Project Area.
San Joaquin Adobe Sunburst (*Pseudobahia peirsonii*)	FT/CE/1B.1 Feb-Apr	Cismontane woodland, valley and foothill grassland. Adobe or clay microhabitat. Found	**None:** Disturbed and regularly maintained oak woodland and grassland occur in

		at elevations between 295 and 2625 ft.	northwestern portion of Project Area. Species not known to occur within 5 miles of site.
San Joaquin Valley Orcutt Grass (*Orcuttia inaequalis*)	FT/CE/1B.1 Apr-Sep	Vernal pools. Found at elevations between 35 and 2475 ft.	**None:** No vernal pool habitat occurs in the Project Area.
Spiny-sepaled Button-celery (*Eryngium spinosepalum*)	-/-/1B.2 Apr-Jun	Vernal pools, valley and foothill grassland. Found at elevations between 260 and 3200 feet.	**None:** No vernal pool habitat occurs in the Project Area.
Subtle Orache (*Atriplex subtilis*)	-/-/2B.2 (Apr) Jun-Sep (Oct)	Valley and foothill grassland. Found at elevations between 130 and 330 feet.	**Low:** Limited maintained grassland habitat. Species not observed during current survey.
Vernal Barley (*Hordeum intercedens*)	-/-/3B.2 Mar-Jun	Coastal dunes, coastal scrub, valley and foothill grassland (depressions, saline flats) and vernal pools. Found at elevations between 15 and 3280 ft.	**None:** No dunes, scrub or vernal pool habitat occurs in the Project Area.
Vernal Pool Smallscale (*Atriplex persistens*)	-/-/1B.2 Jun-Oct	Vernal pools (alkaline). Found at elevations between 35 and 375 ft.	**None:** No alkaline vernal pool habitat occurs in the Project Area.
Watson's Amaranth (*Amaranthus watsonii*)	-/-/4.3 Apr-Sep	Mojavean Desert scrub and Sonoran Desert scrub. Found at elevations between 65 and 5580 ft.	**None:** No desert scrub occurs in the Project Area.
Winter's Sunflower (*Helianthus winteri*)	-/-/1B.2 Jan-Dec	Cismontane woodland, valley and foothill grassland. Microhabitat includes relatively steep, south-facing slopes, granitic, openings, roadsides (often), and rocky (often). Found at elevations between 410 and 1510 ft.	**None:** The Project Area is outside the known elevation range for the species and no rocky woodland or grassland sites occur in the Project Area.

*Listing Status Notes:

Federal: FE – Federally listed Endangered
FT – Federally listed Threatened
FC – Federal Candidate Species

State: CE – State Listed as Endangered
SE – State listed Endangered
ST – State listed Threatened
SC – State Candidate Species
SR – State Rare Species

CRPR: California Native Plant Society Rare Plant Rank
1A – Considered extirpated in CA
1B – Rare, threatened, or endangered in CA and elsewhere
2 – Rare, threatened, or endangered in CA but common elsewhere
4 – Limited distribution (Watch-list)

CRPR Extensions 0.1 – Seriously endangered in California
0.2 – Fairly endangered in California
0.3 – Not very endangered in California

4.1 Special-Status Species Descriptions

This section describes identifiable physical characteristics and habitat requirements for special-status species identified in the CNDDB records search that were within 5 miles of the Project Area. It also discusses their potential to occur following the findings of the survey.

Special-Status Wildlife Species

California tiger salamander (*Amystoma californiense*)

California tiger salamander is listed as Threatened on the Federal and State level. Adults range in size from 15-22 centimeters (6 to 9 inches) long and have a dark background color with distinctive yellow spots. Juveniles look much like adults but lack the yellow spots. Larval California tiger salamander are grayish green in color and have the appearance of tadpoles with obvious, external gills. The eggs are clear and typically laid singly or in groups of three or four in shallow ponds.

Endemic to California, this species is found in grasslands, oak savannah woodlands, edges of mixed woodland, lower elevations of coniferous forests, and in heavily grazed fields along the Central California Coast and within the Central San Joaquin Valley. They may breed in ditches where water is present for a long enough duration for eggs and larvae to metamorphose into adults. During the non-breeding season (approximately late May through early November), California tiger salamander live in small mammal burrows, typically those of ground squirrels and pocket gophers. They spend most of each year on land, emerging from refugia only occasionally, usually on rainy nights, and have been observed on land within 1.24 miles (2 kilometers) from potential breeding pools.

A search of CNDDB records indicate the nearest occurrence of this species is more than five miles away from the Project Area. No potential aquatic breeding habitat occurs in the Project Area. The majority of the Project Area is active agricultural land that is unsuitable for this species. The northern oak woodland and grassland represent limited suitable dispersal or potential estivating habitat, though small mammal burrows were not observed to be abundant. California tiger salamanders are concluded to have a low potential to occur in the Project Area.

Western spadefoot (*Spea hammondii*)

Western spadefoot toad is a State species of special concern. Their range spans throughout the Central Valley and adjacent foothills. They can be common where they occur. In the Coast Ranges they are found from Point Conception in Santa Barbara County, south to the Mexican border. Elevations of occurrence extend from near sea level to 1,363 meters (4,460 feet) in the southern Sierra foothills (Jennings and Hayes 1994). This species occurs primarily in grasslands but occasionally appears in the valley-foothill hardwood woodlands or persists in orchard and vineyard habitats for a few years.

Western spadefoot toads spend most of the year underground in burrows up to 0.9 meters (36 inches) deep (Stebbins 1972). They construct their own burrows but have been seen infrequently using mammal burrows.

Adult western spadefoot toads feed on insects, worms, and other invertebrates (Stebbins 1972). Tadpoles consume planktonic organisms and algae but are also carnivorous—preying and consuming dead aquatic larvae of other amphibians as well as other western spadefoot tadpoles (Bragg 1964).

Rainfall is important in the formation and maintenance of breeding ponds. Most surface movements

by adults are associated with rain or high humidities at night. Breeding and egg laying happens exclusively in shallow temporary pools formed by heavy winter rains. Egg masses are attached to plant material or the upper surfaces of small, submerged rocks (Stebbins 1951). During dry periods, the moist soil inside the burrows provides water for absorption through the skin (Ruibal et al. 1969, Shoemaker et al. 1969). Dispersal of post metamorphic juveniles from breeding ponds can occur without rainfall.

No breeding pond potential habitat for this species occurs in the Project Area. Limited upland dispersal habitat occurs in the northern ten acres of the Project Area. Most of the Project Area is active agricultural land and is unsuitable for the species. Understory vegetation is annually maintained in the northern Project Area, which involves discing. These practices do not improve the spadefoot toad's potential to occur. One previous known occurrence from the CNDDB is 2.1 miles northwest of Project Area.

Swainson's hawk (*Buteo swainsoni*)

Swainson's hawk is listed as Threatened on the State level and is a listed species under the Migratory Bird Treaty Act. However, due to its common distribution throughout the country, it is not listed at the Federal level. This species favors open habitat for foraging such as agricultural fields, pastures, and row crops. They nest in scattered stands of eucalyptus, willow, oak, cottonwood, and conifers. On occasion, Swainson's hawk will nest on a power pole or transmission tower. The location of Swainson's hawk nests is typically on the tallest point in or near an open field, giving this species a full view of its foraging area while nesting.

Due to their late return to California for the breeding season, Swainson's hawk often uses the same nests for serval breeding seasons and even generations. If a nest is constructed, it is often constructed with loose bundles of sticks and debris quickly stacked together. They are also territorial of their nests and will dive bomb any other species attempting to use their nest. Red-tailed hawk and great horned owls, which overlap in habitat, are species known to use Swainson's hawk nests. The incubation period for Swainson's hawk is approximately 35 days, and the nesting period is 17 to 22 days. The breeding season for this species begins in March and ends in September.

The Project Area is primarily active agricultural land with some potential nesting and foraging habitat in the oak and grasslands in the northwest portion of the properties. The active agricultural land also may have potential use as foraging habitat, especially when fallow. Eight known occurrences of Swainson Hawk are within 5 miles of the Project Area and the closest is one mile west. A Swainson hawk and nesting bird survey should be conducted in all of the oak trees in the northern property prior to removal of the trees.

Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)

Yellow-billed cuckoos have uniform grayish-brown plumage on their head and back, and dull white underparts. Their tails are long with two rows of four to six large white circles on the underside. The bill of yellow-billed cuckoos is short to medium in length and curved downward with a black upper mandible and a yellow or orange lower mandible. Yellow-billed cuckoos have zygodactylous feet, meaning that of the four toes, the middle two point forward and the outer two point backward.

Yellow-billed cuckoos prefer open woodlands with clearings and a dense shrub layer. They are often found in woodlands near streams, rivers or lakes. In North America, their preferred habitats include abandoned farmland, old fruit orchards, successional shrubland and dense thickets. In winter, yellow-billed cuckoos can be found in tropical habitats with similar structure, such as scrub forest and mangroves.

The Project Area has approximately 10 acres of oak woodland and unfarmed grassland that could represent foraging habitat for this species. However, no riparian forest or habitat occurs in the Project Area.

San Joaquin kit fox (*Vulpes macrotis mutica*)

The San Joaquin kit fox is listed as Threatened at the Federal level and Endangered at the State level. They are petite, light-colored canids, approximately 50 centimeters (20 inches) in length, with bushy, black-tipped tails, large ears, and pointed snouts.

San Joaquin kit fox is a desert-adapted species which occurs mainly in arid, flat grasslands, scrublands, and alkali meadows where the vegetation structure is relatively short. This species uses dens year-round and needs loose-textured soils suitable for burrowing. They primarily prey on kangaroo rats and other small rodents, as well as large insects and occasionally rabbits. A typical kit fox den is anywhere from four to 10 inches (25 cm) in diameter, and is taller than it is wide, often with a keyhole shape. Dens usually have dirt berms and matted vegetation adjacent to the entrances, and tracks and prey remains will normally be detected nearby. They may also utilize man-made structures such as pipes and culverts as dens.

There were no signs of San Joaquin kit fox den sites or activity at the time of the Habitat Assessment. Suitable habitat for this species is poor within the Project Area. A search of CNDDB records indicate the nearest occurrences of kit fox are 3 and 4.7 miles away north and northwest from the Project Area. No other observations of San Joaquin kit fox have been recorded within 5 miles (8 kilometers) of the Project Area. Due to urbanization of the surrounding area, lack of suitable habitat in the form of natural grassland habitat, and distance of other known occurrences from the site, occurrence of San Joaquin kit fox within the vicinity of the Project Area is unlikely, and the proposed Project is unlikely to adversely affect any population of this species.

Western mastiff bat (*Eumops perotis californicus*) and Pallid bat (*Antrozous pallidus*)

Western mastiff bat and pallid bat are State listed Species of Special Concern. The mastiff bat species has a brown fur body length of 14 to 19 centimeters (5.5 to 7.5 inches), a wingspan of over 56 centimeters (22 inches), and body mass range from 60 to 70 grams (2.1 to 2.5 ounces). Western mastiff bat is the largest native bat in the United States. Thus, such morphology allows for rapid, sustained flight but limits maneuverability. This manner of flight is adaptive to flying in open habitats.

Western mastiff bats and pallid bats catch and feed on insects while in flight. The insects consumed are typically relatively small, low-flying and weak-flying forms. Over rugged terrain western mastiff bats naturally forage at much greater heights of 60 meters (195 feet) above the ground. Crevices in cliff faces, high buildings, trees, and tunnels are required for roosting. When roosting in rock crevices, this species needs vertical faces to drop off to take flight.

Western mastiff bats and pallid bats have yearlong nocturnal activity. They generally go into daily torpor from December through February but usually resume activity each night to feed, except when temperatures drop below 5°C (41°F). Nocturnal foraging range may exceed 24 kilometers (15 miles) from roost sites. Western mastiff bat rarely uses night roost and has an exceptionally long foraging period, up to 6-7 hours per night. Their echolocation can be heard from up to 300 meters (980 feet) away. They are non-migratory with no known home range and no known territory. They are known to roost along or in

small colonies with fewer than 100 bats, and commonly share roosts with other large bats such as *Eptesicus fuscus*, *Antrozous pallidus*, and *Tadarida brasiliensis*.

Western mastiff bats and pallid bats can be found in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban. Roosts are often found in crevices in cliff faces, buildings, trees and tunnels. Their range includes the southeastern San Joaquin Valley and Coastal Ranges, from Monterey County southward through southern California, and from the coast eastward to the Colorado Desert. Suitable habitat for western mastiff bat and pallid bat consists of extensive open areas for foraging with abundant roost locations provided by crevices in rock outcrops and buildings. They need at least 3 meters (9.8 feet) of open space under roosting spot for takeoff.

Nursery roosts are tight rock crevices, caves, mines or tree hollows at least 90 centimeters (35 inches) deep and 5 centimeters (2 inches) wide, or crevices in buildings. The duration of pregnancy is between 80 to 90 days with mating beginning in early spring (March). The gestation period is unknown. Parturition occurs from early April through August or September and varies more than any other bat species in the United States. One young is produced per female bat per year.

No bat roosting habitat occurs in the Project Area in the form of rock outcrops or crevices or buildings. Potential foraging habitat does occur in the air space over the Project Area. The potential for these bat species to occur is considered low.

Western pond turtle (*Actinemys marmorata*)

The western pond turtle is listed as a Species of Special Concern on the State level. It is found throughout California west of the Pacific Crest, and along the Mojave River watershed, ranging from sea level to 4,500 feet (1,372 meters). The western pond turtle's diet consists of both plant material and invertebrates, any life forms found near water sources. Mating typically occurs between April and May, but this species has been observed relocating to find new food sources or breeding locations between March and June. This species requires basking sites and suitable upland habitat for egg-laying. Though an open water channel occurs along the eastern border of the Project and another open water ditch occurs near the northwest corner, neither aquatic feature has any vegetation associated with it growing in the water or along the canal channels.

This species prefers vegetation associated with aquatic habitat. Neither canal occurs in the Project Area and no basking sites are present, however both canals are near the site. The closest historic occurrence of western pond turtle is recorded approximately four miles east-northeast of the Project Area.

Special-Status Plant Species

California Jewelflower

This annual wildflower species is extremely rare and is both a State and federally listed member of the mustard family. It is found in grasslands, chenopod scrub and juniper woodland. The current survey occurred outside of it's known bloom period when it is identifiable. The species has low potential to occur in the Project Area given the disturbed and maintained nature of the Project Area.

Ewan's Larkspur

Limited oak woodland and uncultivated grassland potential habitat occur in the Project Area for this rare larkspur species. The current survey occurred outside of the bloom period for this species. The species has low potential to occur.

Heartscale

This small annual member of the goosefoot family (Chenopodiaceae) has limited and marginal potential grassland habitat in the Project Area. One previous historic occurrence of this species that was within five miles of the Project Area but has since been extirpated. Low potential for this species occurs in the Project Area.

Lesser Saltscale

This small annual member of the goosefoot family (Chenopodiaceae) has limited and marginal potential grassland habitat in the Project Area. One previous historic occurrence of this species was within five miles of the Project Area but has since been extirpated. Low potential for this species occurs in the Project Area.

Subtle Orache

This small annual member of the goosefoot family (Chenopodiaceae) has limited and marginal potential grassland habitat in the Project Area. One previous historic occurrence of this species from the CNDDB was within five miles of the Project Area but has since been extirpated. Low potential for this species occurs in the Project Area.

Recurved Larkspur

Limited oak woodland and uncultivated grassland potential habitat occur in the Project Area for this rare larkspur species. The current survey occurred outside of the bloom period for this species. The species has low potential to occur.

The Project Area is comprised from approximately 49 acres of active agricultural land, approximately 5.6 acres of valley oak woodland that has a disked and maintained understory and another 4.5 acres of regularly disked grassland. It is bounded by an open residential property with denser valley oak woodland on the northwestern boundary of the property.

There is a riverine, non-wetland canal just northwest of the northwest corner of the Project Area and a linear paved non-wetland water canal along one portion of the southeastern boundary which was inundated and without vegetation at the time of the Biological Assessment. The Saint Johns River is more than five miles north of the Project Area. There are no structures on the property, and a little more than twenty valley oak trees compose the woodland in the northwestern corner. Though the majority of the

property was used to grow corn this year, the property had been cleared, maintained and recently disked, likely for fire safety. No nests or roosting bats were observed in the oak tree grove in the northwest corner, nor were any ground nests observed. Powerline poles exist along Road 92, but not on the property itself, and did not appear to harbor any raptor nests. No wetlands, vernal pools or jurisdictional waters were located in the Project Area.

4. Findings

During the Biological Assessment, Soar Environmental did not observe any of the referenced special-status species within the Project Area or environmental footprint. However, grading of the Project Area will result in removing some grassland and oak woodland habitat. The findings for this report are summarized below.

Critical Habitats

No critical habitats occur within the vicinity of the Project's environmental affect area, Project Area or project footprint.

Project Impacts

The project will cause permanent impacts to predominantly active agricultural land and heavily maintained (e.g. regularly mowed and disked) annual grassland and valley oak woodland in the northern Project Area. No fish, or habitat that could support aquatic species occurs on the property. Potential wildlife resources the Project could impact would be tree-nesting bird species such as Swainson Hawk, due to required tree removals and loss of foraging habitat.

The Project Area contains a section of valley oak woodland in the northwest corner. The project will require the removal of approximately twenty-one valley oak trees.

Conclusion

From the information gathered in the data records search and analysis of the habitat on site during the survey there is limited potential native plant and wildlife habitat available in the Project Area given that the majority of the property is active agricultural land. However, of the regionally occurring species, Swainson hawk has the highest potential to occur or be impacted by development of the project.

5. Recommendations

The following mitigation measures are intended to reduce and minimize impacts under CEQA, the California Endangered Species Act, and the federal Endangered Species Act for effects on species and habitats. Implementation of the following mitigation measures would reduce project-related affects to covered species and other biological resources to less than significant.

6. Recommended Mitigation Measures

Mlitigation Measure 1: Swainson's Hawk Nesting Habitat

If construction, grading, or project-related improvements are to commence between March 1 and September 15, a focused survey for Swainson's hawk nests on the site and within ¼ mile of the site shall be conducted by a qualified biologist no later than 30 days prior to the start of construction work (including clearing and grubbing). If active nests are found, the California Fish and Wildlife shall be contacted to determine appropriate protective measures, and these measures shall be implemented prior to the start of any ground-disturbing activities. If no active nests are found during the focused survey, no further mitigation will be required.

Mlitigation Measure 1a: Nesting Bird Survey

If project-related activities are scheduled between February 1 to August 31 (the typical nesting season), a focused survey for nests shall be conducted by a Designated Biologist within three (3) calendar days prior to the beginning of Project-related activities. The Designated Biologist shall survey a minimum radius of 500-feet for migratory birds around the Project Area and for sign of roosting bats. If no active nests or roosts are found, project activities may proceed as scheduled.

Mlitigation Measure 1b: Active Nests or Roosts

If an active nest or roost is found, active nests should be avoided, and a no disturbance or destruction buffer shall be determined and established by a Designated Biologist. The buffer shall be kept in place until after the breeding nesting season or the Designated Biologist confirms the young have fledged, are foraging independently, and the nest is no longer active for the season. The extent of these buffers shall be determined by the Designated Biologist and will depend on the species present, the level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers.

Mlitigation Measure 1c: Project Delay

If a lapse in project-related work of fourteen (14) calendar days or longer occurs, the Designated Biologist shall complete another focused survey before Project work can be reinitiated.

7. Study Limitations

This Report has been prepared in accordance with generally accepted environmental methodologies and contains all the limitations inherent in these methodologies. The Report documents site conditions that were observed during field reconnaissance and do not apply to future conditions. No other warranties, expressed or implied, are made as to the professional services provided under the terms of our contract and included in this Report.

Works Cited

Calflora. (2022). *Taxon Report*. Retrieved from https://www.calflora.org

California Diversity Database (CNDDB). California Department of Fish and Wildlife RareFind. Retrieved from https://map.dfg.ca.gov/rarefind

Calscape. (2023). Retrieved from https://calscape.org

CDFW. (2022). *California's Vernal Pools*. Retrieved from https://www.wildlife.ca.gov/Conservation/Plants/Vernal-Pools

U.S. Fish & Wildlife Service. (2023). Information for Planning and Consultation. https://ipac.ecosphere.fws.gov

California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website https://www.rareplants.cnps.org [accessed 1 August 2023]. https://rareplants.cnps.org

Audubon Guide to North American Birds. (2022). https://www.audubon.org

Calscape. (2023). Retrieved from https://calscape.org

Center for Biological Diversity. (2023). Retrieved from https://www.biologicaldiversity.org

eBird Database, Cornell University Lab of Ornithology. (2022). Retrieved from https://ebird.org

Holland, R. F. 1986. Preliminary descriptions of the terrestrial natural communities of California. Nongame Heritage Program report. California Department of Fish and Game (Sacramento)

USFWS. (Sept. 2007). *Vernal Pool Tadpole Shrimp (Lepidurus packardi)*. Retrieved from

https://ecos.fws.gov/docs/five_year_review/doc1160.pdf

Stephen Ward McCabe. University of California, Berkeley. The Jepson Herbarium. Vascular Plants of California. Thiede 2003 in Eggli (ed.) Illus Handbook Succulent Pls 6 (Crassulaceae):85--103. Springer. https://ucjeps.berkeley.edu/eflora/eflora

USFWS. (Sept. 2007). Vernal Pool Tadpole Shrimp (*Lepidurus packardi*). Retrieved from https://ecos.fws.gov/docs/five_year_review/doc1160.pdf

APPENDIX A:
Project Area Photographs

Photo 1 – 5.6 acre valley oak woodland on northwest edge

Photo 2 – Overview of Main Active Agricultural Property Site (View East)

Photo 3 – Southeastern Edge with Canal

Photo 4 – West Side of Project Area (View North)

Photo 5 – Small mammal burrows (ground squirrel)

Photo 6 – Eastern edge of Project Area, Mexican sprangletop grass (*Leptochloa fusca* ssp. *uninervia*) along canal edge

Photo 7 – Valley Oak Woodland at northwestern corner

Photo 8 – Center of Project Area (View South)

Photo 9 – Center of property from Inner corner edge near (offsite) orchards (View North)

Photo 10 – Valley oak (Quercus lobata) leaf, northern property

Photo 11– Ornamental Fan palm in southern property

APPENDIX B:

U.S. Fish & Wildlife Service IPaC Resource List

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Tulare County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
San Joaquin Kit Fox Vulpes macrotis mutica Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2873	Endangered
Tipton Kangaroo Rat Dipodomys nitratoides nitratoides Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7247	Endangered

Reptiles

NAME	STATUS
Blunt-nosed Leopard Lizard Gambelia silus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/625	Endangered

Amphibians

NAME	STATUS
California Tiger Salamander Ambystoma californiense There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp Branchinecta lynchi Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

There are no documented cases of eagles being present at this location. However, if you believe eagles may be using your site, please reach out to the local Fish and Wildlife Service office.

Additional information can be found using the following links:

- Eagle Managment https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/ documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Belding's Savannah Sparrow Passerculus sandwichensis beldingi This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Bullock's Oriole Icterus bullockii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull Larus californicus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
Clark's Grebe Aechmophorus clarkii This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
Nuttall's Woodpecker Picoides nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse Baeolophus inornatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Short-billed Dowitcher Limnodromus griseus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Tricolored Blackbird Agelaius tricolor This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910	Breeds Mar 15 to Aug 10

Western Grebe aechmophorus occidentalis — Breeds Jun 1 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/6743

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

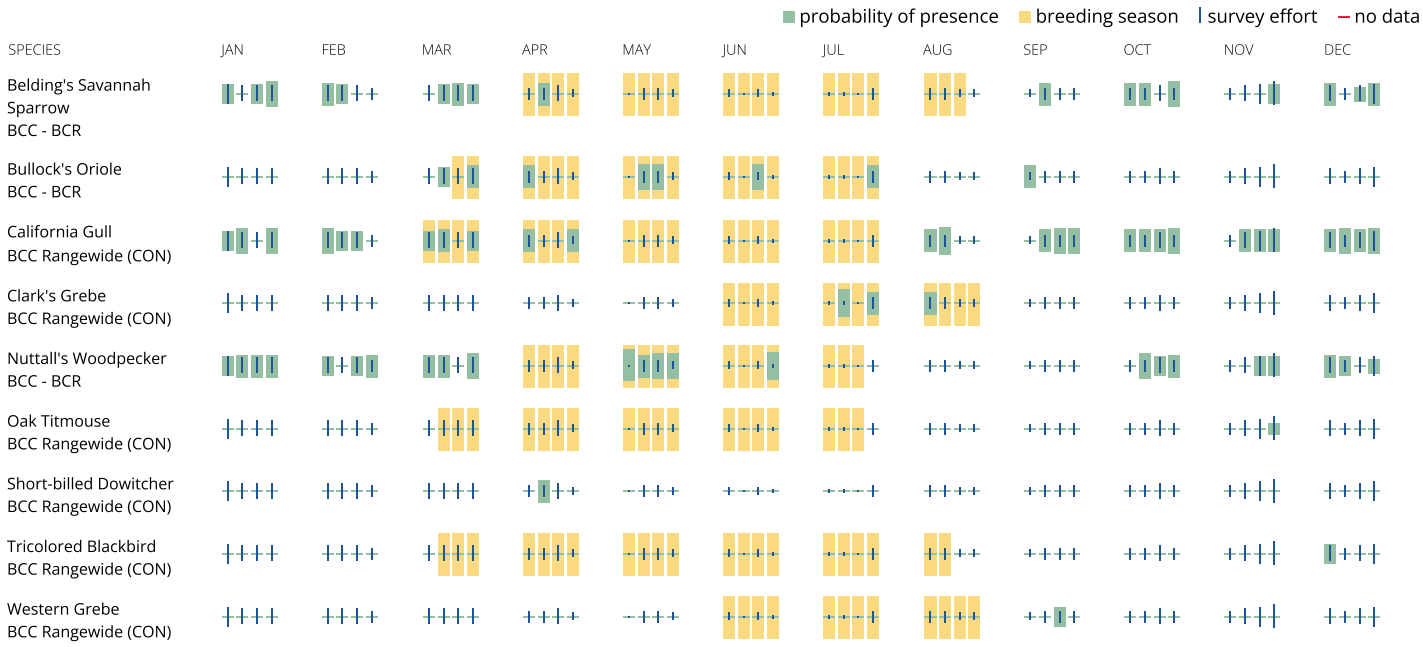
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in

knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

R4SBCx

A full description for each wetland code can be found at the National Wetlands Inventory website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or

adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

APPENDIX C:

California Department of Fish and Wildlife RareFind

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Traver (3611944) OR Goshen (3611934) OR Tulare (3611923) OR Visalia (3611933) OR Cairns Corner (3611922) OR Monson (3611943) OR Paige (3611924) OR Exeter (3611932) OR Ivanhoe (3611942))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
alkali-sink goldfields *Lasthenia chrysantha*	PDAST5L030	None	None	G2	S2	1B.1
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
American bumble bee *Bombus pensylvanicus*	IIHYM24260	None	None	G3G4	S2	
An andrenid bee *Andrena macswaini*	IIHYM35130	None	None	G2	S2	
brittlescale *Atriplex depressa*	PDCHE042L0	None	None	G2	S2	1B.2
burrowing owl *Athene cunicularia*	ABNSB10010	None	None	G4	S2	SSC
California alkali grass *Puccinellia simplex*	PMPOA53110	None	None	G2	S2	1B.2
California jewelflower *Caulanthus californicus*	PDBRA31010	Endangered	Endangered	G1	S1	1B.1
California linderiella *Linderiella occidentalis*	ICBRA06010	None	None	G2G3	S2S3	
California satintail *Imperata brevifolia*	PMPOA3D020	None	None	G3	S3	2B.1
California tiger salamander - central California DPS *Ambystoma californiense pop. 1*	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
Coulter's goldfields *Lasthenia glabrata ssp. coulteri*	PDAST5L0A1	None	None	G4T2	S2	1B.1
Crotch bumble bee *Bombus crotchii*	IIHYM24480	None	Candidate Endangered	G2	S2	
Earlimart orache *Atriplex cordulata var. erecticaulis*	PDCHE042V0	None	None	G3T1	S1	1B.2
Great Valley Valley Oak Riparian Forest *Great Valley Valley Oak Riparian Forest*	CTT61430CA	None	None	G1	S1.1	
heartscale *Atriplex cordulata var. cordulata*	PDCHE040B0	None	None	G3T2	S2	1B.2
Hoover's spurge *Euphorbia hooveri*	PDEUP0D150	Threatened	None	G1	S1	1B.2
Hopping's blister beetle *Lytta hoppingi*	IICOL4C010	None	None	G1G2	S2	
lesser saltscale *Atriplex minuscula*	PDCHE042M0	None	None	G2	S2	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
loggerhead shrike *Lanius ludovicianus*	ABPBR01030	None	None	G4	S4	SSC
Moody's gnaphosid spider *Talanites moodyae*	ILARA98020	None	None	G2G3	S2S3	
Northern California legless lizard *Anniella pulchra*	ARACC01020	None	None	G3	S2S3	SSC
Northern Claypan Vernal Pool *Northern Claypan Vernal Pool*	CTT44120CA	None	None	G1	S1.1	
Northern Hardpan Vernal Pool *Northern Hardpan Vernal Pool*	CTT44110CA	None	None	G3	S3.1	
northern leopard frog *Lithobates pipiens*	AAABH01170	None	None	G5	S2	SSC
pallid bat *Antrozous pallidus*	AMACC10010	None	None	G4	S3	SSC
recurved larkspur *Delphinium recurvatum*	PDRAN0B1J0	None	None	G2?	S2?	1B.2
San Joaquin adobe sunburst *Pseudobahia peirsonii*	PDAST7P030	Threatened	Endangered	G1	S1	1B.1
San Joaquin kit fox *Vulpes macrotis mutica*	AMAJA03041	Endangered	Threatened	G4T2	S3	
San Joaquin Valley Orcutt grass *Orcuttia inaequalis*	PMPOA4G060	Threatened	Endangered	G1	S1	1B.1
Sanford's arrowhead *Sagittaria sanfordii*	PMALI040Q0	None	None	G3	S3	1B.2
spiny-sepaled button-celery *Eryngium spinosepalum*	PDAPI0Z0Y0	None	None	G2	S2	1B.2
subtle orache *Atriplex subtilis*	PDCHE042T0	None	None	G1	S1	1B.2
Swainson's hawk *Buteo swainsoni*	ABNKC19070	None	Threatened	G5	S4	
Tipton kangaroo rat *Dipodomys nitratoides nitratoides*	AMAFD03152	Endangered	Endangered	G3T1T2	S2	
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Threatened	G1G2	S2	SSC
valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	IICOL48011	Threatened	None	G3T3	S3	
Valley Sacaton Grassland *Valley Sacaton Grassland*	CTT42120CA	None	None	G1	S1.1	
vernal pool fairy shrimp *Branchinecta lynchi*	ICBRA03030	Threatened	None	G3	S3	
vernal pool smallscale *Atriplex persistens*	PDCHE042P0	None	None	G2	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
vernal pool tadpole shrimp *Lepidurus packardi*	ICBRA10010	Endangered	None	G3	S3	
western mastiff bat *Eumops perotis californicus*	AMACD02011	None	None	G4G5T4	S3S4	SSC
western pond turtle *Emys marmorata*	ARAAD02030	None	None	G3G4	S3	SSC
western spadefoot *Spea hammondii*	AAABF02020	None	None	G2G3	S3S4	SSC
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Winter's sunflower *Helianthus winteri*	PDAST4N260	None	None	G2?	S2?	1B.2

Record Count: 46

APPENDIX D:

California Native Plant Society Rare Plant Inventory

CNPS Rare Plant Inventory

Search Results

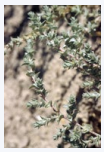
Back | Export Results | Copy Link

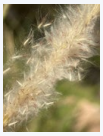
21 matches found. Click on scientific name for details

Search Criteria: CRPR is one of [1A:1B:2A:2B:3:4] , 9-Quad include [3611922:3611933:3611923:3611932:3611943:3611942:3611924:3611934:3611944]

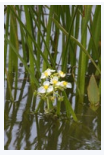
Filter Results:

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Amaranthus watsonii	Watson's amaranth	Amaranthaceae	annual herb	Apr-Sep	None	None	G5?	S3	4.3		2001-01-01	 © 2003 Debra Valov
Atriplex cordulata var. *cordulata*	heartscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G3T2	S2	1B.2	Yes	1988-01-01	 © 1994 Robert E. Preston, Ph.D.
Atriplex cordulata var. *erecticaulis*	Earlimart orache	Chenopodiaceae	annual herb	Aug-Sep(Nov)	None	None	G3T1	S1	1B.2	Yes	2001-01-01	 © 2009 Robert E. Preston, Ph.D.

Atriplex depressa	brittlescale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G2	S2	1B.2	Yes	1994-01-01	 © 2009 Zoya Akulova
Atriplex minuscula	lesser saltscale	Chenopodiaceae	annual herb	May-Oct	None	None	G2	S2	1B.1	Yes	1994-01-01	 © 2000 Robert E. Preston, Ph.D.
Atriplex persistens	vernal pool smallscale	Chenopodiaceae	annual herb	Jun-Oct	None	None	G2	S2	1B.2	Yes	2001-01-01	No Photo Available
Atriplex subtilis	subtle orache	Chenopodiaceae	annual herb	(Apr)Jun-Sep(Oct)	None	None	G1	S1	1B.2	Yes	1994-01-01	 © 2000 Robert E. Preston, Ph.D.
Caulanthus californicus	California jewelflower	Brassicaceae	annual herb	Feb-May	FE	CE	G1	S1	1B.1	Yes	1984-01-01	No Photo Available
Delphinium hansenii ssp. *ewanianum*	Ewan's larkspur	Ranunculaceae	perennial herb	Mar-May	None	None	G4T3	S3	4.2	Yes	1994-01-01	No Photo Available
Delphinium recurvatum	recurved larkspur	Ranunculaceae	perennial herb	Mar-Jun	None	None	G2?	S2?	1B.2	Yes	1988-01-01	No Photo Available
Eryngium spinosepalum	spiny-sepaled button-celery	Apiaceae	annual/perennial herb	Apr-Jun	None	None	G2	S2	1B.2	Yes	1980-01-01	No Photo Available
Euphorbia hooveri	Hoover's spurge	Euphorbiaceae	annual herb	Jul-Sep(Oct)	FT	None	G1	S1	1B.2	Yes	1974-01-01	No Photo Available

Helianthus winteri	Winter's sunflower	Asteraceae	perennial shrub	Jan-Dec	None	None	G2?	S2?	1B.2	Yes	2014-10-15	 © 2014 Chris Winchell
Hordeum intercedens	vernal barley	Poaceae	annual herb	Mar-Jun	None	None	G3G4	S3S4	3.2		1994-01-01	No Photo Available
Imperata brevifolia	California satintail	Poaceae	perennial rhizomatous herb	Sep-May	None	None	G3	S3	2B.1		2006-12-26	 © 2020 Matt C. Berger
Lasthenia chrysantha	alkali-sink goldfields	Asteraceae	annual herb	Feb-Apr	None	None	G2	S2	1B.1	Yes	2019-09-30	 © 2009 California State University, Stanislaus
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	None	None	G4T2	S2	1B.1		1994-01-01	 © 2013 Keir Morse
Orcuttia inaequalis	San Joaquin Valley Orcutt grass	Poaceae	annual herb	Apr-Sep	FT	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Pseudobahia peirsonii	San Joaquin adobe sunburst	Asteraceae	annual herb	Feb-Apr	FT	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Puccinellia simplex	California alkali grass	Poaceae	annual herb	Mar-May	None	None	G2	S2	1B.2		2015-10-15	No Photo Available
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous	May-Oct(Nov)	None	None	G3	S3	1B.2	Yes	1984-01-01	

herb (emergent)

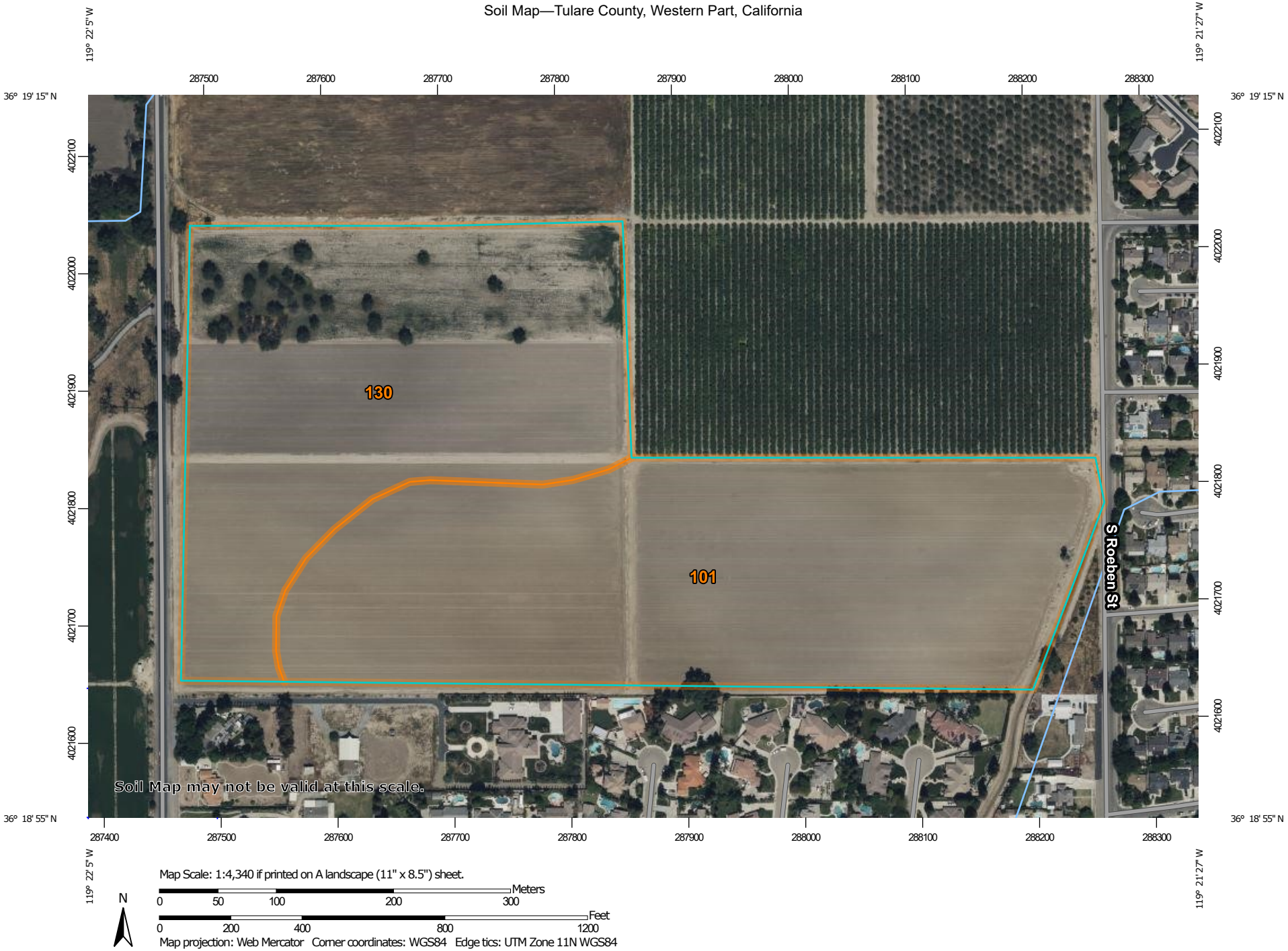


Showing 1 to 21 of 21 entries

Suggested Citation:
California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website https://www.rareplants.cnps.org [accessed 9 October 2023].

APPENDIX E:

USDA-NRCS Soil Survey



Map Scale: 1:4,340 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 50 100 200 300

Feet
0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Tulare County, Western Part, California
Survey Area Data: Version 17, Aug 31, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 16, 2022—May 30, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
101	Akers-Akers, saline-Sodic, complex, 0 to 2 percent slopes	30.3	55.0%
130	Nord fine sandy loam, 0 to 2 percent slopes	24.8	45.0%
Totals for Area of Interest		**55.2**	**100.0%**

APPENDIX F:

Site Plan

September 6, 2023

ELLIOT PROPERTY

TENTATIVE SUBDIVISION MAP

PREPARED FOR: SAN JOAQUIN VALLEY HOMES
5607 AVENIDA DE LOS ROBLES
VISALIA, CA 93291

PREPARED BY: 4CREEKS, INC.
324 S. SANTA FE ST., STE. A
VISALIA ,CA 93292

ACREAGE

59.13 AC 224 UNITS

LEGEND

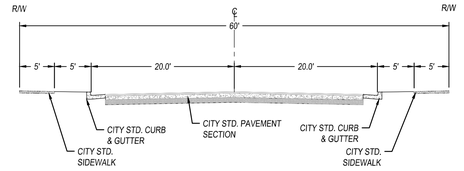
APN:	087-010-006, 087-010-008
ZONING:	AGRICULTURE
GENERAL PLAN:	LOW DENSITY RESIDENTIAL
FLOOD ZONE:	AE & X
ELECTRICITY:	SOUTHEN CALIFORNIA EDISON COMPANY
WATER:	CALWATER
TELEPHONE:	AT&T
NATURAL GAS:	SOUTHERN CALIFORNIA GAS COMPANY
EXISTING USE:	VACANT
PROP. USE:	LOW DENSITY RESIDENTIAL
PROP. MAINTENANCE:	CITY OF VISALIA
	LANDSCAPE SETBACK LOT
	BLOCK WALL

TYPICAL LOT SIZES:

6480 SF MIN. LOTS± (60' X 108' TYP.) (221 UNITS)
6000 SF MIN. LOTS± (60' X 100') (3 UNITS)
**OUTLOTS A-D AND PARKS (4.24 AC) TO BE DEDICATED TO THE CITY OF VISALIA*

UTILITIES:

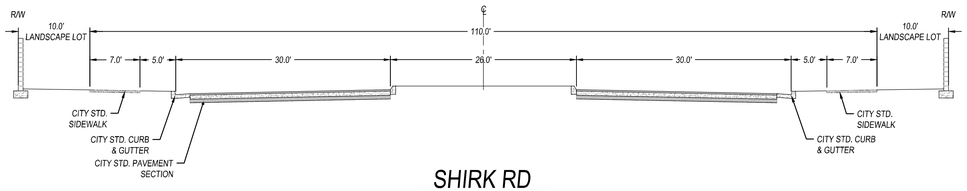
SEWER:	SHIRK RD - EXIST. 6"
	ROEBEN ST - EXIST. 8"
STORM DRAIN:	TEMP. RETENTION BASIN TO MAINTAIN ALL ON-SITE DRAINAGE
OVERHEAD POWER:	ROEBEN ST (3 DISTRIBUTION, TO BE UNDERGROUNDED)
	SHIRK (5 TRANSMISSION, TO BE RELOCATED)



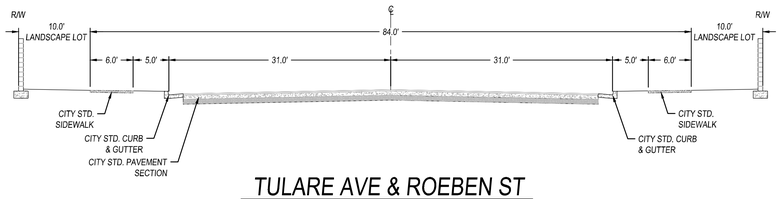
TYPICAL INTERNAL

VICINITY MAP

SCALE: 1"=½ MILE



SHIRK RD



TULARE AVE & ROEBEN ST

NORTH

100' 0' 100'

PREPARED BY:
4CREEKS
324 S. SANTA FE, STE. A
VISALIA, CA 93292
TEL: 559.802.3052
FAX: 559.802.3215
www.4-creeks.com

Appendix C

Cultural Records Search Results

Corporate Headquarters
1322 E. Shaw Avenue, Suite 400 Fresno, CA, 93710
www.soarhere.com • 559.547.8884

Phase I Cultural Resources Assessment
Elliot Housing Subdivision Project, Visalia, CA 93277
Assessor Parcel Numbers
087-010-006, and 087-010-008
Tulare, County, California

Prepared for

4CREEKS
324 South Santa Fe Street, Suite A
Visalia, CA 93292

Prepared by

1322 E Shaw Ave.
Fresno, CA 93710

Heather Froshour, M.A., R.P.A., Senior Archaeologist

December 4, 2023

EXECUTIVE SUMMARY

Soar Environmental Consulting, Inc. (Soar Environmental) has been retained by 4Creeks, Inc. (4Creeks) to prepare a Phase 1 Cultural Resources Assessment (Phase 1 CRA) as part of an Initial Study, for a Housing Subdivision Development Project (Project) in the city of Visalia (City), in accordance with the California Environmental Quality Act (CEQA) prior to implementation of the proposed Project. The proposed project is to construct 224 housing units on 59.13-acres on Accessor Parcel Numbers (APNs) 087-010-006 and 087-010-008. The purpose of the CRA is to provide an inventory of the known and potentially significant cultural resources within the Project area through a California Historical Records Information search (CHRIS) using the Southern San Joaquin Valley Information Center (SSJVIC), as well as a Sacred Lands File & Native American Contacts List Request through the Native American Heritage Commission (NAHC).

The results of the records search indicate two (2) cultural resource(s) recorded within 0.50-mile of the Project area. The records searches indicate one (1) recorded resource within the Project area. The pedestrian survey identified one (1) existing resource within the Project area. No site testing or mitigation measures are required, unless previously undiscovered cultural resources are detected during construction.

Contents

FIGURES

TABLES

APENDICIES

1.0 Introduction

This report details the results of a Phase 1 Cultural Resources Assessment in support of the proposed housing development on 59.13-acres in Visalia, California, on Accessor Parcel Numbers (APNs) 087-010-006 and 087-010-008 (Figures 1-3). This Phase 1 report is prepared pursuant to the California Environmental Quality Act (CEQA), PRC Sections 21082, 21083.2, and 21084.1, and California Code of Regulations 15064.5.

Heather Froshour completed the archival review, the Native American consultation, field survey, and prepared this Phase 1 report. Ms. Froshour is Soar Environmental's Senior Archaeologist who meets the professional standards of the U.S. Secretary of the Interior for archaeology (36 CFR 61) and is certified by the Register of Professional Archaeologists.

Soar Environmental requested a records search from the Southern San Joaquin Valley Information Center (SSJVIC) for the Project area as well as a 0.50-mile buffer. The archival research for this Phase 1 report was positive for archaeological sites or historical resources within the Project area. The archival record search reported two (2) recorded resources within 0.5-mile radius of the Project area. The records search revealed two (2) previous cultural resources surveys had been conducted in the Project area. A total of seven (7) additional cultural resource survey reports have been completed within a 0.50-mile radius of the Project area.

As part of the background research, Soar Environmental also requested a search of the Sacred Lands File (SLF) from the Native American Heritage Commission (NAHC). The results of the records review and SLF search were negative. The NAHC suggested contacting five (5) individuals representing three (3) Native American tribal groups to find out if they have additional information about the Project area. Soar Environmental sent outreach letters to all five (5) recommended tribal individuals. No response was received.

Soar Environmental conducted an intensive pedestrian survey of the project on November 18, 2023. No prehistoric resources of any kind were identified within the Project area. The current study however resulted in the documentation of one historical-period resource within the Project footprint: a segment of the nineteenth century South Fork Persian Ditch. The ditch was created by the Persian Ditch Company between 1854 and 1856 to transport water from Mill Creek for irrigation purposes. The ditch serves as a short distributary for the Persian Ditch to the north and the Watson Ditch to the south. The course of the South Fork Persian Ditch has changed subsequently and no longer maintain integrity from its original location. The ditch also now lacks integrity of setting, design, materials, feeling and association. As common property types lacking integrity, it is recommended as not eligible for listing in the California Register of Historical Resources (CRHR). Based on these findings, the development of the 4Creeks Elliot (San Joaquin Valley Housing) SJVH Project will not result in adverse impacts to know significant or unique resources as defined by CEQA. It is recommended, however, in the event that cultural resources are encountered during construction activities associated with the Project, a qualified archaeologist shall be obtained to assess the significance of the find in accordance with the criteria set forth in CEQA Guidelines 15064.5(f). In addition, Health and Safety Code 7050.5, CEQA 15064.5(e), and Public Resources Code 5097.98 mandate the process to be

followed in the unlikely event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

1.1 Project Description

The Project proposes the construction of a 224-unit housing subdivision at the southeast corner of Tulare Avenue and Shirk Road, in the city of Visalia (Figures 1-4). The proposed construction lies within the combined 59.13-acre parcels, APNs 087-010-006 and 087-010-008. The Project Site also has 4.24-acres allocated to the development of a park dedicated to the city (Figure 4). Grading of the area will be accomplished using a backhoe and grader.

The project will require the development of roads and sidewalks around and throughout the property. A stormwater retention basin will be maintained in the southwest corner of the Project Site for all on site drainage. On the east side of the property bounded by Roeben Street, 3 existing overhead powerlines will be undergrounded, and 5 powerline poles on the Shirk Road boundary will be relocated. Since the entire property will be graded for the housing project during construction activities, the trees in the northwest section of the property would be removed. Much of the property has been used for agricultural production and the entire lot has been cleared and maintained aside from the scattered trees (Figures 5-15).

1.2 Existing Condition

The Project area is located on two parcels of 59.13-acres combined located approximately 0.77-kilometers south from Highway 198, Visalia, California, at Accessor Parcel Numbers (APNs) 087-010-006 and 087-010-008 (Figure 1-4). The Project area is approximately 1.40-kilometers south from Mill Creek. The Project area is located in Tulare County within Section 34, Township 18S, Range 24E, Mount Diablo Base Meridian, as depicted on the Visalia, CA 7.5' U. S Geological Survey (USGS) topographical quadrangle (Figures 1). Surface soils consist primarily of the Akers soil series within the east and the Nord soil series within the west half of the Project area (Figure 3). The Akers soil series is typically very deep, well-drained, and formed in alluvium derived from granite rock. This soil is made up of light brownish gray sandy loam at surface with pale brown fine sandy loam below. The Nord soil series is typically very deep, well-drained, and formed in mixed alluvium dominantly from granite and sedimentary rocks. This soil is made up of grayish brown fine sandy loam at surface with brown fine sandy loam below. The elevation of the Project area ranges from 301-304 feet (ft) above mean sea level.

2.0 REGULATORY SETTING

Federal, State and local governments have developed laws and regulations designed to protect significant cultural resources that may be affected by actions that they undertake or regulate. The National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA) are the basic federal and state laws governing preservation of historic and archaeological resources of national, regional, State and local significance.

2.1 Federal

Federal regulations for cultural resources are governed primarily by Section 106 of the National Historic Preservation Act (NHPA) of 1966. Section 106 of NHPA requires Federal agencies to take into account the effects of their undertakings on historic properties and affords the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. The Council's implementing regulations, "Protection of Historic Properties" are found in 36 Code of Federal Regulations (CFR) Part 800. The goal of the Section 106 review process is to offer a measure of protection to sites which are determined eligible for listing on the National Register of Historic Places. The criteria for determining National Register eligibility are found in 36 CFR Part 60. Amendments to the NHPA (1986 and 1992) and subsequent revisions to the implementing regulations have, among other things, strengthened the provisions for Native American consultation and participation in the Section 106 review process. While federal agencies must follow federal regulations, most projects by private developers and landowners do not require this level of compliance. Federal regulations only come into play in the private sector if a project requires a federal permit or if it uses federal money.

2.2 State

California Register of Historical Resources

In California, the term "historical resource" includes "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (California PRC § 5020.1[j])(State of California 2021). In 1992, the California legislature established the California Register of Historical Resources (CRHR) "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (California PRC § 5024.1(a)). The criteria for listing resources on the CRHR, enumerated in the following text, were developed to be in accordance with previously established criteria developed for listing in the NRHP. According to California PRC § 5024.1(c) (1– 4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

2) Is associated with the lives of persons important in our past.

3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

4) Has yielded, or may be likely to yield, information important in prehistory or history

To understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (14 CCR 4852[d][2]).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the National Register of Historic Places (NRHP), and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

California Health and Safety Code, §7050.5

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code, §7050.5, requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains can occur until the County Coroner has examined the remains (California Health and Safety Code, §7050.5b). California PRC §5097.98, also outlines the process to be followed in the event that remains are discovered. If the County Coroner determines or has reason to believe the remains are those of a Native American, the County Coroner must contact the California NAHC within 24 hours (California Health and Safety Code, §7050.5c)(State of California 2021). The NAHC will notify the most likely descendant. With the permission of the landowner, the most likely descendant may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the most likely descendant by the NAHC. The most likely descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains, and items associated with Native Americans.

California State Assembly Bill 52

Assembly Bill (AB) 52 of 2014 amended California PRC § 5097.94, and added California PRC §21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 established that tribal cultural resources must be considered under CEQA and also provided for additional Native American consultation requirements for the lead agency. California PRC §21074, defines tribal cultural resources as follows:

(a) Section 21074 of the Public Resources Code states that "tribal cultural resources" are either of the following:

> (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
>
> (A) Included or determined to be eligible for inclusion in the California Register

of Historical Resources.

(B) Included in a local register of historical resources as defined in subdivision (k) of §5020.1.

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of §5024.1. In applying the criteria set forth in subdivision (c) of §5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe. A cultural landscape that meets the criteria of subdivision:

(a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(b) A historical resource described in §21084.1, a unique archaeological resource as defined in subdivision (g) of §21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of §21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

AB 52 formalizes the lead agency–tribal consultation process, requiring the lead agency to initiate consultation with California Native American tribes located on the contact list maintained by the Native American Heritage Commission (NAHC). This includes California Native American groups that are traditionally and culturally affiliated with the project, including tribes that may not be federally recognized. Lead agencies are required to begin consultation prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report (EIR).

Section 9 of AB 52 establishes that "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." Section 6 of AB 52 added §21080.3.2 to the California PRC, which states that parties may propose mitigation measures "capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource." Further, if a California Native American tribe requests consultation regarding Project alternatives, mitigation measures, or significant effects to tribal cultural resources, the consultation shall include those topics (California PRC §21080.3.2[a]). The environmental document and the mitigation monitoring and reporting program (where applicable) shall include any mitigation measures that are adopted (California PRC §21082.3[a]).

Native American Human Remains

State law (California PRC §5097 et seq.) addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are

discovered during construction of a project; and established the NAHC.

In the event that Native American human remains, or related cultural material are encountered, §15064.5(e) of the CEQA Guidelines (as incorporated from PRC §5097.98) and California Health and Safety Code, §7050.5, defines the subsequent protocol. In the event of the accidental discovery or recognition of any human remains, excavation or other disturbances shall be suspended on the site, or any nearby area reasonably suspected to overlie adjacent human remains or related material. Protocol requires that the County Coroner or County-approved Coroner represented be contacted in order to determine if the remains are of Native American origin. Should the coroner determine the remains to be Native American, the coroner must contact the NAHC within 24 hours. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work for means of treating, with appropriate dignity, the human remains, and any associated grave goods as provided in California PRC §5097.98 (14 CCR 15064.5(e))(State of California 2021).

2.3 Local

Tulare County

Chapter 8.6 of the Tulare County General Plan of 2012 promotes the preservation of cultural and historic resources through managing and protecting sites of cultural and archeological importance for the benefit of present and future generations (County of Tulare 2012). Some of the measures implemented by the County are:

> **ERM-6.1 Evaluation of Cultural and Archaeological Resources**
> The County shall participate in and support efforts to identify its significant cultural and archaeological resources using appropriate State and Federal standards.
>
> **ERM-6.2 Protection of Resources with Potential State or Federal Designations**
> The County shall protect cultural and archaeological sites with demonstrated potential for placement on the National Register of Historic Places and/or inclusion in the California State Office of Historic Preservation's California Points of Interest and California Inventory of Historic Resources. Such sites may be of Statewide or local significance and have anthropological, cultural, military, political, architectural, economic, scientific, religious, or other values as determined by a qualified archaeological professional.
>
> **ERM-6.3 Alteration of Sites with Identified Cultural Resources**
> When planning any development or alteration of a site with identified cultural or archaeological resources, consideration should be given to ways of protecting the resources. Development can be permitted in these areas only after a site specific investigation has been conducted pursuant to CEQA to define the extent and value of resource, and mitigation measures proposed for any impacts the development may have on the resource.

ERM-6.4 Mitigation
If preservation of cultural resources is not feasible, every effort shall be made to mitigate impacts, including relocation of structures, adaptive reuse, preservation of facades, and thorough documentation and archival of records.

ERM-6.5 Cultural Resources Education Programs
The County should support local, State, and national education programs on cultural and archaeological resources.

ERM-6.6 Historic Structures and Sites
The County shall support public and private efforts to preserve, rehabilitate, and continue the use of historic structures, sites, and parks. Where applicable, preservation efforts shall conform to the current Secretary of the Interior's Standards for the Treatment of Historic Properties and Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.

ERM-6.7 Cooperation of Property Owners
The County should encourage the cooperation of property owners to treat cultural resources as assets rather than liabilities, and encourage public support for the preservation of these resources.

ERM-6.8 Solicit Input from Local Native Americans
The County shall continue to solicit input from the local Native American communities in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.

ERM-6.9 Confidentiality of Archaeological Sites
The County shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.

ERM-6.10 Grading Cultural Resources Sites
The County shall ensure all grading activities conform to the County's Grading Ordinance and California Code of Regulations, Title 20, § 2501 et. seq..

City of Visalia

Under Chapter 3, the City's Role and Tools for Preservation, in the General Plan of the City of Visalia defines a "cultural resources" as:

Chapter 3.3: Sites, structures, or any other physical evidence associated with human activity considered important to be culturally important. This includes archaeological resources and contemporary Native American resources in addition to the historic resources that are the subject of this chapter. Impacts of development on cultural resources of all kinds must be avoided to the

greatest extent possible, as described by policies in Chapter 6: Open Space and Conservation.

Under Chapter 6, Open Space and Conservation, within the General Plan of the City of Visalia the following policies are outlined for the preservation of cultural resources:

Chapter 6.5: OSC-P-39 Establish requirements to avoid potential impacts to sites suspected of being archeologically, paleontologically, or historically significant or of concern, by:

- Requiring a records review for development proposed in areas that are considered archaeologically or paleontologically sensitive.

- Determining the potential effects of development and construction on archaeological or paleontological resources (as required by CEQA).

- Requiring pre-construction surveys and monitoring during any ground disturbance for all development in areas of historical and archaeological sensitivity.

- Implementing appropriate measures to avoid the identified impacts, as conditions of project approval.

In the event that previously unidentified historical, archaeological, or paleontological resources are discovered during construction, grading activity in the immediate area shall cease and materials and their surroundings shall not be altered or collected. A qualified archaeologist or paleontologist must make an immediate evaluation and avoidance measures, or appropriate mitigation should be completed, according to CEQA Guidelines. The State Office of Historic Preservation has issued recommendations for the preparation of Archaeological Resource Management Reports that will be used as guidelines. (City of Visalia 2014).

3.0 SETTING

This section of the report summarizes information regarding the physical and cultural setting of the Project area, including prehistoric, ethnographic, and historic contents of the general area. Several factors; including topography, biological resources, and available water sources; affect the nature and distribution of the cultural periods of activity of an area. This background provides a context for understanding the nature of the cultural resources that may be identified within the region of the project.

3.1 Environmental Setting

The Project area is located in west Tulare County, approximately 5.3 miles north-northwest of Tulare, California within the San Joaquin Valley. The San Joaquin Valley is a long, narrow, northwest-trending, alluvial valley that lies between the Sierra Nevada Range to the east, and the Coast Ranges to the west (Wagner, 2002). The region was historically covered with native annual and perennial grasses including San Joaquin saltbush, valley oak savanna, riparian forest, and tule marsh (McNab and Avers, 1996; Munz and Keck, 1973). The climate consists of hot,

dry summers with cool, moist winters that provide the best climate for the neighboring pomegranate and citrus orchards and vineyards.

The Project area is best characterized historically as a rural ranching and agricultural region with large populations of both large and small mammals. Prehistorically, the larger mammals inhabiting the Project area would have included mule deer (*Odocoileus hemionus californicus*), black-tailed deer (*O. hemionus columbianus*), tule elk (*Cervus elaphus nannoides*), pronghorn antelope (*Antilocarpa Americana*), mountain lion (*Felis concolor*), and black bear (*Ursus americanus*) (Jameson and Peeters 1988). The small mammals that historically inhabited the Project area included rabbit (*Sylvilagus sp*.), black-tailed jackrabbit (*Lepus californicus*), western gray squirrel (*Sciurus griseus*), coyote (*Canis latrans*), and gray fox (*Urocyon cinereoargenteus*).

The Project site is currently being used for agricultural production and the entire lot has been cleared and maintained aside from several scattered trees.

3.2 Cultural Setting

Cultural resources include prehistoric-era archaeological sites, historic-era archaeological sites, Native American traditional cultural properties, sites of religious and cultural significance, and historical buildings, structures, objects, and sites. The importance of any single cultural resource is defined by the context in which it was first created, current public opinion and modern yet evolving analysis. From the analytical perspective, temporal and geographic considerations help to define the historical context of the Project area. The importance or significance of a cultural resource is in part described by the context in which it originated or developed. National Park Service Bulletin 16a (1997) describes a historic context as "information about historic trends and properties grouped by an important theme in prehistory or history of a community, state, or the nation during a particular period of time." A context links an existing property to important historic trends, and this allows a framework for determining the significance of a property. Given this, a major goal of the historian is to determine accurate themes of analysis, a task that can only be undertaken by a thorough review of previous researchers' thoughts and ideas, as well as reviewing the literature of the resources.

In California, historians have divided the past into broad categories based on climate models, archaeological dating and written histories. Paleontologists divide time into much larger segments, with defined and named periods of time shortening in timespan as the modern era is reached. For the purposes of this analysis, these periods in history have been summarized below.

3.2.1 Prehistoric Setting

During the Early Holocene epoch (9700 to 4000 B.C.), large game hunting societies populated the area. Culturally significant surface finds in the Tulare Basin have yielded some projectile points similar to particular Paleoindian varieties (i.e., Western Clovis), suggesting an initial occupation pre-dating approximately 11,300 years before present (B.P.). The Middle Holocene epoch (4000 to 1000 B.C.) is characterized by Pinto-like points and groundstone tools, although

the association between the epoch and specific societies is not certain.

Olsen and Payen (1968) developed a chronology of four temporally distinct complexes for sites found within the southern San Joaquin Valley. The first complex, the Positas Complex, ranges from 3300 to 2600 B.C. and is characterized by small, shaped mortars, short cylindrical pestles, milling stones, perforated flat cobbles, and sea snail shell beads. The second complex is the Pacheco Complex which ranges from approximately 2600 B.C. to 300 A.D. This complex is divided into Phase B and Phase A. Phase B ranges from 2600 B.C. to 1600 B.C. and is characterized by biface arrow points, abalone shell ornaments, and sea snail shell beads. Phase A ranges from 1600 B.C. to 300 A.D. and is represented by more variation in shell bead types, perforated canine teeth, bone awl, whistles, grass saws, large stemmed and side-notched points, and an abundance of milling stones, mortars, and pestles. The third complex, the Gonzaga Complex, ranges from 300 to 1000 A.D. and is characterized by extended burials, bowl mortars, shaped pestles, squared and tapered stem projectile points, bone awls, grass saws, and a shell industry composed of distinctive shell ornaments and beads. Lastly, the Panoche Complex ranges from 1500 A.D. to European contact (mid to late 1700 A.D.) and is characterized by the presence of fewer milling stones, varied mortars and pestles, small side-notched arrow points, clamshell disc beads, bone awls, whistles, saws, and tubes.

3.2.2 Ethnographic Setting

Penutian-speaking Yokuts tribal groups occupied the southern San Joaquin Valley region and much of the nearby Sierra Nevada. Ethnographic information about the Yokuts was collected primarily by Powers (1971, 1976 [originally 1877]), Kroeber (1925), Gayton (1930, 1948), Driver (1937), Latta (1977) and Harrington (n.d.). For a variety of historical reasons, existing research information emphasizes the central Yokuts tribes who occupied both the valley and particularly the foothills of the Sierra. The northernmost tribes suffered from the influx of Euro-Americans during the Gold Rush and their populations were in substantial decline by the time ethnographic studies began in the early twentieth century. In contrast, the southernmost tribes were partially removed by the Spanish to missions and eventually absorbed into multi-tribal communities on the Sebastian Indian Reservation (on Tejon Ranch), and later the Tule River Reservation and Santa Rosa Rancheria to the north. The result is an unfortunate scarcity of ethnographic detail on southern Valley tribes, especially in relation to the rich information collected from the central foothills tribes where native speakers of the Yokuts dialects are still found. Regardless, the general details of indigenous lifeways were similar across the broad expanse of Yokuts territory, particularly in terms of environmentally influenced subsistence and adaptation and with regard to religion and belief, which were similar everywhere.

This scarcity of specific detail is particularly apparent in terms of southern valley tribal group distribution. The San Joaquin Valley floor, and thus the study area, was occupied by these southern Valley Yokuts speakers, themselves divided into a series of autonomous “tribelets,” the boundaries of which are not well defined. The Yauelmani Yokuts lived from the Kern River area, in modern Bakersfield, to the southeast corner of the valley, on the Tejon Ranch, thus likely including the study area. The Hometwali were centered around Kern Lake, while the Tulamni occupied the west side of Buena Vista Lake and the foothills of the Temblors, at least to

McKittrick. The Tuhohi resided from the Kern River delta north to the Goose Lake area and west to the sloughs near Buttonwillow. Yokuts villages apparently extended up to, but not into, the mouths of the canyons on the northern and western fronts of the Tehachapi Mountains, well into the foothills and lower elevations of the Sierra Nevada on the east, and to the crest of the Temblor Range on the west. The Yokuts are Penutian speakers and are linguistically related to northern occupants of the San Joaquin Valley.
The Yokuts settlement pattern was largely consistent, regardless of specific tribe involved. Winter villages were typically located along lakeshores and major stream courses (as these existed circa AD 1800), with dispersal phase family camps located at elevated spots on the valley floor and near gathering areas in the foothills.

Most Yokuts groups, again regardless of specific tribal affiliation, were organized as a recognized and distinct tribelet; a circumstance that almost certainly pertained to the tribal groups noted above. Tribelets were land-owning groups organized around a central village and linked by shared territory and descent from a common ancestor. The population of most tribelets ranged from about 150 to 500 peoples (Kroeber 1925).

Each tribelet was headed by a chief who was assisted by a variety of assistants, the most important of whom was the winatum, a herald or messenger and assistant chief. A shaman also served as religious officer. While shamans did not have any direct political authority, as Gayton (1930) has illustrated, they maintained substantial influence within their tribelet.

Shamanism is a religious system common to most Native American tribes. It involves a direct and personal relationship between the individual and the supernatural world enacted by entering a trance or hallucinatory state (usually based on the ingestion of psychotropic plants, such as jimsonweed or more typically native tobacco). Shamans were considered individuals with an unusual degree of supernatural power, serving as healers or curers, diviners, and controllers of natural phenomena (such as rain or thunder). Shamans also produced the rock art of this region, depicting the visions they experienced in vision quests believed to represent their spirit helpers and events in the supernatural realm (Whitley 1992, 2000).

The centrality of shamanism to the religious and spiritual life of the Yokuts was demonstrated by the role of shamans in the yearly ceremonial round. The ritual round performed the same each year, started in the spring with the jimsonweed ceremony, followed by rattlesnake dance and (where appropriate) first salmon ceremony. After returning from seed camps, fall rituals began in the late summer with the mourning ceremony, followed by first seed and acorn rites and then bear dance (Gayton 1930:379). In each case, shamans served as ceremonial officials responsible for specific dances involving a display of their supernatural powers (Kroeber 1925).

Subsistence practices varied from tribelet to tribelet based on the environment of residence. Throughout Native California, and Yokuts territory in general, the acorn was a primary dietary component, along with a variety of gathered seeds. Valley tribes augmented this resource with lacustrine and riverine foods, especially fish and wildfowl. As with many Native California tribes, the settlement and subsistence rounds included the winter aggregation into a few large villages, where stored resources (like acorns) served as staples, followed by dispersal into

smaller camps, often occupied by extended families, where seasonally available resources would be gathered and consumed.

Although population estimates vary and population size was greatly affected by the introduction of Euro-American diseases and social disruption, the Yokuts were one of the largest, most successful groups in Native California. Cook (1978) estimates that the Yokuts region contained 27 percent of the aboriginal population in the state at the time of contact; other estimates are even higher. Many Yokuts people continue to reside in the southern San Joaquin Valley today.

3.2.3 Historic Setting

In California, the historic era is divided into three general periods: the Spanish or Mission Period (1769 to 1821), the Mexican or Rancho Period (1821 to 1848), and the American Period (1848 to present). The mission system, which ultimately established 21 missions between 1796 and 1822, consisted of missions, presidios, and pueblos, and was designed to convert the indigenous peoples of California to Christianity and assimilate them under Spanish rule (Gudde 1998).

The Spaniards were the first non-Indians to enter the San Joaquin Valley. Pedro Fages led a group of soldiers through Tejon Pass into the San Joaquin Valley in 1772 (Wallace 1978:459). In 1776, Spanish missionaries visited the area now known as Bakersfield; the event was documented by Franciscan friar Francisco Garcés. Father Garcés described the Kern River, which he named Rio de San Felipe, and visited the Yokuts community of Woilu, a village situated on the land modern Bakersfield would later occupy. While visiting Woilu, Father Garcés performed the first European baptism in the San Joaquin Valley. The Franciscans returned to their base at Mission San Gabriel following a route through the Tehachapi Mountains that functioned as the primary road until 1876, when the Southern Pacific Railroad created an alternate route.

Lieutenant Gabriel Moraga led a group of Spanish explorers into the San Joaquin Valley in 1806 (Clough and Secrest 1984:25–27). Moraga's party intended to locate new lands for missions, find and return runaway Indians, and relocate stolen livestock. Moraga is credited with naming both the Kings and San Joaquin rivers. By the early 1820s, the expansion of missions in California ceased as a result of Mexico's independence from Spain (Clough and Secrest 1984:26). In 1827, the 17-man expedition led by Jedediah Smith entered the region and signaled the earliest American presence in the Kern County area (Clark 1998). Smith's adventures included friendly encounters with the Southern Yokuts near the Kings River and trapping and camping along the San Joaquin River (Clough and Secrest 1984:27). After Smith's visit, other trappers followed until about 1837, by which time fur-bearing animals had been nearly exterminated from the valley.

Visalia, then called Four Creeks, was settled in 1852. In this same year Tulare County was officially formed from parts of Mariposa County. By 1858 Visalia was added to John Butterfield's Overland Stage route from St. Louis to San Francisco. In these early years Visalia was a used as a supply center for the nearby gold mining operations along the Kern River. During this time Visalia's agricultural economy was based predominantly around livestock. In

1872 the Southern Pacific Railroad constructed train tracks throughout the San Joaquin Valley, and with this a shift was triggered in Visalia's agricultural economy to one revolving around field crops. By 1874 Visalia was incorporated as a city in Tulare County. The next major economic change was brought about by the increased availability of irrigation water, resulting in the conversion of large grain fields to small farms, where citrus, grapes, olives, and deciduous fruits were raised. These crops are a mainstay of the region's economy today (City of Visalia 2023).

4.0 ARCHIVAL RECORDS SEARCH

4.1 South Central Coastal Information Center

The Project area is located in the USGS Visalia 7.5' Series Quadrangle (USGS 2021). On October 13, 2023, Soar submitted a records search request to the Southern San Joaquin Valley Information Center (SSJVIC) located at the California State University, Bakersfield (Appendix A). The records search included a 0.5-mile buffer around the Project area. The results from the records search indicate two (2) cultural resource studies have been conducted within the Project area (Table 1). According to the information on file, there is one (1) resource within the Project area (Table 2).

Table 1. Survey Reports within the Project area

Report No.	Year	Author(s)/ Affiliation	Title
TU-00041	1995	Self, William/ William Self Associated	Class I Overview, Santa Fe Pacific Pipeline Partners, L.P., Proposed Concord to Colton Pipeline Project
TU-01190	1957	Mitchell, Annie R./ Westernlore Press	Jim Savage and the Tulareño Indians

Table 2. Resources within the Project area

Primary #	Type	Description
P-54-002177	Structure	Nineteenth-century earthenware irrigation ditch, HP20

There are two (2) recorded resources within the 0.5-mile record search radius (Table 3). There were seven (7) reports identified within a 0.5-mile radius of the Project area (Table 4).

Table 3. Survey Reports within 0.5 Mile of the Project area

Report No.	Year	Author(s)/ Affiliation	Title
TU-00246	1979	Cantwell, R.J./ Individual Consultant	Archaeological and Historical Survey Report for the Walnut Avenue Extension from Watson Ditch Near Shirk Road to the Termination of Road 86, Visalia, California
TU-00247	1979	Cantwell, R.J./ California Department of Transportation	Historic Property Survey Report for the Extension of Walnut Avenue, Road A288 and Road 86, Approximately Two and a Half Miles of New Road, from Watson Ditch to Southern Terminus of Akers Road
TU-00960	1989	Chavez, David/ CH2M Hill, David Chavez & Associates	Historic Resources Evaluation Repot for a Proposed Freeway Project in Visalia
TU-00962	1990	Unknown/ CH2M Hill, David Chavez & Associates	Historic Property Survey Report for a Proposed Freeway Project in Visalia
TU-00963	1989	Chavez, David/ CH2M Hill, David Chavez & Associates	Archaeological Survey Report for a Proposed Freeway Project in Visalia
TU-00964	1989	Chavez, David/ CH2M Hill,	Historic Architectural Survey Report for the State Route 198 Draft Environmental Impact Report
TU-01006	1999	Binning, Jeanne and Chick, Phil/ California Department of Transportation	Negative Archaeological Survey Report to Perform Replacement Plan for Freeze Damage to landscaping Along Portions of State Route 198 In and Near Visalia

Table 4. Resources within 0.5 Mile of the Project area

Primary #	Type	Description
P-54-003667	Building	400 Block of Roeben Road - Two Residences and Associated Outbuildings on Roeben Road, ca. 1940s/1970s
P-54-003670	Building	Cottonwood Court Historic Residence, ca 1980s

There are no recorded cultural resources within the Project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks.

4.2 Sacred Lands File & Native American Contacts List Request

The California Native American Heritage Commission (NAHC) was contacted on October 13, 2023, to conduct a Sacred Lands File (SLF) search, and to obtain a list of tribes culturally and geographically affiliated with the Project area (Appendix B). On December 1, 2023, the NAHC indicated there are no Native American traditional cultural places or sacred sites within or near the Project area. The NAHC provided a list of five (5) Tulare County Native American groups and individuals affiliated with the local tribes. On December 4, 2023 Ms. Froshour sent letters to all individuals describing the location, and the nature of the project. In each letter, Ms. Froshour included a request for information regarding prehistoric, historic, ethnographic land use, as well as contemporary Native American values.

Soar Environmental did not receive comments from the Tulare County Native American groups or affiliated individuals regarding the proposed development at the project location.

4.3 National Register of Historic Places (NRHP) Eligibility Evaluation

Historical Context and Construction History

The South Fork Persian Ditch is located in west Visalia, California within the 3rd hydrologic unit of the Kaweah Delta Water Conservation District. The ditch branches off from Watson Ditch and flows south and west for approximately 2.5 miles before terminating at the Persian Ditch. Previous cultural resources surveys in the area indicate that the ditch was first visible on Thompson's 1892 map and first appears on USGS topographic maps in 1927. The ditch is visible on aerial photographs as early as 1956. Alignment of the South Fork Persian Ditch has changed since its original construction between 1854 and 1856 with a major shift noted on topo maps between 1942 and 1946 when the ditch was altered from its northeast to southwest alignment to a north to south alignment along the west side of South Roeben St and an east to west alignment once it reaches the area between West Tempe Ave and West Howard Court (Nationwide Environmental Title Research, LLC 2020). The northern-most portion of the ditch was more recently modified to a west to east alignment between 2003 and 2004 (Google Earth 2022).

Earthen Irrigation Ditches in the San Joaquin Valley

Settlers in the San Joaquin Valley were among the first farmers in California to put in utility works specifically designed for use in irrigation. During the late 1850s and 1860s these short, roughly made, earthen ditches diverted water by means of temporary brush dams constructed across the lower courses of the streams running west out of the Sierra. The earliest of these ditches were built in the vicinity of Visalia in 1852-1853 with the Persian Ditch being one of the earlier ditches constructed in 1854 and the nearby Watson Ditch between 1855 and 1856 (Mitchell 1974). Other irrigation ditches spread out through the Kaweah River and Kings River deltas throughout the 1860s. Many of these early irrigation ditch systems were destroyed by the great floods of 1862 and 1868, despite these losses the San Joaquin Valley farmers continued to experiment with irrigation methods. By 1870, most of the approximately 60,000 irrigated acres in California were small diversions in Southern California and irrigation from former mining

ditches in the Sierra foothills. Farmers had also begun to irrigate bottom lands along the streams in the southern San Joaquin Valley (Pisani 1984). In the first decades of the twentieth century, many private enterprise irrigation systems in the San Joaquin Valley, as in Southern California, were acquired by irrigation districts formed by local residents (Adams 1929). The most common absorption occurred when local citizens formed an irrigation district covering the area served, and then purchased the commercial canals serving it. After irrigation districts took over in the 1910s and 1920s in the San Joaquin Valley, they typically replaced the wooden headgates, control structures, and diversion works with concrete structures (Jelinek 1982). Many canals remain earth lined, however, although areas with high seepage losses or problems with high groundwater tables installed linings in their originally earth-lined conduits.

Period of Significance

The ditch was constructed between 1854 and 1856 by farmers and other water users holding stock in what is now the Persian Ditch Company, created in ca. 1936, to transport water from Mill Creek for irrigation purposes. If eligible, the South Fork Persian Ditch would have a period of significance from approximately 1854 to present. This date range is based on historic maps of the City of Visalia and Tulare County.

Significance

South Fork Persian Ditch is potentially significant under **Criterion A.** The ditch is a mostly unlined earthenware irrigation ditch used by the city of Visalia. The ditch does not represent a unique association with agricultural activities at the local, state, or national levels. The ditch is associated with events that have made a significant contribution to the broad patterns of our history as part of the earliest irrigation ditch systems in Visalia. South Fork Persian Ditch is not significant under **Criterion B**. because the ditch is not associated with the lives of significant persons in our past. The design and construction, as well as modifications, were not by any one individual or individuals in the city of Visalia with particular significance at the local, state, or national levels. South Fork Persian Ditch is not significant under **Criterion C**. because the use of the earth in the construction of irrigation ditches has been common for over 150 years in the region and has been used since the planting of agricultural fields in Visalia. The ditch does not embody the distinctive characteristics of a type, period, or method of construction, nor does it represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction. The ditch is constructed of common materials and has been repaired and modified using typical methods and technologies. South Fork Persian Ditch is not significant under **Criterion D**. because the ditch is not a significant or likely source of important information about the construction of irrigation ditches, agricultural fields, or the materials or technologies employed in their construction and operation.

Integrity

The South Fork Persian Ditch is potentially significant under Criterion A and not significant under Criteria B-D. The ditch, however, have experienced changes in its alignment, alterations to

its immediate and landscape surroundings (including suburbanization along certain of their segments and the construction of modern bridge crossings), and the replacement of its original water control features with modern equipment (such as concrete culverts and metal gates). The ditch therefore lacks integrity of original location, setting, design, materials and feeling and it cannot convey its historical association and is therefore not eligible for the NRHP. Integrity of location design, materials, and workmanship, setting, feeling, and association is relatively low within the period of significance.

Determination of Eligibility

In view of this analysis, SOAR finds the South Fork Persian Ditch lacks significance and is not eligible for the NRHP.

Finding of Effect

The proposed Project is a 224-unit housing subdivision in Tulare County. The South Fork Persian Ditch is not NRHP eligible. The Project area is not located within any known historic districts or landscapes. The proposed construction would be limited to the 59.13-acre property, in addition to the 4.15 acres allocated to the development of a park dedicated to the City. As a result, SOAR finds *No Historic Properties Affected* (800.4[d][1]) for this undertaking.

5.0 PREVIOUS DISTURBANCES IN THE PROJECT AREA

The Project area is located within an area that has undergone anthropogenic modifications, primarily from activities related to residential development and agricultural activities. Likewise, the surface of the Project area has undergone surface grading and intense subsurface disturbance from previous residential construction and agricultural plowing. In some cases, the graded surface could exceed 24 inches (60 centimeters). This disturbance could exceed 5 feet (1.524 meters) in some areas.

In summary, the following previous disturbances have occurred within or immediately adjacent to the Project area:

- Surface grading and maintenance of current and historic roads
- Subsurface plowing, tilling, and harvesting due to agricultural activities
- Surface grading and subsurface disturbance for main building, outbuilding construction.

6.0 FIELD SURVEY METHODS AND RESULTS

The basic criteria for determining the presence of prehistoric and historic cultural resources in local urban and rural settings generally includes:

- Presence of flaking debris derived from stone tool manufacturing
- Presence of marine shell and/or other faunal remains
- Occurrence of material culture artifacts
- Surface expressions of cultural features
- Bedrock mortars and related milling features/components
- Soil discolorations or atypical soil manifestations
- Stone/adobe features associated with structural remains
- Diagnostic ceramics derived from Spanish, Mexican, or later periods
- Historic iron and glassware, cans, privy pits, domestic occupational debris

This investigation included the following tasks:

- Review of regional history and previous cultural resource sites and studies within the Project area and the vicinity.
- Examination of archival topographic maps and aerial photographs for the Project area and the general vicinity.
- Request of a California Historical Resources Information System data request of the Project area and 0.50-mile radius through the Southern San Joaquin Valley Information Center.
- Request of a NAHC Sacred Lands File Search for the Project area and 0.50-mile radius. Contact with Tribal groups and individuals as named by the NAHC.
- Evaluate the potential for the proposed Project to result in significant impacts to cultural resources including the potential to impact buried cultural resources with no surface expression.
- Intensive Phase 1 pedestrian survey with transect intervals of 50 feet (15 meters) of the Project area.
- Develop recommendations associated with impacts to cultural resources following the guidelines as outlined in the Regulatory Setting.

Ms. Froshour conducted the field survey of the Project area on November 18, 2023. The Project area was examined by systematic pedestrian inspection of the ground surface. Transect intervals

varied from 50 feet (15 meters). Disturbances immediately adjacent to the Project area were also examined for primary and secondary surface archaeological indicators.

The approximately 59.13-acre Project area consists mostly of undeveloped agricultural fields (Figures 5-15). Irrigation ditches, dirt roads, and contemporary irrigation features (e.g., standing pipes, culverts, pumps) exist within the Project footprint. The surface visibility of the Project area, defined as the approximate percentage of native soils visible during field survey of a given project component, was estimated at 90-100% within the Project area. The ground surface was covered by approximately 53.53-acres of active agricultural land with tree groves covering 5.6 acres, comprised of approximately 30 valley oaks (*Quercus lobata*), in the northwestern portion of the property (Figure 15).

No prehistoric cultural resources were identified within the Project area as a result of the intensive pedestrian survey. However, one (1) nineteenth-century irrigation ditch was identified within the Project area: the South Fork Persian Ditch was previously recorded in 1995 and again in 2022.

South Fork Persian Ditch

This resource is a short segment of the nineteenth century South Fork Persian Dith located on valley flats within the city limits of Visalia. The recorded segment measures approximately 518 feet long by 15 feet wide by 4 feet deep and is situated at an elevation range between 305 feet and 306 feet above sea level. During the current investigation, Soar Environmental investigated only that portion of the linear resource within the Project area, which runs in an east-west direction for approximately 0.75 mi. The ditch is earthen in construction and has contemporary irrigation features associated with it (i.e., concrete culverts, corrugated sheet metal culverts, sluice gates).

The ditch was constructed between 1854 and 1856 by farmers and other water users holding stock in what is now the Persian Ditch Company, created in ca. 1936, to transport water from Mill Creek for irrigation purposes. The ditch serves as a short distributary for the Persian Ditch to the north and the Watson Ditch to the south. The course of the South Fork Persian Ditch has changed subsequently between 1942 and 1946 as evidenced on USGS topographic quadrangles, and no longer maintain integrity from its original location. No artifacts or related cultural materials of any kind were observed on or immediately adjacent to the ditch. The resource is in good condition; however, it lacks integrity to its period of construction due to decades of agricultural activities, ditch modifications, and road maintenance. The ditch also now lacks integrity of setting, design, materials, feeling and association. As common property types lacking integrity, it is recommended as not eligible for listing in the California Register of Historical Resources (CRHR). Based on these findings, the development of the 4Creeks Elliot SJVH Project will not result in adverse impacts to know significant or unique resources as defined by California Environmental Quality Act CEQA.

In addition, three (3) isolate isolated ceramic sherds potentially derived from a primary or secondary archaeological context were observed on the surface of the Project area (Table 5).

Table 5. Isolates Recorded within the Project area

Isolate #	Type	Description
IF-01-2023	Ceramic	Refined earthenware, white glaze with blue band, thick possible serving dish/platter sherd
IF-02-2023	Ceramic	Refined earthenware body sherd, cream/yellow colored glaze
IF-03-2023	Ceramic	Refined earthenware sherd, light cream-colored glaze, possible platter sherd

In summary, one (1) existing *in situ* cultural resource was observed on the surface of the Project area, a nineteenth-century irrigation ditch associated with irrigation systems throughout the City of Visalia, with three (3) isolated ceramic sherds observed on the surface of the Project area.

7.0 RECOMMENDED ACTIONS AND MITIGATION MEASURES

There appears to be a moderate possibility for subsurface cultural resources in the Project area, based on the results of the archival research, and the fact that one (1) known resource have been detected during previous disturbances within the Project area. There are no recorded cultural resources within the 0.5-mile buffer radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks. No site testing or mitigation measures are recommended or required, unless previously undiscovered cultural resources are detected during construction.

The intensive Phase I pedestrian survey was conducted on November 18, 2023, with parallel transects spaced at 50 feet (15-meter) intervals walked across the entire Project area. No prehistoric resources were identified, but segments of one (1) nineteenth-century irrigation ditch was documented within the Project area: the South Fork Persian Ditch. The ditch dates from 1854 – 1856 and reflects the establishment of an irrigation system in this portion of Tulare County. It thus could be potentially eligible for CRHR listing due to its association with this important historic event (CRHR Criterion 1). It has no known association with an important historical figure (CRHR Criterion 2) and, as common property types, is not notable in terms of design, materials, or engineering (CRHR Criterion 3). It also lacks research value not better provided by historical records and documents (CRHR Criterion 4).

The ditch, however, has experienced changes in its alignment, alterations to its immediate and landscape surroundings (including suburbanization along certain of their segments and the construction of modern bridge crossings), and the replacement of its original water control features with modern equipment (such as concrete culverts and metal gates). The ditch therefore lacks integrity of original location, setting, design, materials and feeling and it cannot convey its historical association.

The South Fork Persian Ditch is recommended as not CRHR eligible, and it does not constitute significant or unique historical resources under CEQA due to its lack of integrity. No other cultural resources of any kind were identified during a Phase I study of the Project area. The proposed 4 Creeks Elliot SJVH Project therefore does not have the potential to result in adverse impacts to know historical properties.

A potential always exists to encounter previously undetected cultural resources. If cultural materials (prehistoric and/or historic artifacts) are detected during the course of ground disturbances associated with this project, all work in the immediate area of the find shall be halted until a qualified archaeologist can inventory and assess the significance of the find(s). At that point, the resources shall be evaluated in accordance with the procedures set forth in the California Environmental Quality Act (CEQA) 21083.2, sections 15064.5 and 15126.4, and the criteria regarding resource eligibility to the California Register of Historic Resources (CRHR).

If a resource cannot be avoided, then the resource must be examined vis-à-vis the provisions in the County Guidelines, and CEQA Sections 15064.5 and 15126.4 and the eligibility criteria as an "important" or "unique archaeological resource", as appropriate. In many cases, determination of a resource's eligibility can only be made through extensive research and archaeological testing.

Human remains are addressed by State of California Health and Safety Code Section 7050.5. This code section states that no further disturbance shall occur until the County Coroner has made a determination of the origin and disposition of the remains, pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the human remains are determined to be prehistoric/ethnohistoric Native American remains, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendent (MLD). The MLD shall complete the inspection of the site within 24 hours of notification, and may potentially recommend scientific removal, reburial, nondestructive analysis of human remains, and/or specific treatment of associated burial goods.

8.0 REFERENCES CITED

Adams, Frank.
1929 *Irrigation Districts in California*, Bulletin No. 21. California Department of Public Works, Reports of the Division of Engineering and Irrigation. California State Printing Office, Sacramento, California.

Arguelles, Marcus R., with Michael J. Moratto
1983 *Overview of Cultural Resources, Kern and Pixley National Wildlife Refuges, California*. Submitted to U.S. Fish and Wildlife Service, Portland, Oregon.

Bennyhoff, James A.
1977 *The Ethnogeography of the Plains Miwok*. Center for Archaeological Research at Davis Publication No. 5. Department of Anthropology, University of California, Davis, California.

City of Visalia
2014 Electronic Reference: https://www.visalia.city/depts/community_development/planning/gp.asp. Accessed: November 2, 2023.

2023 Electronic Reference: https://www.visalia.city/about/history_of_visalia.asp. Accessed: October 12, 2023.

Clark, Matthew
1998 *An Archaeological Reconnaissance of Nine Alternative Sites for the Proposed Stanislaus County Public Safety Center, Stanislaus County, California*. Holman & Associates Archaeological Consultants, San Francisco, California. Submitted to Redwood Consulting Group, San Rafael, California.

Clough, Charles W., and William B. Secrest, Jr.
1984 *Fresno County—The Pioneer Years: From the Beginnings to 1900*, edited by Bobbye Sisk Temple. Panorama West Books, Fresno, California.

Cook, Sherburne F.
1955 *The Aboriginal Populations of the San Joaquin Valley, California*. University of California Press Anthropological Records 16(2). Berkeley.

1978 *Historical Demography.* In *Handbook of North American Indians, Volume 8, California,* R. F. Heizer, editor, pp. 91-98. Washington, D.C., Smithsonian Institute.

County of Tulare
2012 Electronic Reference: https://generalplan.co.tulare.ca.us/. Accessed: November 2, 2023.

Davis, G. H., J. H. Green, F. H. Olmstead, and D. W. Brown
1959 *Groundwater Conditions and Storage Capacity in the San Joaquin Valley, California*. U.S. Geological Survey Water Supply Paper 1469. Prepared in cooperation with California Division of Water Resources, Sacramento.

Driver, H.E.
1937 *Cultural Element Distributions: VI, Southern Sierra Nevada*. University of California Anthropological Records 1(2):53-154. Berkeley, California.

Fredrickson, David A., and Joel W. Grossman
1966 *Radiocarbon Dating of an Early Man Site at Buena Vista Lake, California*. Paper presented at the Annual Meeting of the Society for American Archaeology, Reno, Nevada.

Gayton, A.H.
1930 *Yokuts-Mono Chiefs and Shamans*. University of California Publications in American Archaeology and Ethnology 24. Berkeley, 361-420.

1948 *Yokuts and Western Mono Ethnography*. University of California Anthropological Records 10:1–290. Berkeley, California.

Gifford, Edward W., and W. E. Schenck
1926 *Archaeology of the San Joaquin Valley, California.* University of California Publications in American Archaeology and Ethnology 23(1):1-122.

Google Earth Pro 7.3.6.9345.
2022 *Visalia Region, Visalia, California*. 36.318064, -119.362946. Borders and labels; places layers. Electronic Reference: http://www.google.com/earth/index.html. Accessed: November 20, 2013.

Grossman, Joel W.
1968 Early Cultural Remains at Buena Vista Lake, California: Report on the 1965 Season of Field Investigations. California Department of Parks and Recreation, Sacramento, California.

Gudde, Erwin G.
1969 *1000 California Place Names*. University of California Press, Berkeley, California.

Hall, Matthew C.
1993 *Archaeology of Seven Prehistoric Sites in Tiefort Basin, Fort Irwin, San Bernardino County, California*, with contributions by M. E. Basgall, D. A. Jones, M. G. Delacorte, M. R. Waters, C. A. Hunter, P. D. Bouey, T. M. Origer, and K. R. McGuire. Far Western Anthropological Research Group, Inc., Davis, California. Submitted to the U.S. Army National Training Center, Fort Irwin, California.

Harrington, John Peabody
n.d. *Yokuts ethnographic notes.* National Anthropological Archives.

Heady, H. F.
1977 *Valley Grassland*. In *Terrestrial Vegetation of California*, edited by Michael G. Barbour and Jack Major, pp. 491–514. Wiley-Interscience, New York.

Jelinek, Lawrence J.
1982 *Harvest Empire: A History of California Agriculture.* 2nd ed. Boyd & Fraser Publishing Company, San Francisco, California.

Jepson, Willis L.
1925 *A Manual of the Flowering Plants of California*. University of California Press, Berkeley and Los Angeles, California.

Kirkland, Jerry
2010 *School District Origins in Kern County California.* Kern County Superintendent of Schools. Bakersfield, California.

Kroeber, Alfred L.
1925 *Handbook of the Indians of California*. California Book Company Limited, Berkeley, California.

1939 *Cultural and Natural Areas of Native North America*. University of California Publications in American Archaeology and Ethnology 38:1–240. Berkeley, California.

Latta, F. F.
1977 *Handbook of the Yokuts Indians.* Bear State Books, Santa Cruz, California.

McNab, W. Henry, and Peter E. Avers
1996 Ecological Subregions of the Unites States. U.S. Forest Service.

Mitchell, Annie R.
1974 *A Modern History of Tulare County.* Limited Editions of Visalia, Inc. Visalia, California.

Moratto, Michael J.
1984 *California Archaeology*. Academic Press, Orlando and London.

Munz, Phillip A.
1959 *A California Flora*. University of California Press, Berkeley, California.

Munz, Phillip, and David D. Keck
1973 A California Flora with Supplement. University of California Press, Berkley.

National Park Service.
1997 Electronic Reference: www.nps.gov/subjects/nationalregister/upload/NRB16A-Complete.pdf. Accessed October 12, 2023.

Nationwide Environmental Title Research, LLC
2020 Electronic Reference: www.historicaerials.com. Accessed October 12, 2023.

Oakeshott, Gordon B.
1971 *California's Changing Landscapes, A Guide to the Geology of the State.* McGraw-Hill, New York.

Olsen, W.H. and L.A. Payen.
1968 Archeology of the Little Panoche Reservoir, Fresno County, California.

Pisani, Donald.
1984 *From the Family Farm to Agribusiness: The Irrigation Crusade in California and the West, 1850-1931.* University of California Press, Berkley, California.

Pittman, Ruth

1995 *Roadside History of California*. Mountain Press, Missoula, Montana.

Powers, Stephen
1971 *The Yokuts Dance for the Dead*. In R.F. Heizer and M.A. Whipple, editors, pp. 513-519, *The California Indians: A Source Book* (second edition). Berkeley, University of California Press (original 1877).

1976 *Tribes of California*. Berkeley, University of California Press (original 1877)

Riddell, Francis A., and William H. Olsen
1969 *An Early Man Site in the San Joaquin Valley*. American Antiquity 34:121–130

State of California.
2021 Electronic Reference: https://leginfo.legislature.ca.gov/faces/home.xhtml. Accessed October 12, 2023.

United States Congress.
2016 Electronic Reference: https://ncshpo.org/resources/national-historic-preservation-act-of-1966/. Accessed October 12, 2023.

United States Department of the Interior
1997 *Guidelines for Completing National Register of Historic Places Forms: Part A How to Complete the National Register Registration Form.* National Park Service, National Register of Historic Places, Washington DC.

United States Department of Agriculture (USDA)
1981 *Soil Survey of Tulare County, California*. Soil Conservation Service and Forest Service. In cooperation with University of California Agricultural Experiment Station.

United States Geological Survey (USGS)
2021 *Visalia Quadrangle, California.* 1:24,000 scale. United States Geological Survey, Denver. Map on file, California Division of Mines and Geology Library, Sacramento.

Wagner, D.L.
2002 California Geomorphic Provinces. California Geological Survey Note 36.

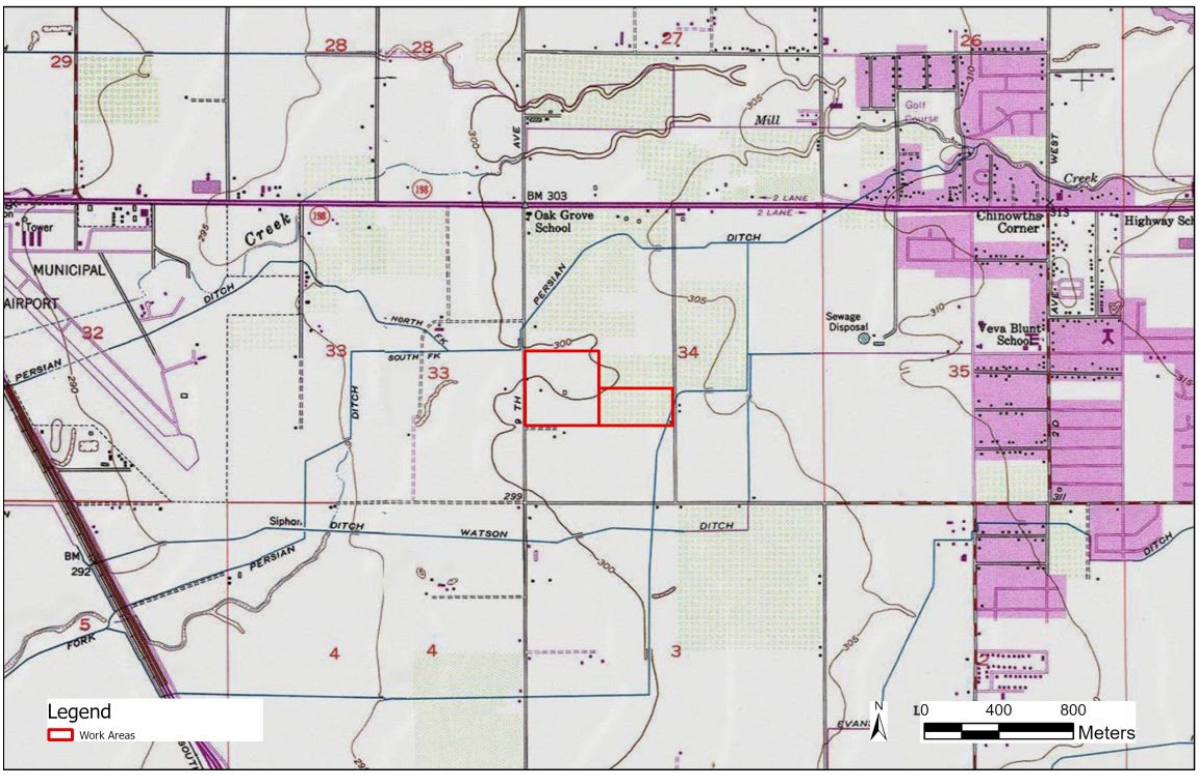
Wallace, William J.
1978 *Southern Valley Yokuts*. In *California*, edited by Robert F. Heizer, pp. 448–461. Handbook of North American Indians, vol. 8, William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Wedel, Waldo, R.
1941 *Archaeological Investigations at Buena Vista Lake, Kern County, California.* Bureau of American Ethnology Bulletin 130. Smithsonian Institution, Washington, D.C.

Whitley, D.S.
1992 *Shamanism and Rock Art in Far Western North America*. Cambridge Archaeological Journal 2(1):89-113.

2000 *The Art of the Shaman: Rock Art of California*. Salt Lake City: University of Utah Press.

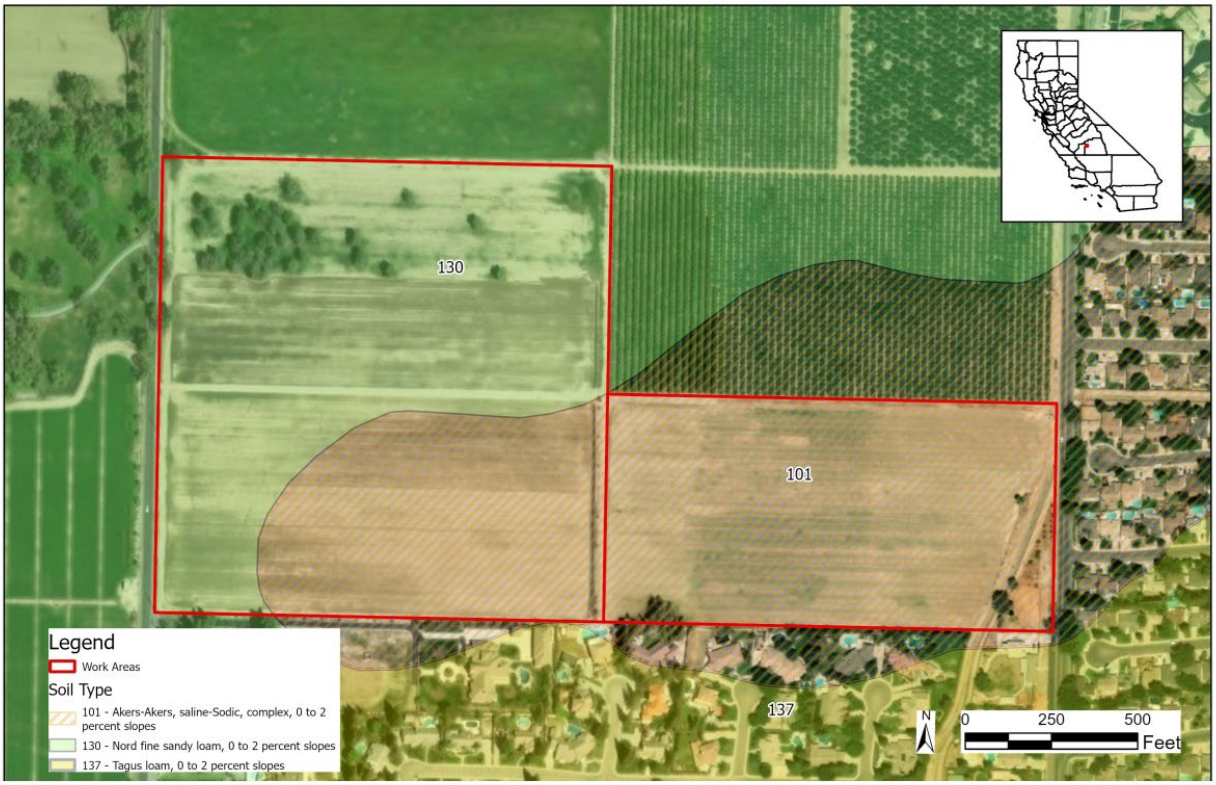
FIGURES



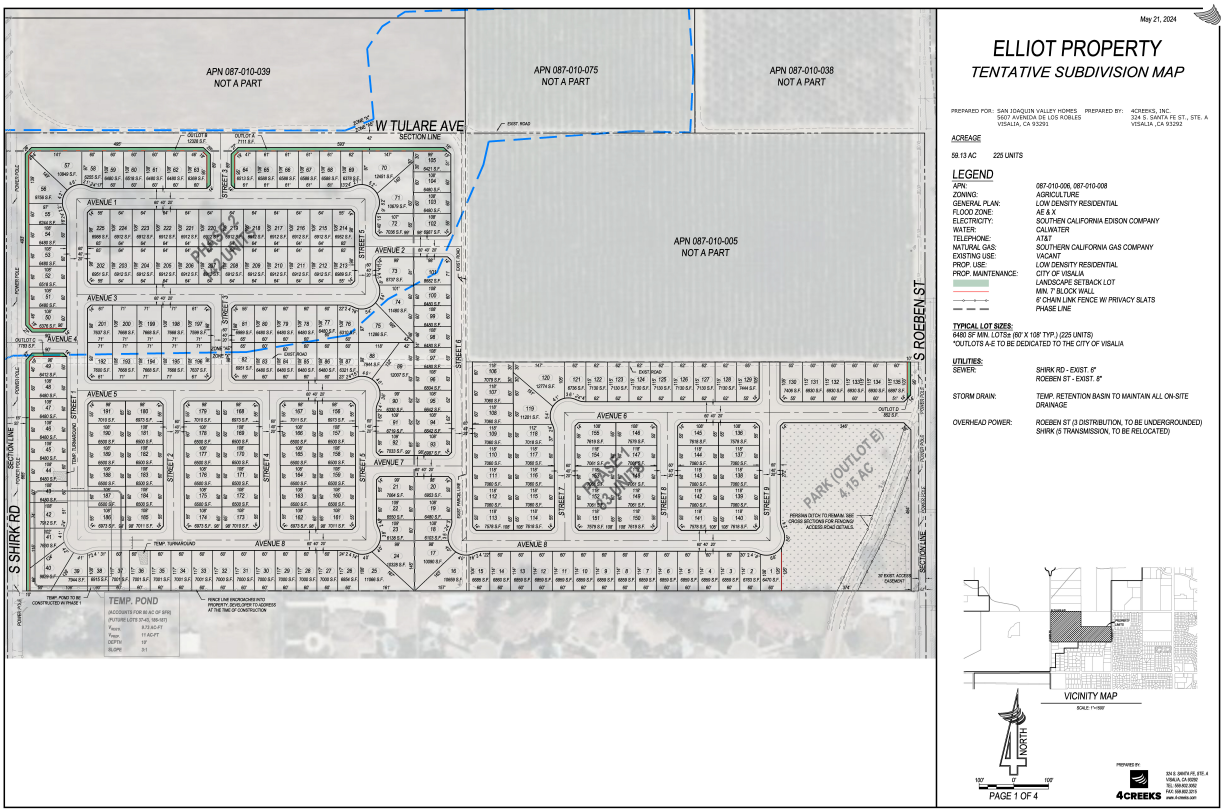
Phase 1 Cultural Resources Assessment Elliott SJVH, Visalia, CA 93277

Figure 1 - Project Location (adapted from USGS 7.5' Series Visalia, California, 1949

	Phase 1 Cultural Resources Assessment Elliot SJVH, Visalia, CA 93277	Figure 2 - Project Boundary



	Phase 1 Cultural Resources Assessment Elliot SJVH, Visalia, CA 93277	Figure 3 - Soil Types Occurring in the Project Area


APN 087-010-039
NOT A PART
APN 087-010-075
NOT A PART
APN 087-010-038
NOT A PART
APN 087-010-005
NOT A PART
W TULARE AVE
SECTION LINE
S SHIRK RD
S ROEBEN ST
PARK (OUTLOT E)
4.15 AC.
TEMP. POND
AVENUE 1
AVENUE 2
AVENUE 3
AVENUE 4
AVENUE 5
AVENUE 6
AVENUE 7
AVENUE 8
May 21, 2024
ELLIOT PROPERTY
TENTATIVE SUBDIVISION MAP
PREPARED FOR: SAN JOAQUIN VALLEY HOMES
5607 AVENIDA DE LOS ROBLES
VISALIA, CA 93291
PREPARED BY: 4CREEKS, INC.
324 S. SANTA FE ST., STE. A
VISALIA, CA 93292
ACREAGE
59.13 AC 225 UNITS
LEGEND
APN: 087-010-006, 087-010-008
ZONING: AGRICULTURE
GENERAL PLAN: LOW DENSITY RESIDENTIAL
FLOOD ZONE: AE & X
ELECTRICITY: SOUTHERN CALIFORNIA EDISON COMPANY
WATER: CALWATER
TELEPHONE: AT&T
NATURAL GAS: SOUTHERN CALIFORNIA GAS COMPANY
EXISTING USE: VACANT
PROP. USE: LOW DENSITY RESIDENTIAL
PROP. MAINTENANCE: CITY OF VISALIA
LANDSCAPE SETBACK LOT
MIN. 7' BLOCK WALL
6' CHAIN LINK FENCE W/ PRIVACY SLATS
PHASE LINE
TYPICAL LOT SIZES:
6480 SF MIN. LOTS± (60' X 108' TYP.) (225 UNITS)
*OUTLOTS A-E TO BE DEDICATED TO THE CITY OF VISALIA
UTILITIES:
SEWER: SHIRK RD - EXIST. 8"
ROEBEN ST - EXIST. 8"
STORM DRAIN: TEMP. RETENTION BASIN TO MAINTAIN ALL ON-SITE DRAINAGE
OVERHEAD POWER: ROEBEN ST (3 DISTRIBUTION, TO BE UNDERGROUNDED)
SHIRK (5 TRANSMISSION, TO BE RELOCATED)
VICINITY MAP
NORTH
PAGE 1 OF 4
4CREEKS

	Phase 1 Cultural Resources Assessment Elliot SJVH, Visalia, CA 93277	Figure 5 - Overview from north edge of project area, facing south

	Phase 1 Cultural Resources Assessment Elliot SJVH, Visalia, CA 93277	Figure 6 - Overview from northeast corner of project area, facing southwest

	Phase 1 Cultural Resources Assessment Elliot SJVH, Visalia, CA 93277	Figure 7 - Overview from center of project area, facing north

	Phase 1 Cultural Resources Assessment Elliot SJVH, Visalia, CA 93277	Figure 8 - Overview from center of project area, facing east

	Phase 1 Cultural Resources Assessment Elliot SJVH, Visalia, CA 93277	Figure 9 - Overview from center of project area, facing south

	Phase 1 Cultural Resources Assessment Elliot SJVH, Visalia, CA 93277	Figure 10 - Overview from center of project area, facing west

	Phase 1 Cultural Resources Assessment Elliot SJVH, Visalia, CA 93277	Figure 11 - Overview from southeast corner of project area, facing northwest

	Phase 1 Cultural Resources Assessment Elliot SJVH, Visalia, CA 93277	Figure 12 - Overview from south corner of project area, facing north

	Phase 1 Cultural Resources Assessment Elliot SJVH, Visalia, CA 93277	Figure 13 - Overview from southwest corner of project area, facing northeast

	Phase 1 Cultural Resources Assessment Elliot SJVH, Visalia, CA 93277	Figure 14 - Overview from west edge of project area, facing east

	Phase 1 Cultural Resources Assessment Elliot SJVH, Visalia, CA 93277	Figure 15 - Overview from northwest corner of project area, facing southeast

APPENDIX A

Southern San Joaquin Valley Information Center Records Search

Corporate Headquarters
1322 E. Shaw Avenue, Suite 400 Fresno, CA, 93710
www.soarhere.com • 559.547.8884

Cultural Resources Records Search Request

Tuesday, October 12, 2023

Southern San Joaquin Valley Information Center
California State University Bakersfield
Mail Stop: 72DOB
9001 Stockdale Highway
Bakersfield, CA 93311-1022
Tel: 661.654.2289
ssjvic@csub.edu

RE: Phase I CEQA Cultural Resource Evaluation Report for proposed housing development bounded by Shirk and Tulare roads and Roeben Street, Visalia, CA, 93277. APNs 087-010-006, 087-010-008.

Dear Celeste,

Please find attached one project location map and shapefiles for the proposed housing development bounded by Shirk and Tulare roads and Roeben Street Phase I Cultural Resource Assessment Report, and the SSJVIC/CHRIS Data Request Form. The proposed project is situated on the Visalia, California (2021), USGS 7.5' Series Quads. The 59.11-acre project area is located on APNs 087-010-006 and 087-010-008 and is bounded by Shirk and Tulare roads and Roeben Street in Visalia, California. The project is for a proposed 224-unit housing development with a center at approximately WGS 84 11 N 287779 E 4021822 N.

Please conduct a normal rate records search, including no more than a 0.50-mile radius buffer, of the project location illustrated on the attached map. Please provide the following information:

- PDF of all site records and associated survey reports (Note: PDF/photocopy only those site reports that appear to be pertinent to the immediate project location and search area; surveys and other site/resources can be listed, with full reports requested later if necessary).
- A list of all previous sites and surveys within the search area.
- A confirmation of any sites, structures, or linear features on local, state, and/or federal registers/lists in the project location or the 0.50-mile search area that are not yet mapped on the GIS.

If the normal records search costs will exceed $500.00, or if you have any questions or comments, please e-mail me at hfroshour@soarhere.com. Please contact me as soon as possible if there will be any delays with the records search, as the client may request an expedited search. Please email the encrypted search results in PDF format to: hfroshour@soarhere.com.

Many thanks in advance for your assistance with this project.

Most Sincerely,

Heather Froshour, M.A., R.P.A.
Sr. Archaeologist
Soar Environmental Consulting, Inc.
207.232.8912

California Historical Resources Information System

CHRIS Data Request Form

ACCESS AND USE AGREEMENT NO.: 515.00 **IC FILE NO.:** _____

To: Southern San Joaquin Valley Information Center

Print Name: Heather Froshour Date: 10/12/2023

Affiliation: Soar Environmental Consulting Inc.

Address: 1322 East Shaw Ave. Suite 400

City: Fresno State: CA Zip: 93710

Phone: (559) 547-8884 Fax: _____ Email: hfroshour@soarhere.com

Billing Address (if different than above): _____

Billing Email: cdavis@soarhere.com Billing Phone: _____

Project Name / Reference: Phase I Cultural Resources Assessment Report Elliot SJVH

Project Street Address: APNs 087-010-006 & 087-010-008; Shirk & Tulare Rds & Roeben St

County or Counties: Tulare

Township/Range/UTMs: T 18S, R 24E, S 34; WGS 84 11 N 287779 E 4021822 N

USGS 7.5' Quad(s): Visalia California (2022), USGS 7.5' Series Quad;

PRIORITY RESPONSE (Additional Fee): yes ☐ / no ■

TOTAL FEE NOT TO EXCEED: $ 500.00
(If blank, the Information Center will contact you if the fee is expected to exceed $1,000.00)

Special Instructions:

Information Center Use Only

Date of CHRIS Data Provided for this Request: _____

Confidential Data Included in Response: yes ☐ / no ☐

Notes: _____

CHRIS Data Request Form

Mark the request form as needed. Attach a PDF of your project area (with the radius if applicable) mapped on a 7.5' USGS topographic quadrangle to scale 1:24000 ratio 1:1 neither enlarged nor reduced and include a shapefile of your project area, if available. Shapefiles are the current CHRIS standard for submitting digital spatial data for your project area or radius. **Check with the appropriate IC for current availability of digital data products.**

- Documents will be provided in PDF format. Paper copies will only be provided if PDFs are not available at the time of the request or under specially arranged circumstances.
- Location information will be provided as a digital map product (Custom Maps or GIS data) unless the area has not yet been digitized. In such circumstances, the IC may provide hand drawn maps.
- In addition to the $150/hr. staff time fee, client will be charged the Custom Map fee when GIS is required to complete the request [e.g., a map printout or map image/PDF is requested and no GIS Data is requested, or an electronic product is requested (derived from GIS data) but no mapping is requested].

For product fees, see the CHRIS IC Fee Structure on the OHP website.

1. Map Format Choice:

Select One: Custom GIS Maps ☒ GIS Data ☐ Custom GIS Maps **and** GIS Data ☐ No Maps ☐

Any selection below left unmarked will be considered a "no. "

Location Information:

	Within project area	Within 0.5 mi. radius
ARCHAEOLOGICAL Resource Locations[1]	yes ☒ / no ☐	yes ☒ / no ☐
NON-ARCHAEOLOGICAL Resource Locations	yes ☒ / no ☐	yes ☒ / no ☐
Report Locations[1]	yes ☒ / no ☐	yes ☒ / no ☐
"Other" Report Locations[2]	yes ☐ / no ☒	yes ☐ / no ☒

3. Database Information:
(contact the IC for product examples, or visit the SSJVIC website for examples)

	Within project area	Within 0.5 mi. radius
ARCHAEOLOGICAL Resource Database[1]		
List (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Detail (PDF format)	yes ☐ / no ☒	yes ☐ / no ☒
Excel Spreadsheet	yes ☐ / no ☒	yes ☐ / no ☒
NON-ARCHAEOLOGICAL Resource Database		
List (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Detail (PDF format)	yes ☐ / no ☒	yes ☐ / no ☒
Excel Spreadsheet	yes ☐ / no ☒	yes ☐ / no ☒
Report Database[1]		
List (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Detail (PDF format)	yes ☐ / no ☒	yes ☐ / no ☒
Excel Spreadsheet	yes ☐ / no ☒	yes ☐ / no ☒
Include "Other" Reports [2]	yes ☒ / no ☐	yes ☒ / no ☐

4. Document PDFs (paper copy only upon request)**:**

	Within project area	Within 0.5 mi. radius
ARCHAEOLOGICAL Resource Records[1]	yes ☒ / no ☐	yes ☒ / no ☐
NON-ARCHAEOLOGICAL Resource Records	yes ☒ / no ☐	yes ☒ / no ☐
Reports[1]	yes ☒ / no ☐	yes ☒ / no ☐
"Other" Reports[2]	yes ☐ / no ☒	yes ☐ / no ☒

CHRIS Data Request Form

5. Eligibility Listings and Documentation:

	Within project area	Within 0.5 mi. radius
OHP Built Environment Resources Directory[3]:		
Directory listing only (Excel format)	yes ☒ / no ☐	yes ☒ / no ☐
Associated documentation[4]	yes ☒ / no ☐	yes ☒ / no ☐
OHP Archaeological Resources Directory[1,5]:		
Directory listing only (Excel format)	yes ☒ / no ☐	yes ☒ / no ☐
Associated documentation[4]	yes ☒ / no ☐	yes ☒ / no ☐
***California Inventory of Historic Resources* (1976):**		
Directory listing only (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Associated documentation[4]	yes ☒ / no ☐	yes ☒ / no ☐

6. Additional Information:

The following sources of information may be available through the Information Center. However, several of these sources are now available on the OHP website and can be accessed directly. The Office of Historic Preservation makes no guarantees about the availability, completeness, or accuracy of the information provided through these sources. Indicate below if the Information Center should review and provide documentation (if available) of any of the following sources as part of this request.

Caltrans Bridge Survey	yes ☒ / no ☐
Ethnographic Information	yes ☒ / no ☐
Historical Literature	yes ☒ / no ☐
Historical Maps	yes ☒ / no ☐
Local Inventories	yes ☒ / no ☐
GLO and/or Rancho Plat Maps	yes ☒ / no ☐
Shipwreck Inventory	yes ☐ / no ☒
Soil Survey Maps	yes ☒ / no ☐

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[1] In order to receive archaeological information, requestor must meet qualifications as specified in Section III of the current version of the California Historical Resources Information System Information Center Rules of Operation Manual and be identified as an Authorized User or Conditional User under an active CHRIS Access and Use Agreement.

[2] "Other" Reports GIS layer consists of report study areas for which the report content is almost entirely non-fieldwork related (e.g., local/regional history, or overview) and/or for which the presentation of the study area boundary may or may not add value to a record search.

[3] Provided as Excel spreadsheets with no cost for the rows; the only cost for this component is IC staff time. Includes, but not limited to, information regarding National Register of Historic Places, California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and historic building surveys. Previously known as the HRI and then as the HPD, it is now known as the Built Environment Resources Directory (BERD). The Office of Historic Preservation compiles this documentation and it is the source of the official status codes for evaluated resources.

[4] Associated documentation will vary by resource. Contact the IC for further details.

[5] Provided as Excel spreadsheets with no cost for the rows; the only cost for this component is IC staff time. Previously known as the Archaeological Determinations of Eligibility, now it is known as the Archaeological Resources Directory (ARD). The Office of Historic Preservation compiles this documentation and it is the source of the official status codes for evaluated resources.

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

10/23/2023

Heather Froshour
Soar Environmental Consulting
1322 East Shaw Ave., Suite 400
Fresno, CA 93710

Re: Phase I Cultural Resources Assessment Report Elliot SJVH
Records Search File No.: 23-439

The Southern San Joaquin Valley Information Center received your record search request for the project area referenced above, located on the Visalia USGS 7.5' quad. The following reflects the results of the records search for the project area and the 0.5 mile radius:

As indicated on the data request form, the locations of resources and reports are provided in the following format: ☒ custom GIS maps ☐ GIS data

Resources within project area:	P-54-002177
Resources within 0.5 mile radius:	P-54-003667, 003670
Reports within project area:	TU-00041, 01190
Reports within 0.5 mile radius:	TU-00246, 00247, 00960, 00962, 00963, 00964, 01006

Resource Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Resource Digital Database Records:	☐ enclosed	☒ not requested	☐ nothing listed
Report Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Report Digital Database Records:	☐ enclosed	☒ not requested	☐ nothing listed
Resource Record Copies:	☒ enclosed	☐ not requested	☐ nothing listed
Report Copies:	☒ enclosed	☐ not requested	☐ nothing listed
OHP Built Environment Resources Directory:	☒ enclosed	☐ not requested	☐ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	☒ nothing listed
CA Inventory of Historic Resources (1976):	☐ enclosed	☐ not requested	☒ nothing listed

Caltrans Bridge Survey: Not available at SSJVIC; please see https://dot.ca.gov/programs/environmental-analysis/cultural-studies/california-historical-bridges-tunnels

Ethnographic Information: Not available at SSJVIC

Historical Literature: Not available at SSJVIC

Historical Maps: Not available at SSJVIC; please see http://historicalmaps.arcgis.com/usgs/

Local Inventories: Not available at SSJVIC

GLO and/or Rancho Plat Maps: Not available at SSJVIC; please see http://www.glorecords.blm.gov/search/default.aspx#searchTabIndex=0&searchByTypeIndex=1 and/or http://www.oac.cdlib.org/view?docId=hb8489p15p;developer=local;style=oac4;doc.view=items

Shipwreck Inventory: Not available at SSJVIC; please see https://www.slc.ca.gov/shipwrecks/

Soil Survey Maps: Not available at SSJVIC; please see http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the 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.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Jeremy E David
Assistant Coordinator

Report List

SSJVIC Record Search 23-439

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
TU-00041	BLM - Permit No. CA-95-01-0004; NADB-R - 1141258	1995	Self, William	Class I Overview, Santa Fe Pacific Pipeline Partners, L.P., Proposed Concord to Colton Pipeline Project	William Self Associates	
TU-00246		1979	Cantwell, R.J.	Archaeological and Historical Survey Report for the Walnut Avenue Extension from Watson Ditch Near Shirk Road to the Termination of Road 86, Visalia, California	Individual Consultant	
TU-00247		1979	Cantwell, R.J.	Historic Property Survey Report for the Extension of Walnut Avenue, Road A288 and Road 86, Approximately Two and a Half Miles of New Road, from Watson Ditch to Southern Terminus of Akers Road	California Department of Transportation	
TU-00960	Caltrans - 06-TUL-198 PM 5.0/9.3 EA 06-200-278600	1989	Chavez, David	Historic Resources Evaluation Repot for a Proposed Freeway Project in Visalia	CH2M Hill / David Chavez & Associates	
TU-00962		1990	Chavez, David	Historic Property Survey Report for a Proposed Freeway Project in Visalia	CH2M Hill / David Chavez & Associates	
TU-00963	Caltrans - 06-TUL-198 PM 5.0/9.3 EA 06-200-278600	1989	Unknown	Archaeological Survey Report for a Proposed Freeway Project in Visalia	CH2M Hill / David Chavez & Associates	54-001368
TU-00964		1989	Chavez, David	Historic Architectural Survey Report for the State Route 198 Draft Environmental Impact Report	CH2M Hill	
TU-01006	Caltrans - 06-TUL-198 PM 4.6/11.9 EA 06-349201	1999	Binning, Jeanne and Chick, Phil	Negative Archaeological Survey Report to Perform Replacement Plantatin for Freeze Damage to landscaping Along Portions of State Route 198 In and Near Visalia	California Department of Transportation	
TU-01190		1957	Mitchell, Annie R.	Jim Savage and the Tulareño Indians	Westernlore Press	

Resource List

SSJVIC Record Search 23-439

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-54-002177	CA-TUL-003259H	Resource Name - South Fork Persian Ditch; Resource Name - SFPP-22; SFPP-23	Structure	Historic	HP20	1995 (Carrie D. Wills, Allen Estes, William Self Associates); 1995 (Carrie D. Wills, Allen Estes, William Self Associates); 2022 (Consuelo Y. Sauls, Taylored Archaeology)	TU-01937
P-54-003667		Resource Name - 400 Block of Roeben Road - Two Residences and Associated Outbuildings on Roeben Road	Building	Historic	HP02; HP04	1989 (Sally Woodbridge, David Chavez and Associates)	
P-54-003670		Resource Name - Cottonwood Court	Building	Historic	HP02	1989 (Sally Woodbridge, David Chavez and Associates)	

California Historical Resources Information System

Fresno
Kern
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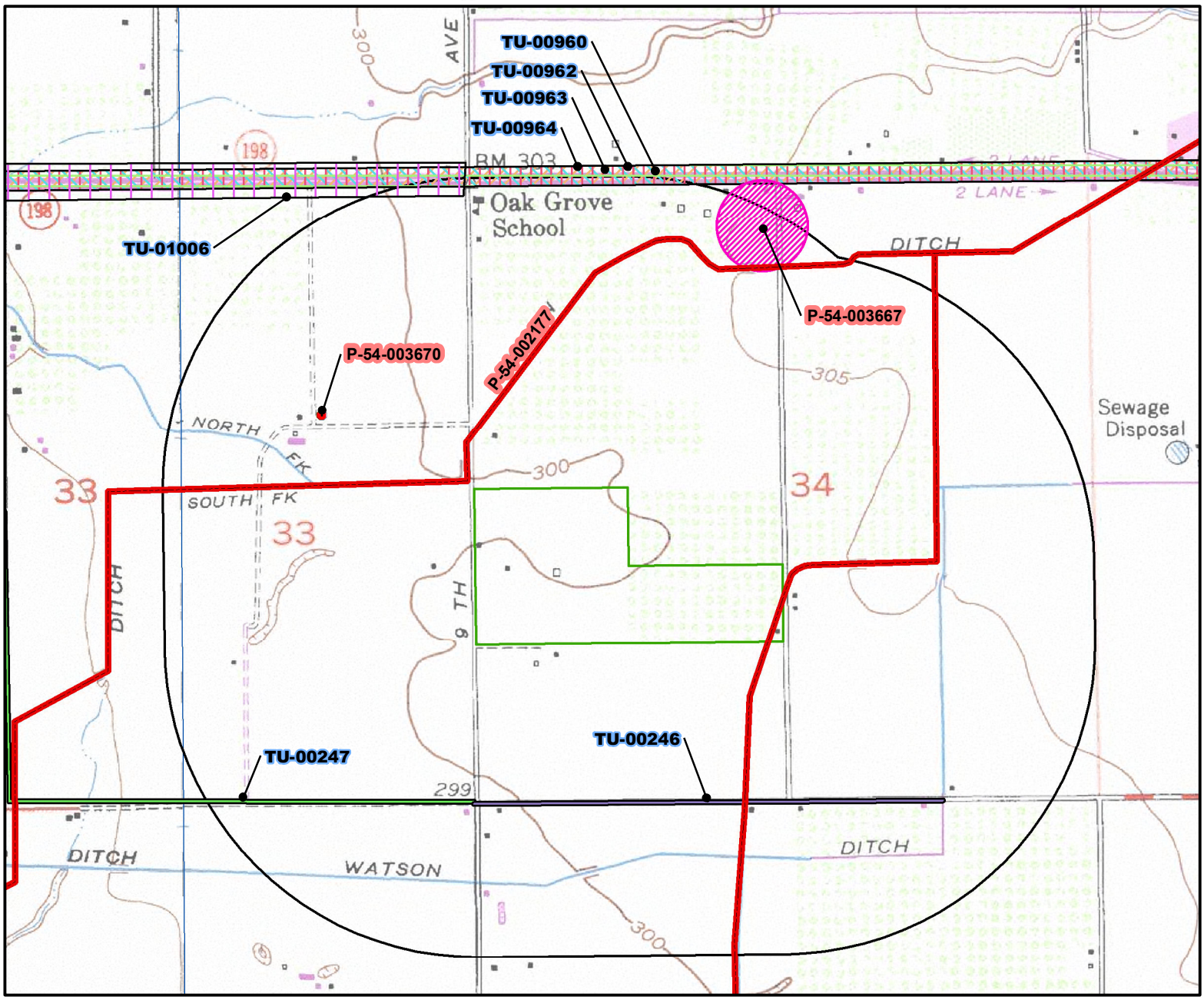
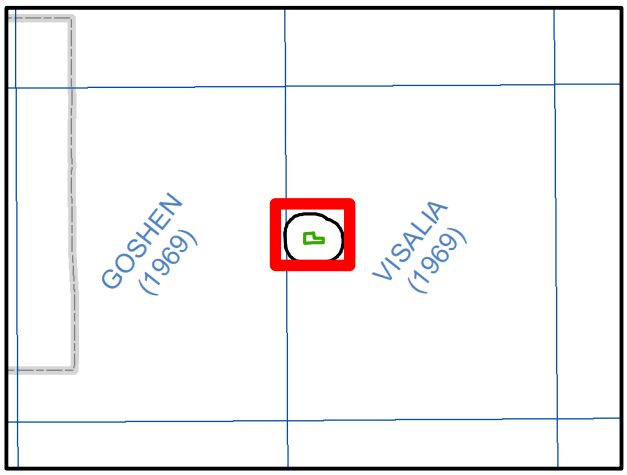
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic





May depict confidential cultural resource locations. Do not distribute.

Map pages depicting no data have been excluded.

Project Area

Record Search radius

N
W E
S

0 0.075 0.15 0.3 Miles

0 0.1 0.2 0.4 Kilometers

SSJV Information Center Record Search 23-439
Requester: Heather Froshour; Soar Environmental Consulting, Inc.
Project Name: Phase I Cultural Resource Assessment Report Elliot SJVH
USGS 7.5' Quad(s): Visalia
County: Tulare

APPENDIX B

Sacred Lands File & Native American Contacts List Request

Corporate Headquarters
1322 E. Shaw Avenue, Suite 400 Fresno, CA, 93710
www.soarhere.com • 559.547.8884

Sacred Lands File & Native American Contacts List Request

Thursday, October 12, 2023

Native American Heritage Commission
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Tel: 916.373.3710
Fax: 916.373.5471
nahc@nahc.ca.gov

RE: Phase I CEQA Cultural Resource Evaluation Report for proposed housing development bounded by Shirk and Tulare roads and Roeben Street, Visalia, CA, 93277. APNs 087-010-006, 087-010-008.

Dear Sir/Madam,

Please find attached one project location map for the proposed housing development bounded by Shirk and Tulare roads and Roeben Street Phase I Cultural Resource Assessment Report, and the Sacred Lands File & Native American Contacts List Request. The proposed project is situated on the Visalia, California (2021), USGS 7.5' Series Quads. The 59.11-acre project area is located on APNs 087-010-006 and 087-010-008 and is bounded by Shirk and Tulare roads and Roeben Street in Visalia, California. The project is for a proposed 224-unit housing development with a center at approximately WGS 84 11 N 287779 E 4021822 N.

This letter is intended to inform you of the project and to help ensure compliance with the National Environmental Protection Act (NEPA). As part of the Cultural Resources Study for the project, we are requesting your insights on potential Native American cultural properties and resources in and/or near the project.

Please respond at your earliest convenience if you have any information to consider for this study.

Also, we would greatly appreciate if you could review the attached map and indicate to us if there are any concerns you might have or input regarding potentially sensitive cultural heritage values in the project area and vicinity.

Feel free to contact me by email at hfroshour@soarhere.com or phone at 207.232.8912.

Most Sincerely,

Heather Froshour, M.A., R.P.A.
Sr. Archaeologist
Soar Environmental Consulting, Inc.
207.232.8912

Sacred Lands File & Native American Contacts List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Phase I Cultural Resources Assessment Report Elliot SJVH

County: Tulare

USGS Quadrangle Name: Visalia, California, Kern County, 7.5' Series

Township: 18S **Range:** 24E **Section(s):** 34

Company/Firm/Agency: Soar Environmental Consulting Inc.

Street Address: 1322 East Shaw Ave. Suite 400

City: Fresno **Zip:** 93710

Phone: (559)547-8884

Fax:

Email: hfroshour@soarhere.com

Project Description:

The 59.11-acre project area is located on APNs 087-010-006 and 087-010-008 and is bounded by Shirk and Tulare roads and Roeben Street in Visalia, California. The project is for a proposed 224-unit housing development with a center at approximately WGS 84 11 N 287779 E 4021822 N.

Local Government Tribal Consultation List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Type of List Requested

■ **CEQA Tribal Consultation List (AB 52)** – ***Per Public Resources Code § 21080.3.1, subs. (b), (d), (e) and 21080.3.2***

☐ **General Plan (SB 18)** - ***Per Government Code § 65352.3.***

Local Action Type:

☐ **General Plan** ☐ **General Plan Element** ☐ **General Plan Amendment**

☐ **Specific Plan** ☐ **Specific Plan Amendment** ☐ **Pre-planning Outreach Activity**

Required Information

Project Title: Phase I Cultural Resources Assessment Report Elliot SJVH

Local Government/Lead Agency: Soar Environmental Consulting Inc.

Contact Person: Heather Froshour

Street Address: 1322 East Shaw Ave. Suite 400

City: Fresno **Zip:** 93710

Phone: (559) 547-8884 **Fax:**

Email: hfroshour@soarhere.com

Specific Area Subject to Proposed Action

County: Tulare **City/Community:** Visalia

Project Description:

The 59.11-acre project area is located on APNs 087-010-006 and 087-010-008 and is bounded by Shirk and Tulare roads and Roeben Street in Visalia, California. The project is for a proposed 224-unit housing development with a center at approximately WGS 84 11 N 287779 E 4021822 N.

Additional Request

■ **Sacred Lands File Search** - ***Required Information:***

USGS Quadrangle Name(s): Visalia, California (2022) 7.5' Series Quad

Township: 18S **Range:** 24E **Section(s):** 34

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

December 1, 2023

Heather Froshour
Soar Environmental Consulting Inc.

Via Email to: hfroshour@soarhere.com

Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Phase I Cultural Resources Assessment Report Elliot SJVH Project, Tulare County

Dear Ms. Froshour:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

- Any report that may contain site forms, site significance, and suggested mitigation measures.

  All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was negative.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: Cameron.vela@nahc.ca.gov.

Sincerely,

Cameron Vela

Cameron Vela
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Tulare County
12/1/2023

County	Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Fax #	Email Address	Cultural Affiliation	Counties	Last Updated
Tulare	Santa Rosa Rancheria Tachi Yokut Tribe	F	Samantha McCarty, Cultural Specialist II	P.O. Box 8 Lemoore, CA, 93245	(559) 633-3440		smccarty@tachi-yokut-nsn.gov	Southern Valley Yokut	Fresno,Kern,Kings,Merced,Monterey,San Benito,San Luis Obispo,Tulare	10/3/2023
	Santa Rosa Rancheria Tachi Yokut Tribe	F	Shana Powers, THPO	P.O. Box 8 Lemoore, CA, 93245	(559) 423-3900		spowers@tachi-yokut-nsn.gov	Southern Valley Yokut	Fresno,Kern,Kings,Merced,Monterey,San Benito,San Luis Obispo,Tulare	10/3/2023
	Santa Rosa Rancheria Tachi Yokut Tribe	F	Nichole Escalon, Cultural Specialist I	P.O. Box 8 Lemoore, CA, 93245	(559) 924-1278		nescalone@tachi-yokut-nsn.gov	Southern Valley Yokut	Fresno,Kern,Kings,Merced,Monterey,San Benito,San Luis Obispo,Tulare	10/3/2023
	Tule River Indian Tribe	F	Neil Peyron, Chairperson	P.O. Box 589 Porterville, CA, 93258	(559) 781-4271	(559) 781-4610	neil.peyron@tulerivertribe-nsn.gov	Yokut	Alameda,Amador,Calaveras,Contra Costa,Fresno,Inyo,Kern,Kings,Madera,Mariposa,Merced,Monterey,Sacramento,San	
	Wuksachi Indian Tribe/Eshom Valley Band	N	Kenneth Woodrow, Chairperson	1179 Rock Haven Ct. Salinas, CA, 93906	(831) 443-9702		kwood8934@aol.com	Foothill Yokut Mono	Alameda,Calaveras,Contra Costa,Fresno,Inyo,Kings,Madera,Marin,Mariposa,Merced,Mono,Monterey,San Benito,San	6/19/2023

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Phase I Cultural Resources Assessment Report Elliot SJVH Project, Tulare County.

Record: PROJ-2023-005824
Report Type: AB52 GIS
Counties: Tulare
NAHC Group: All

Corporate Headquarters
1322 E. Shaw Avenue, Suite 400 Fresno, CA, 93710
www.soarhere.com • 559.547.8884

Monday, December 4, 2023

Santa Rosa Rancheria Tachi Yokut Tribe
P.O. Box 8
Lemoore, CA, 93245
Phone: (559) 924-1278
nescalone@tachi-yokut-nsn.gov

RE: Proposed housing subdivision bounded by Shirk and Tulare roads and Roeben Street, Visalia, CA, 93277. APNs 087-010-006, 087-010-008.

Dear Nichole Escalon, Cultural Specialist l,

Below, please find a description of the proposed project, a map showing the project location, and the name of our project point of contact, pursuant to Public Resources Code (PRC) § 21080.3.1 (d).

The proposed project is situated on the Visalia, California (2021), USGS 7.5' Series Quadrangle. The 59.13-acre project area is located on APNs 087-010-006 and 087-010-008 and is bounded by Shirk and Tulare Roads and Roeben Street in Visalia, California. The project is for a proposed 224-unit housing development with a center at approximately WGS 84 11 N 287779 E 4021822 N.

4Creeks, Inc. has requested a Phase 1 Archaeological Resource Assessment (Phase 1) to determine the potential for cultural resources prior to development, pursuant to state and local laws, including the California Environmental Quality Act (CEQA) and Tulare County guidelines. Soar Environmental Consulting Inc. (Soar Environmental) proposes to complete the Phase 1 study for the present project.

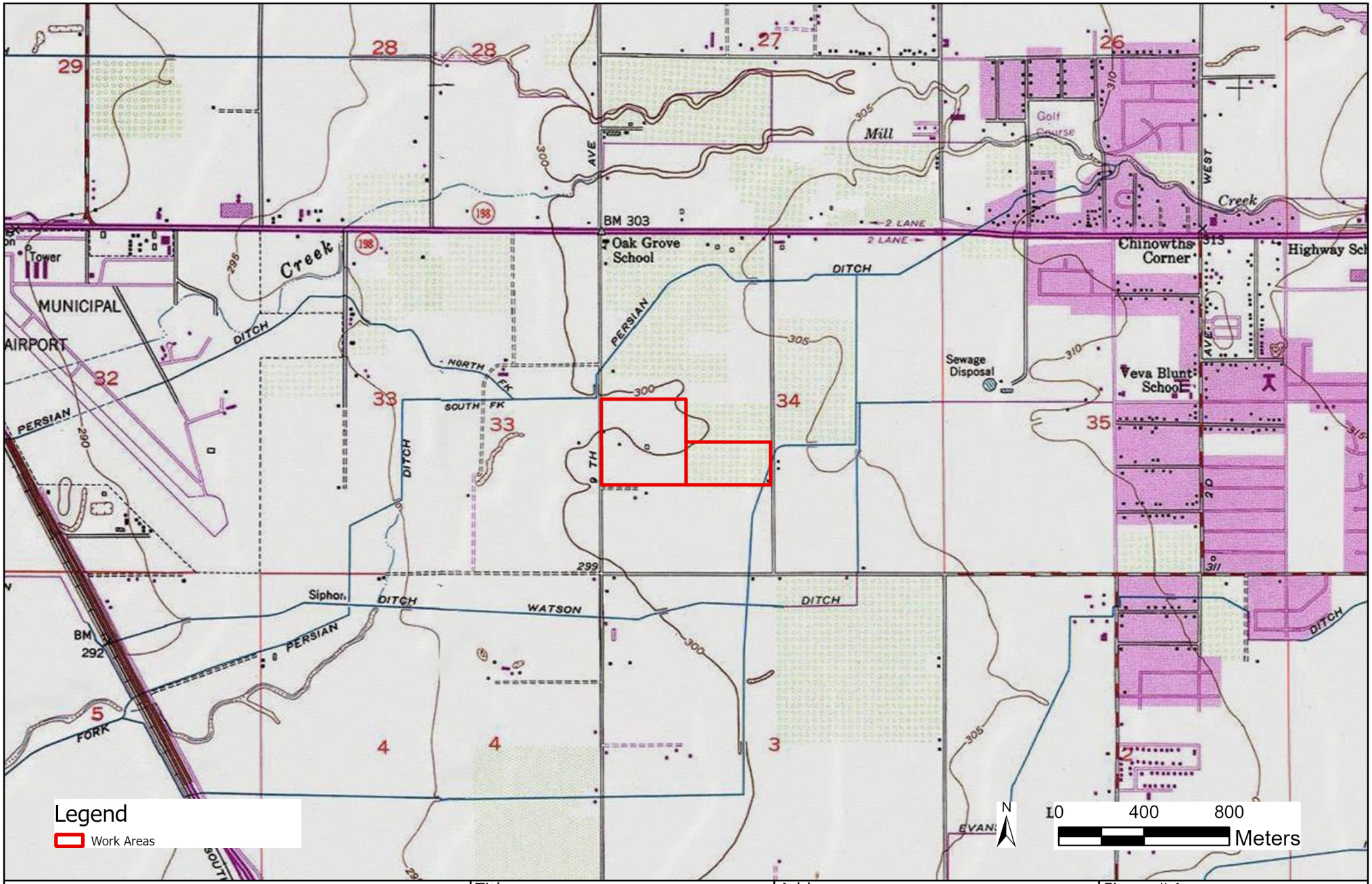
An important element of a Phase 1 study is to identify sites, resources, or locations of cultural importance to the local Native American community. As part of the process, Soar Environmental contacted the Native American Heritage Commission (NAHC) on October 13 2023. On December 1, 2023, Soar received a response letter from the NAHC indicating **negative results** of the Sacred Lands File search. Furthermore, the NAHC identified your organization as a point of contact regarding potentially known recorded sites or cultural resources within Tulare County.

Soar contacted the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System on October 13, 2023. On October 23, 2023, SSJVIC revealed one (1) historic cultural resource within the project area. No archaeological sites, three (3) potentially historic isolated finds, and one (1) historical resource are known within the project area. Two (2) previous surveys have been conducted within the project area. Two (2) historic cultural resources were identified within the ½-mile search radius of the project area. No historic properties on federal, state, or local inventories have been evaluated within the project area. Seven (7) previous surveys have been conducted within a ½-mile radius of the project area. On November 18, 2023, Soar conducted an archeological pedestrian field survey of the project area. **One (1) historic resource** was identified during the field survey, the South Fork Persian Ditch earthenware irrigation ditch.

Soar is contacting you to determine if you have any concerns regarding the proposed development. Pursuant to PRC § 21080.3.1 (d), you have **30 days** from the receipt of this letter to request consultation, in writing, with Soar. Should you have any concerns or knowledge of cultural resources in the specific project area, please contact me at hfroshour@soarhere.com or at (207) 232-8912 at your earliest convenience. If Soar does not hear from you within this time, we shall assume that you have no comments regarding this project.

Respectfully,

Heather Froshour, M.A., R.P.A.
Sr. Archaeologist
Soar Environmental Consulting, Inc.



1322 East Shaw Avenue, Suite 400 Fresno, CA 93710 www.soarhere.com 559.547.8884	Title Visalia Topographic Map	Address Subdivision Bounded by Shirk and Tulare roads and Roeben Street. APNs 087-010-006, 087-010-008.	Figure # 1 Topographic Map
	Client 4Creeks		Revision Date 10/13/2023

Corporate Headquarters
1322 E. Shaw Avenue, Suite 400 Fresno, CA, 93710
www.soarhere.com • 559.547.8884

Monday, December 4, 2023

Santa Rosa Rancheria Tachi Yokut Tribe
P.O. Box 8
Lemoore, CA, 93245
Phone: (559) 633-3440
smccarty@tachi-yokut-nsn.gov

RE: Proposed housing subdivision bounded by Shirk and Tulare roads and Roeben Street, Visalia, CA, 93277. APNs 087-010-006, 087-010-008.

Dear Samantha McCarty, Cultural Specialist ll,

Below, please find a description of the proposed project, a map showing the project location, and the name of our project point of contact, pursuant to Public Resources Code (PRC) § 21080.3.1 (d).

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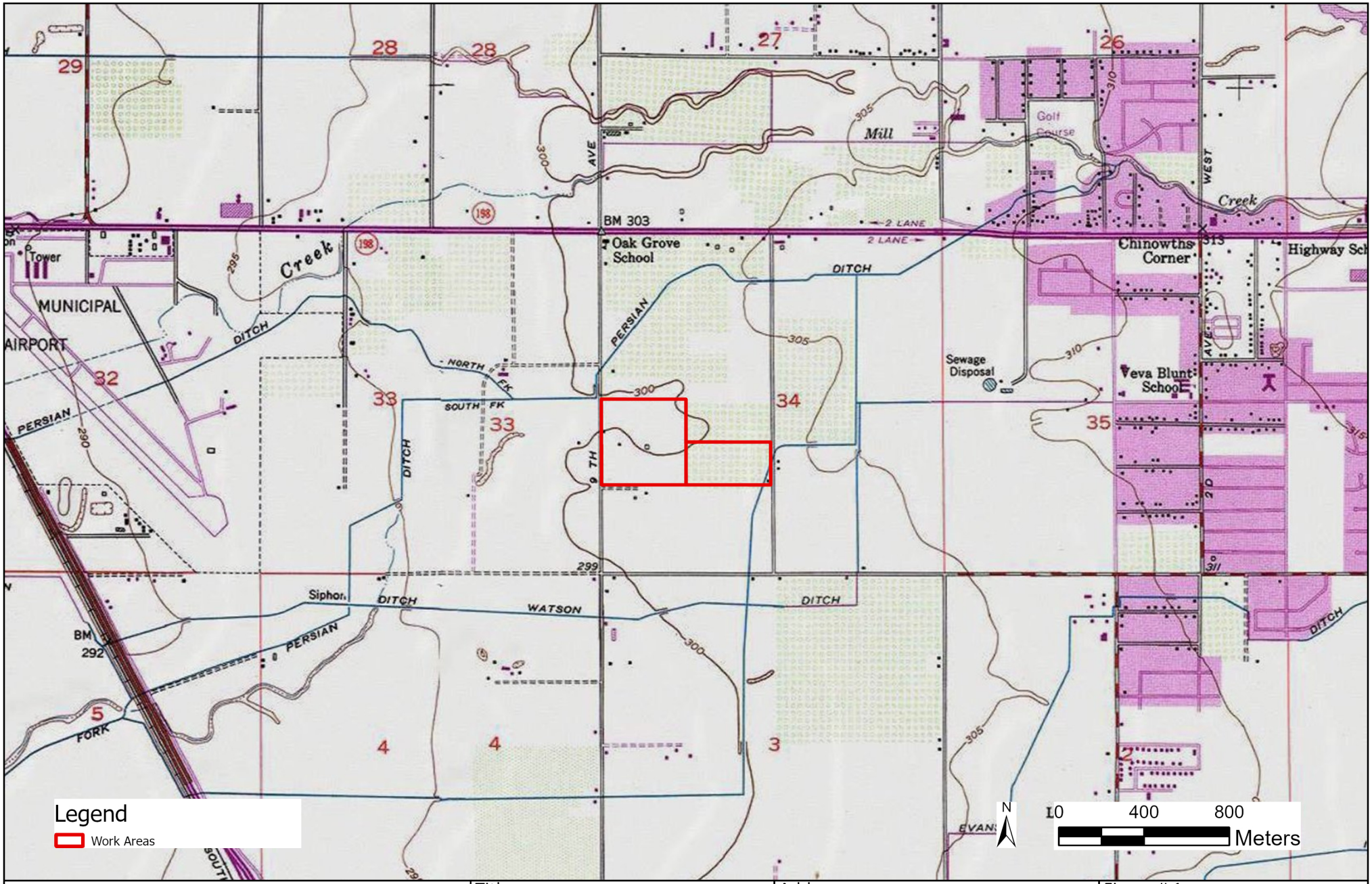
Respectfully,

Heather Froshour, M.A., R.P.A.
Sr. Archaeologist
Soar Environmental Consulting, Inc.



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Corporate Headquarters
1322 E. Shaw Avenue, Suite 400 Fresno, CA, 93710
www.soarhere.com • 559.547.8884

Monday, December 4, 2023

Santa Rosa Rancheria Tachi Yokut Tribe
P.O. Box 8
Lemoore, CA, 93245
Phone: (559) 423-3900
spowers@tachi-yokut-nsn.gov

RE: Proposed housing subdivision bounded by Shirk and Tulare roads and Roeben Street, Visalia, CA, 93277. APNs 087-010-006, 087-010-008.

Dear Shana Powers, THPO,

Below, please find a description of the proposed project, a map showing the project location, and the name of our project point of contact, pursuant to Public Resources Code (PRC) § 21080.3.1 (d).

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Soar contacted the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System on October 13, 2023. On October 23, 2023, SSJVIC revealed one (1) historic cultural resource within the project area. No archaeological sites, three (3) potentially historic isolated finds, and one (1) historical resource are known within the project area. Two (2) previous surveys have been conducted within the project area. Two (2) historic cultural resources were identified within the ½-mile search radius of the project area. No historic properties on federal, state, or local inventories have been evaluated within the project area. Seven (7) previous surveys have been conducted within a ½-mile radius of the project area. On November 18, 2023, Soar conducted an archeological pedestrian field survey of the project area. **One (1) historic resource** was identified during the field survey, the South Fork Persian Ditch earthenware irrigation ditch.

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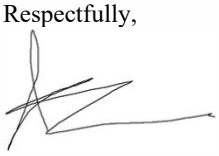
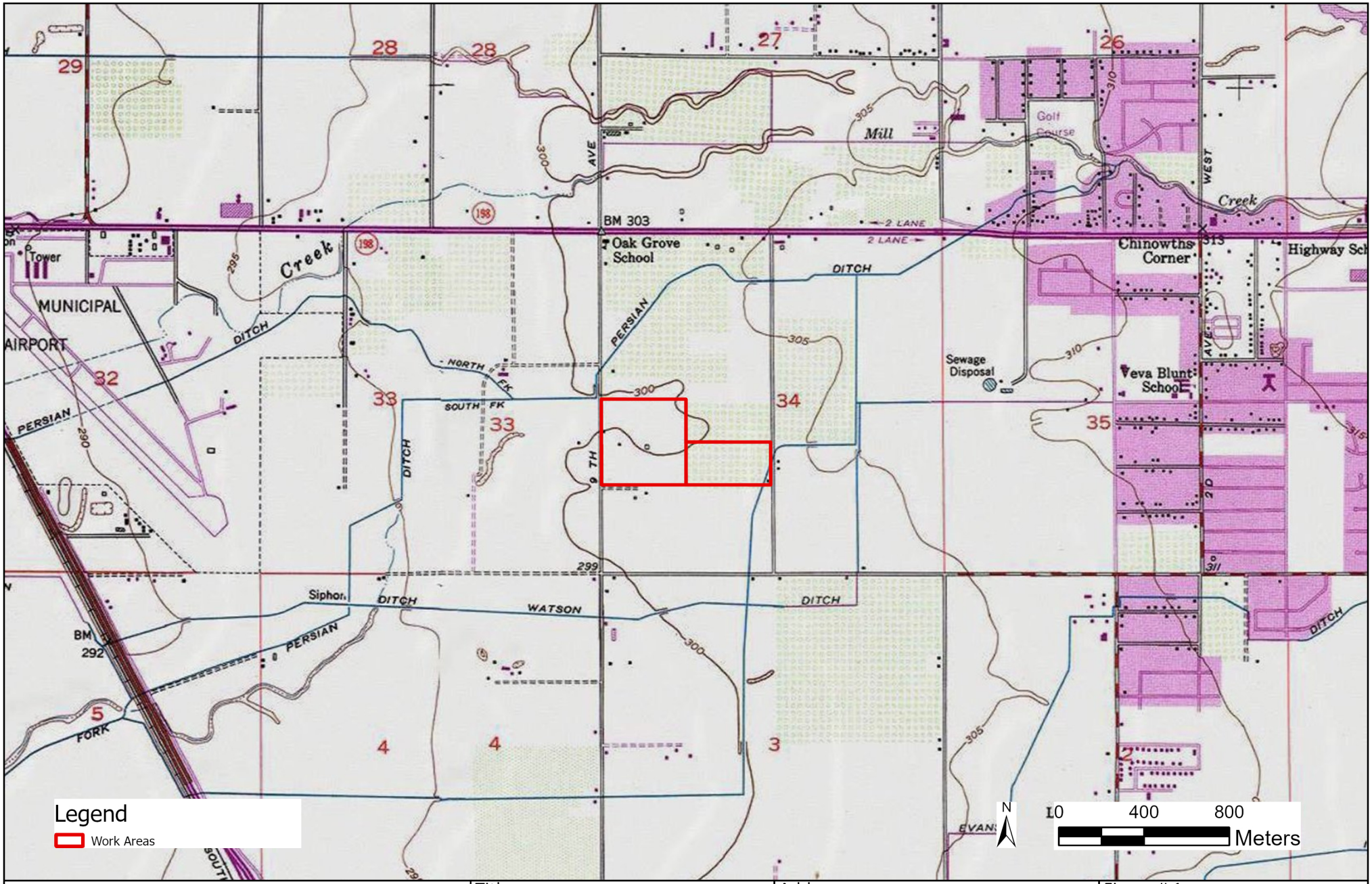
Respectfully,



Heather Froshour, M.A., R.P.A.
Sr. Archaeologist
Soar Environmental Consulting, Inc.



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Corporate Headquarters
1322 E. Shaw Avenue, Suite 400 Fresno, CA, 93710
www.soarhere.com • 559.547.8884

Monday, December 4, 2023

Tule River Indian Tribe
P.O. Box 589
Porterville, CA, 93258
Phone: (559) 781-4271
neil.peyron@tulerivertribe-nsn.gov

RE: Proposed housing subdivision bounded by Shirk and Tulare roads and Roeben Street, Visalia, CA, 93277. APNs 087-010-006, 087-010-008.

Dear Neil Peyron, Chairperson,

Below, please find a description of the proposed project, a map showing the project location, and the name of our project point of contact, pursuant to Public Resources Code (PRC) § 21080.3.1 (d).

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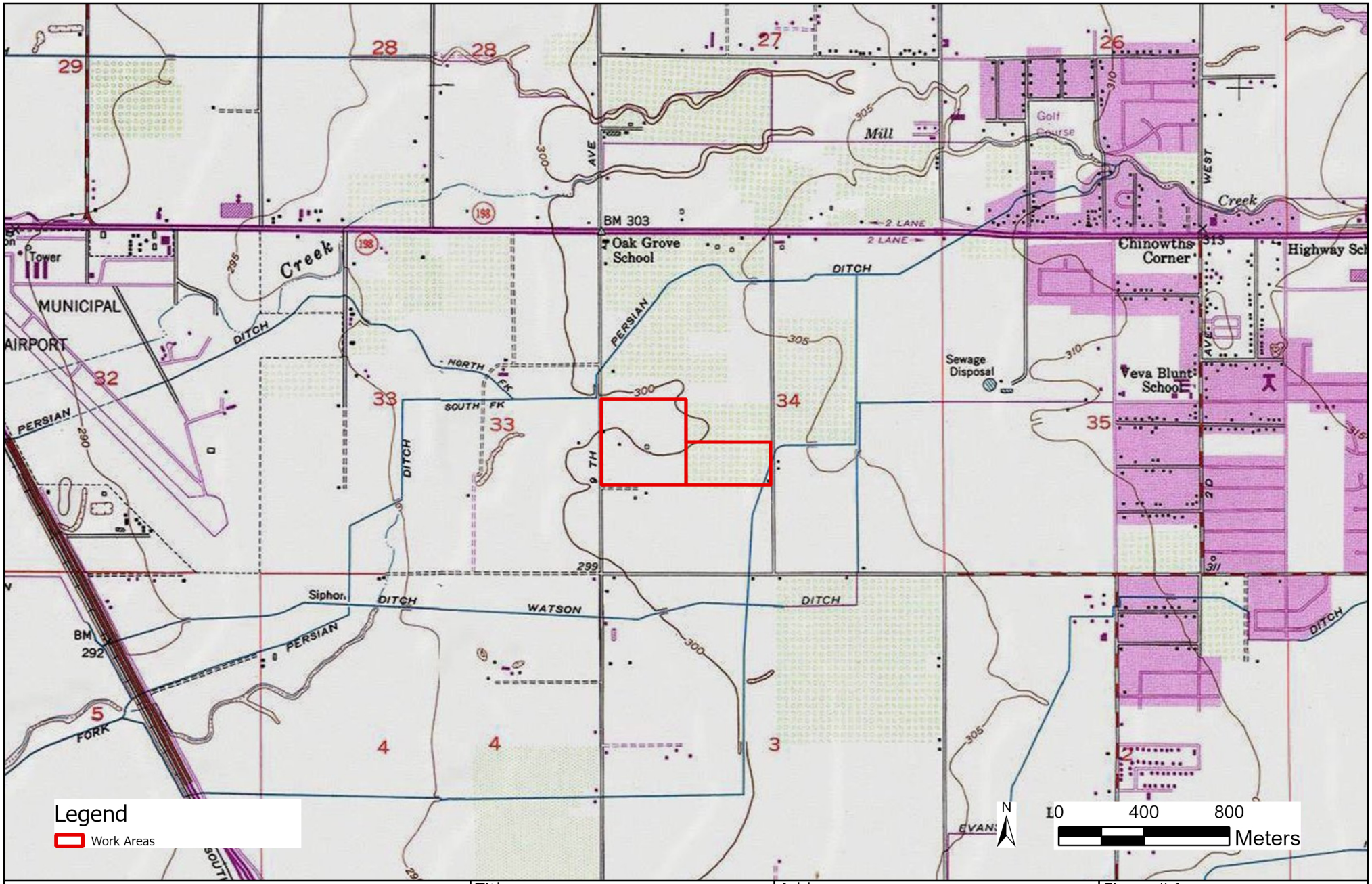
Sr. Archaeologist
Soar Environmental Consulting, Inc.



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	Client 4Creeks		Revision Date 10/13/2023

Corporate Headquarters
1322 E. Shaw Avenue, Suite 400 Fresno, CA, 93710
www.soarhere.com • 559.547.8884

Monday, December 4, 2023

Wuksachi Indian Tribe/Eshom Valley Band
1179 Rock Haven Ct.
Salinas, CA, 93906
Phone: (831) 443-9702
kwood8934@aol.com

RE: Proposed housing subdivision bounded by Shirk and Tulare roads and Roeben Street, Visalia, CA, 93277. APNs 087-010-006, 087-010-008.

Dear Kenneth Woodrow, Chairperson,

Below, please find a description of the proposed project, a map showing the project location, and the name of our project point of contact, pursuant to Public Resources Code (PRC) § 21080.3.1 (d).

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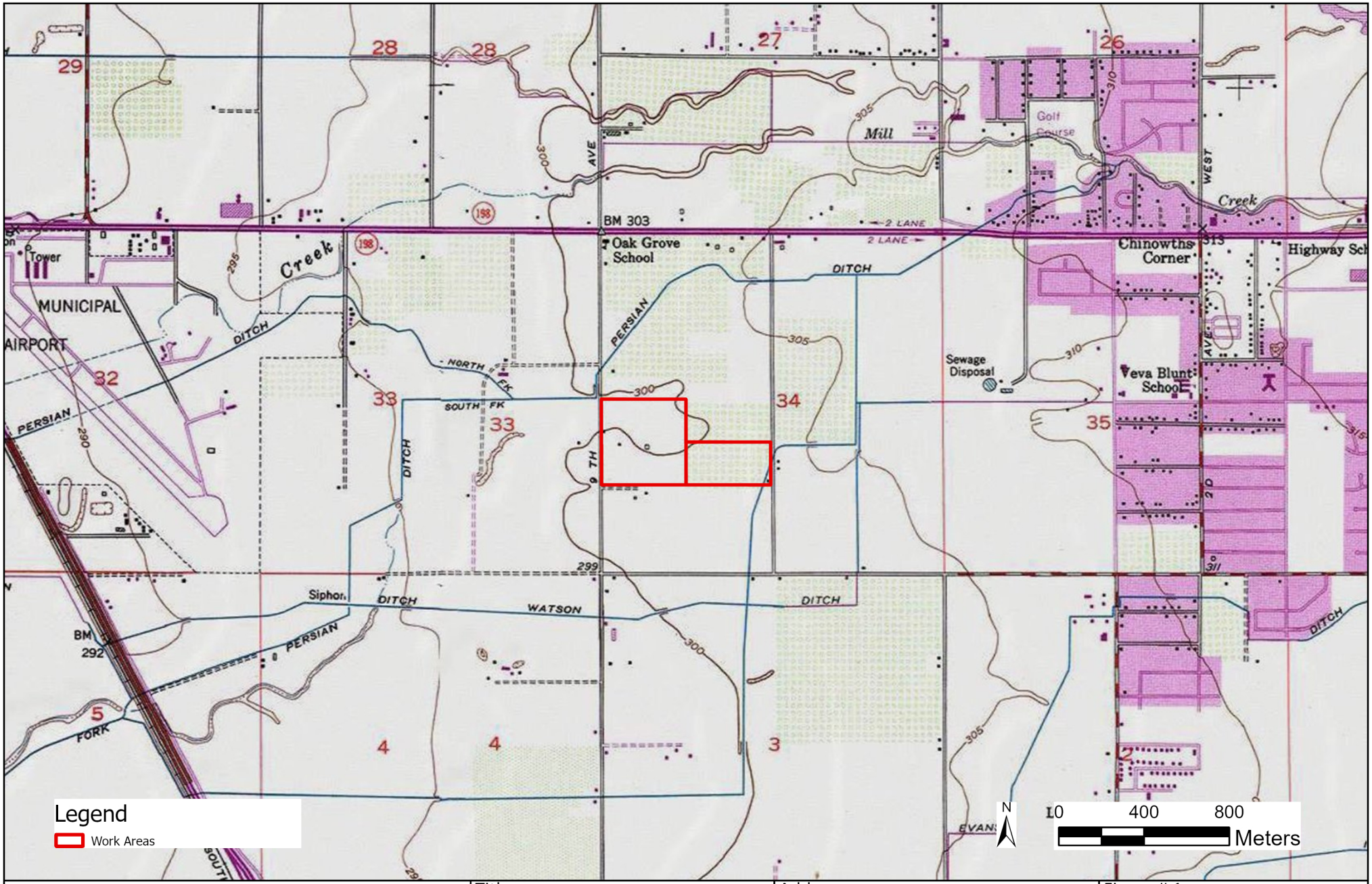
Heather Froshour, M.A., R.P.A.
Sr. Archaeologist
Soar Environmental Consulting, Inc.



1322 East Shaw Avenue, Suite 400 Fresno, CA 93710 www.soarhere.com 559.547.8884	Title Visalia Topographic Map	Address Subdivision Bounded by Shirk and Tulare roads and Roeben Street. APNs 087-010-006, 087-010-008.	Figure # 1 Topographic Map
	Client 4Creeks		Revision Date 10/13/2023

APPENDIX C

Feature and Isolate Forms

State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-54-002177
HRI #
Trinomial CA-TUL-003259H
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 4 ***Resource Name or #:** (Assigned by recorder) South Fork Persian Ditch
P1. Other Identifier: SFPP-23
***P2. Location:** ☐ **Not for Publication** X **Unrestricted**
***a. County** Tulare **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Visalia **Date** 2021 **T** 19S ; **R** 24E ; SW ¼ **of** NE ¼ **of** SE ¼ **of Sec** 5 ; MD **B.M.**
c. Address 1537 S Roeben St City Visalia Zip 93277
d. UTM: (Give more than one for large and/or linear resources) Zone 11 , 288237 mE/ 4021635 mN
e. **Other Locational Data:** From Selma travel south on Highway 99, 2.4 miles past Exit 198. Site is west of Highway 99 and the railroad tracks and is visible from the road.

***P3a. Description:**
Earthen irrigation canal associated with agricultural activities in the City of Visalia. The canal flows in a northeast to southwest direction until it reaches the concrete headgate at S Roeben St, from that point it passes under S Roeben ST. and turns 90° to continue north. Once past W Howard Court the canal shifts to an east to west alignment before then turning north at W Tulare Ave to connect to the main Persian Ditch. Approximately 20' west of the railroad is a concrete culvert stamped with "1940". Resources are in good condition.

***P3b. Resource Attributes:** (List attributes and codes) HP20 Canal/Aqueduct

***P4. Resources Present:** ☐ Building X Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photograph or Drawing

P5b. Description of Photo: (view, date, accession #) 43° NE @ 288185 mE / 4021621 mN

***P6. Date Constructed/Age and Source:** X Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
Persian Ditch Company
15370 Avenue 256
Visalia, CA 93292

***P8. Recorded by:** (Name, affiliation, and address) Heather Froshour
SOAR Environmental Consulting Inc
1322 E. Shaw Ave., Suite 400
Fresno, CA 93710

***P9. Date Recorded:**
11/18/2023

***P10. Survey Type:** (Describe)
Intensive Survey

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Froshour, Heather
2023 Phase I Cultural Resources Assessment Elliot Housing Subdivision Project, Visalia, CA 93277, Assessor Parcel Numbers 087-010-006, and 087-010-008 Tulare, County, California

***Attachments:** ☐NONE X Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record X Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

L1. Historic and/or Common Name: South Fork Persian Ditch
L2a. Portion Described: □ Entire Resource X Segment □ Point Observation **Designation:**
b. Location of point or segment: WGS 84 **Zone:** 11N; **UTM:** 288255 mE / 4021770 mN (N end)
288182 mE / 4021627 mN (S end)

L3. Description:
The recorded segment measures approximately 518 feet long by 15 feet wide by 4 feet deep and is situated at an elevation range between 305 feet and 306 feet above sea level. During the current investigation, ASM investigated only that portion of the linear resource within the Project area, which runs in an east-west direction for approximately 0.75 mi. The ditch is earthen in construction and has contemporary irrigation features associated with it (i.e., concrete culverts, corrugated sheet metal culverts, sluice gates).

L4. Dimensions:
a. Top Width: approx. 15 feet
b. Bottom Width: approx. 5 feet
c. Height or Depth: approx. 4 feet
d. Length of Segment: approx. 518 feet

L4e. Sketch of Cross-Section: None

L5. Associated Resources: Unknown

L6. Setting: The resource is in a suburban/rural setting on the west edge of the city of Visalia with orchards to the north, residential neighborhoods to the east and south, and corn fields to the west.

L7. Integrity Considerations:

Period of Significance
The ditch was constructed between 1854 and 1856 by farmers and other water users holding stock in what is now the Persian Ditch Company, created in ca. 1936, to transport water from Mill Creek for irrigation purposes. If eligible, the South Fork Persian Ditch would have a period of significance from approximately 1854 to present. This date range is based on historic maps of the City of Visalia and Tulare County.

Significance
South Fork Persian Ditch is potentially significant under **Criterion A.** The ditch is a mostly unlined earthenware irrigation ditch used by the city of Visalia. The ditch does not represent a unique association with agricultural activities at the local, state, or national levels. The ditch is associated with events that have made a significant contribution to the broad patterns of our history as part of the earliest irrigation ditch systems in Visalia. South Fork Persian Ditch is not significant under **Criterion B**. because the ditch is not associated with the lives of significant persons in our past. The design and construction, as well as modifications, were not by any one individual or individuals in the city of Visalia with particular significance at the local, state, or national levels. South Fork Persian Ditch is not significant under **Criterion C**. because the use of the earth in the construction of irrigation ditches has been common for over 150 years in the region and has been used since the planting of agricultural fields in Visalia. The ditch does not embody the distinctive characteristics of a type, period, or method of construction, nor does it represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction. The ditch is constructed of common materials and has been repaired and modified using typical methods and technologies. South Fork Persian Ditch is not significant under **Criterion D**. because the ditch is not a significant or likely source of important information about the construction of irrigation ditches, agricultural fields, or the materials or technologies employed in their construction and operation.

Integrity
The South Fork Persian Ditch is potential significant under Criterion A and not significant under Criteria B-D. The ditch, however, have experienced changes in its alignment, alterations to its immediate and landscape surroundings (including suburbanization along certain of their segments and the construction of modern bridge crossings), and the replacement of its original water control features with modern equipment (such as concrete culverts and metal gates). The ditch therefore lacks integrity of original location, setting, design, materials and feeling and it cannot convey its historical association and is therefore not eligible for the NRHP. Integrity of location design, materials, and workmanship, setting, feeling, and association is relatively low within the period of significance.

State of California □ Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LINEAR FEATURE RECORD

Primary# P-54-002177
HRI #
Trinomial CA-TUL-003259H

Resource Name or #: South Fork Persian Ditch

L8a. Photograph, Map or Drawing

L8b. Description of Photo, Map, or Drawing: South Fork Persian Ditch, north portion of recorded segment with modern concrete culvert, facing northeast

L9. Remarks: None

L10. Form Prepared by:
Heather Froshour
SOAR Environmental Consulting Inc
1322 E. Shaw Ave., Suite 400
Fresno, CA 93710

L11. Date: 11/18/2023

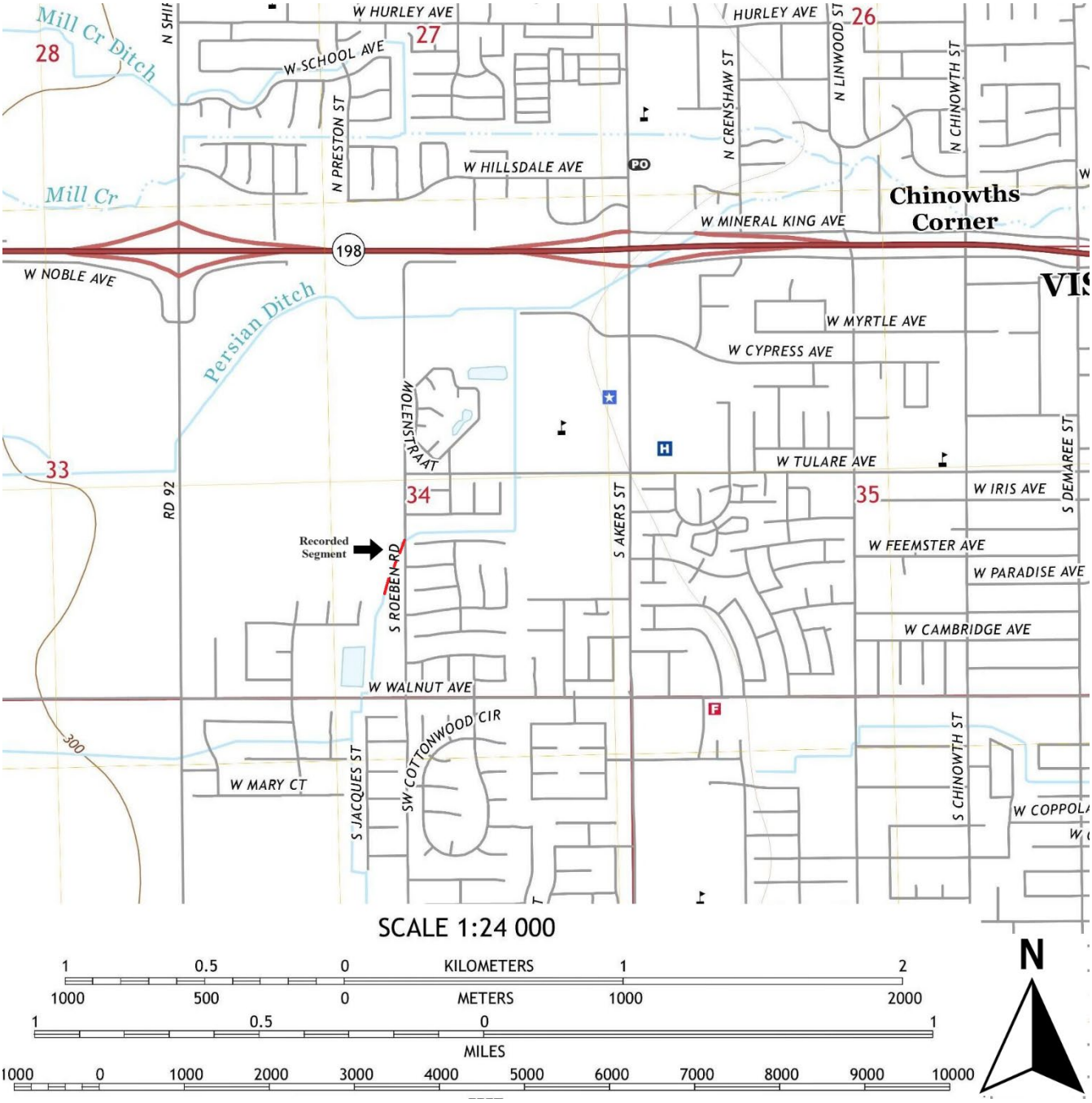
State of California □ Natural Resources Agency Primary #
DEPARTMENT OF PARKS AND RECREATION HRI#

LOCATION MAP

Trinomial

Page 4 of 4 ***Resource Name or #**_South Fork Persian Ditch

***Map Name:** USGS Topographic quadrangle Visalia ***Scale:** 1:24,000 ***Date of map:** 2021



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-54-002177
HRI #
Trinomial CA-TUL-003259H
NRHP Status Code

Other Listings
Review Code | Reviewer | Date

*Resource Name or #: South Fork Persian Ditch

P1. Other Identifier:

*P2. Location:
a. County: Tulare ☐ Not for Publication ☒ Unrestricted
b. USGS 7.5' Quad: Visalia, CA Date: 1949 (1969) T 19S; R 24E; Sec 3 M.D. B.M.
c. Address: N/A
d. UTM WGS 84 Zone: 11N; Head: 288049 mE/ 4020604 mN
Terminus: 285181 mE/ 4020647 mN
e. Other Locational Data: Assessor Parcel Number 119-022-041

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

South Fork Persian Ditch is a mostly unlined earthen irrigation ditch, V-shape with steep side earthen berms to either side, and concrete lined when the ditch orientation turns 90 degrees. The ditch branches off from Watson Ditch and flows south and west for approximately 2.5 miles before terminating at the Persian Ditch. The ditch is located in a predominately agricultural setting, though the start of the ditch is located within a single-family residential neighborhood. The ditch is consistently maintained and is still currently for agricultural irrigation. The South Fork Persian Ditch is first visible on Thompson's 1892 map and 1927 USGS topographic map.

*P3b. Resource Attributes: HP20 Canal/Aqueduct

*P4. Resources Present: ☐Building ☒ Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing:

P5b. Description of Photo: South Fork Persian Ditch, facing south

*P6. Date Constructed/Age and Sources: ☒Historic ☐Prehistoric ☐Both

*P7. Owner and Address:
Persian Ditch Company
15370 Avenue 256
Visalia, CA 93292

*P8. Recorded by:
Consuelo Y. Sauls
Taylored Archaeology
6083 N. Figarden Dr., Ste. 616
Fresno, CA 93722

*P9. Date Recorded: 7/9/2022

*P10. Survey Type: Intensive Survey

*P11. Report Citation:
Sauls, Consuelo Y.
2022 *Cultural Resource Assessment for Barr and Wood Tentative Subdivision Map Project, Tulare County* Taylored Archaeology, Fresno, California. Prepared for 4Creeks, Inc. Visalia, California.

*Attachments: ☐NONE ☒Location Map ☐Sketch Map ☐Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☒Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LINEAR FEATURE RECORD

Primary # P-54-002177
HRI #
Trinomial CA-TUL-003259H

 Resource Name or #: South Fork Persian Ditch

L1. Historic and/or Common Name: South Fork Persian Ditch
L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation **Designation:**
b. Location of point or segment: WGS 84 **Zone:** 11N; **UTM:** 288096 mE/ 4020414 mN (S end)
288047 mE/ 4020604 mN (N end)

L3. Description: This recorded segment of the South Fork Persian Ditch measures approximately 770 linear feet and is an unlined V-shared earthen irrigation ditch with earthen berms to either side. The north end of this recorded segment runs west to east before turning 90 degrees to the south and terminating at an unnamed earthern bridge over the ditch. Two 90 degree turns at the northern end of this recorded segment are concrete-lined at the turns to prevent erosion and scouring.

L4. Dimensions:

a. Top Width: approx. 15 feet
b. Bottom Width: approx. 5 feet
c. Height or Depth: approx. 4 feet
d. Length of Segment: approx. 770 feet

L4e. Sketch of Cross-Section: None

L5. Associated Resources: Unknown

L6. Setting: The resource is in a rural setting surrounded by wheat fields to the east and west, and single family residences to the north.

L7. Integrity Considerations: This recorded segment of the South Fork Persian Ditch has been twice modified from its original northeast to southwest alignment: first it was modified to a north to south alignment between 1937 and 1946 (Lodge 2020; USAAA 1946) and second, the northern-most portion of the ditch was modified to a west to east alignment between 2003 and 2004 (Google Earth (2022).

L8a. Photograph, Map or Drawing

L8b. Description of Photo, Map, or Drawing South Fork Persian Ditch, northern portion of recorded segment, facing east.

L9. Remarks:

L10. Form Prepared by:
Consuelo Sauls
Taylored Archaeology
6083 N. Figarden Dr., Ste. 616
Fresno, CA 93722

L11. Date: 7/9/2022

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

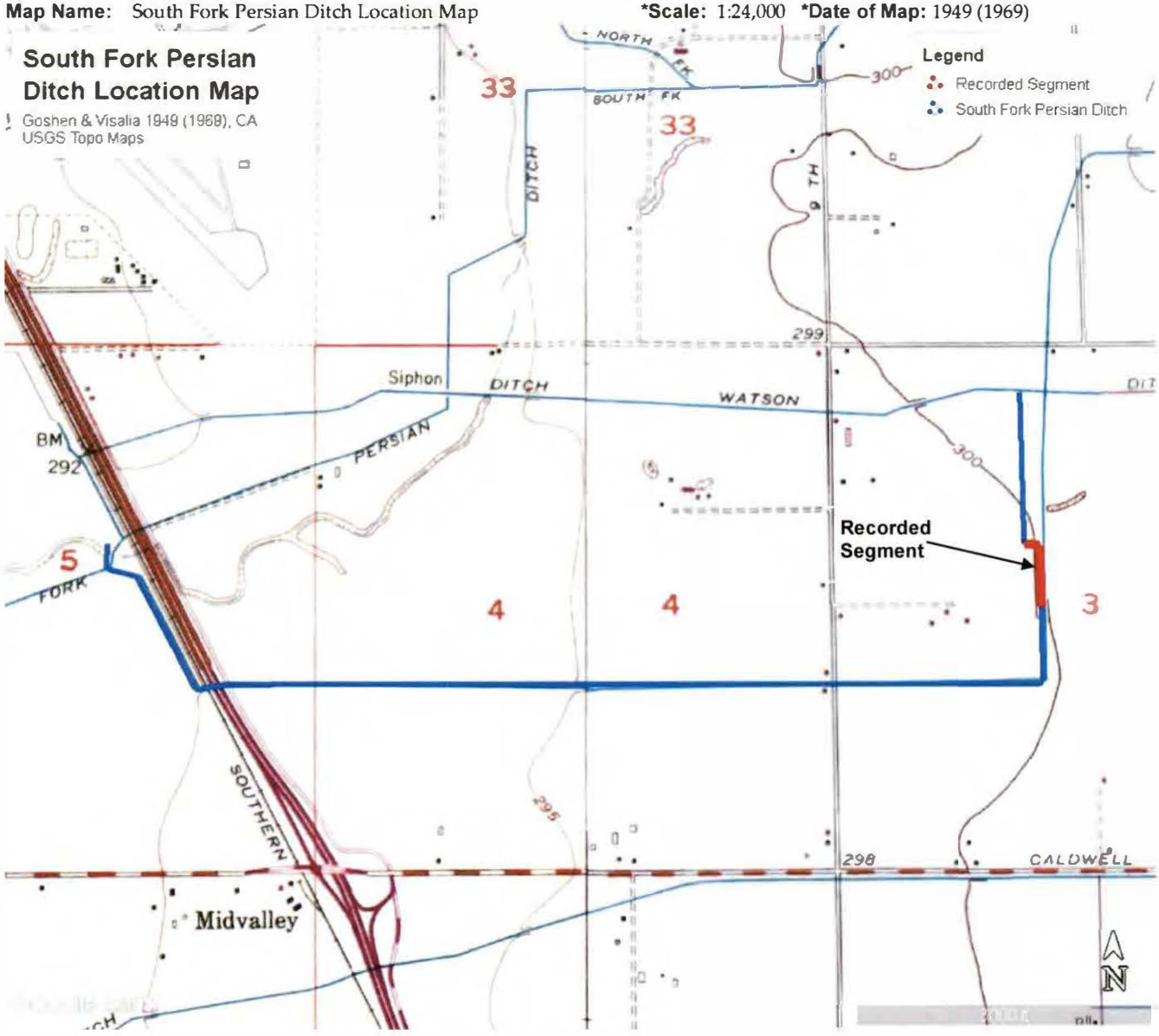
LOCATION MAP

Primary # P-54-002177
HRI#
Trinomial CA-TUL-003259H

*Resource Name or #: South Fork Persian Ditch

Map Name: South Fork Persian Ditch Location Map

*Scale: 1:24,000 *Date of Map: 1949 (1969)



SCALE 1 24 000

1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 KILOMETER

CONTOUR INTERVAL 5 FEET
DATUM IS MEAN SEA LEVEL

*Required information

P-54-002177

CA-TUL-003259H

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-54-002177
HRI #
Trinomial
NRHP Status Code
Other Listings
Review code Reviewer Date

Page 1 of 2 *Resource Name or #: (Assigned by recorder)
P1. Other Identifier: SFPP-23
*P2. Location: ☐ Not for Publication ☒ Unrestricted *a. County Tulare
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
*b. USGS 7.5' Quad Goshen Date 1969 T 19S; R 24E; SW 1/4 of NE 1/4 of SE 1/4 of Sec 5; MD B.M.
c. Address 334C City Zip
d. UTM: (Give more than one for large and/or linear resources) Zone 11, 285540 mE/ 4020045 mN
e. Other Locational Data (e.g., parcel #, legal description, directions to resource, elevation, etc., as appropriate):
From Selma travel south on Highway 99, 2.4 miles past Exit 198. Site is west of Highway 99 and the railroad tracks and is visible from the road.

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
Earthen irrigation canal associated with orchard. Canal flows in an east to west direction until it reaches the concrete headgate, from that point it turns 90° and continues north. Approximately 20' west of the railroad is a concrete culvert stamped with "1940". Resources are in good condition.

*P3b. Resource Attributes: (List attributes and codes) HP20
*P4. Resources Present: ☐ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5b. Description of Photo (view, date, accession #) East; 4-26-95; SFPP-CW-3-24

*P6. Date Constructed/Age and Sources: ☒ Historic
☐ Prehistoric ☐ Both

*P7. Owner and Address:

*P8. Recorded by (Name, affiliation, and address): Carrie D. Wills & Allen Estes; William Self Associates 4 Orinda Way Suite 200A Orinda, CA 94563

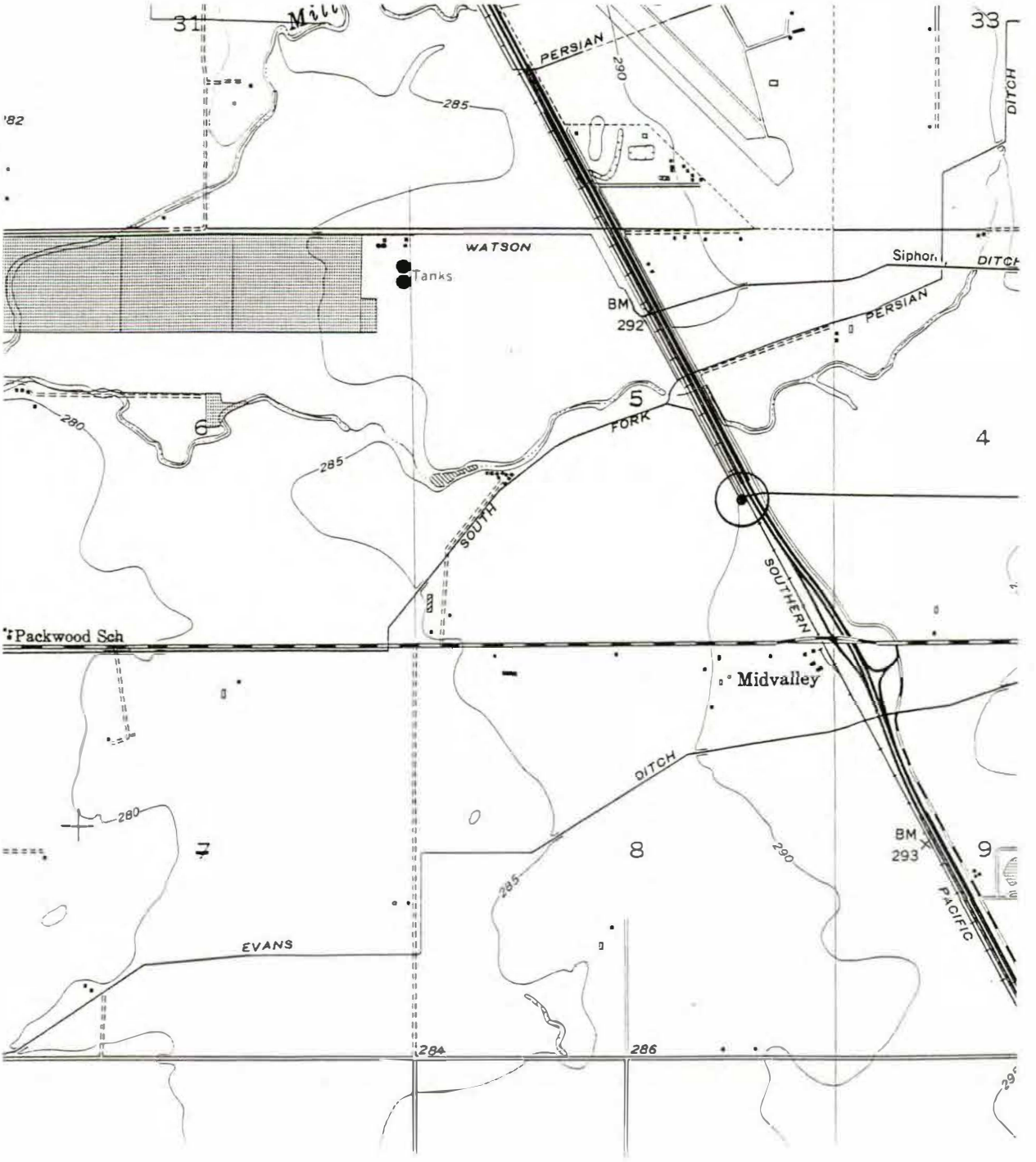
*P9. Date Recorded: April 26, 1995

*P10. Survey Type: (Describe)
Reconnaissance.

*P11. Report Citation (Cite survey report and other sources, or enter "none."):
Class I Overview Santa Fe Pacific Pipeline Partners, L.P., Proposed Concord to Colton Pipeline Project.

*Attachments: ☐ NONE ☒ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record
☐ Archaeological Record ☐ District Record ☐ Linear Resource Record ☐ Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☐ Photograph Record ☐ Other (List):

P-54-002177
CA-TUL-003259H



GOSHEN, CALIF.

7.5' QUADRANGLE

1949

PHOTOREVISED 1969

0 1000 2000 3000 4000 5000 6000 7000 FEET

1 5 0 1 KILOMETER

N

CONTOUR INTERVAL 5 FEET

DATUM IS MEAN SEA LEVEL

Santa Fe Pacific Pipeline

Concord to Colton Project

Location Map

P-54-002177
CA-TUL-003259H

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-54-002177
HRI #
Trinomial
NRHP Status Code
Other Listings
Review code _____ Reviewer _____ Date _____

Page 1 of 2 *Resource Name or #: (Assigned by recorder) South Fork Persian Ditch
P1. Other Identifier: SFPP-22
*P2. Location: ☐ Not for Publication ☒ Unrestricted *a. County Tulare
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
*b. USGS 7.5' Quad Goshen Date 1969 T 19S; R 24E; NE 1/4 of SW 1/4 of NE 1/4 of Sec 5; MD B.M.
c. Address 334C City Zip
d. UTM: (Give more than one for large and/or linear resources) Zone 11, 285305 mE/ 4020495 mN
e. Other Locational Data (e.g., parcel #, legal description, directions to resource, elevation, etc., as appropriate):
From Selma travel south on Highway 99, 2.1 miles past 198 exit. Site is west of Highway 99 and railroad tracks.

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
Earthen irrigation ditch flowing east to west, associated with an orchard and other agricultural land. A galvanized pipe culvert supports the railroad over the ditch. The ditch goes underground west of Highway 99 and resurfaces on the east side of the highway. Approximately 250' west of the railroad tracks is a concrete headgate. Large oak trees and dense riparian vegetation grow on the banks of the ditch. The resources are in good ocndition.

*P3b. Resource Attributes: (List attributes and codes) HP20
*P4. Resources Present: ☐ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5b. Description of Photo (view, date, accession #) West; 4-26-95; S. FPP-CW-3-21

*P6. Date Constructed/Age and Sources: ☒ Historic
☐ Prehistoric ☐ Both

*P7. Owner and Address:

*P8. Recorded by (Name, affiliation, and address): Carrie D. Wills & Allen Estes; William Self Associates 4 Orinda Way Suite 200A Orinda, CA 94563

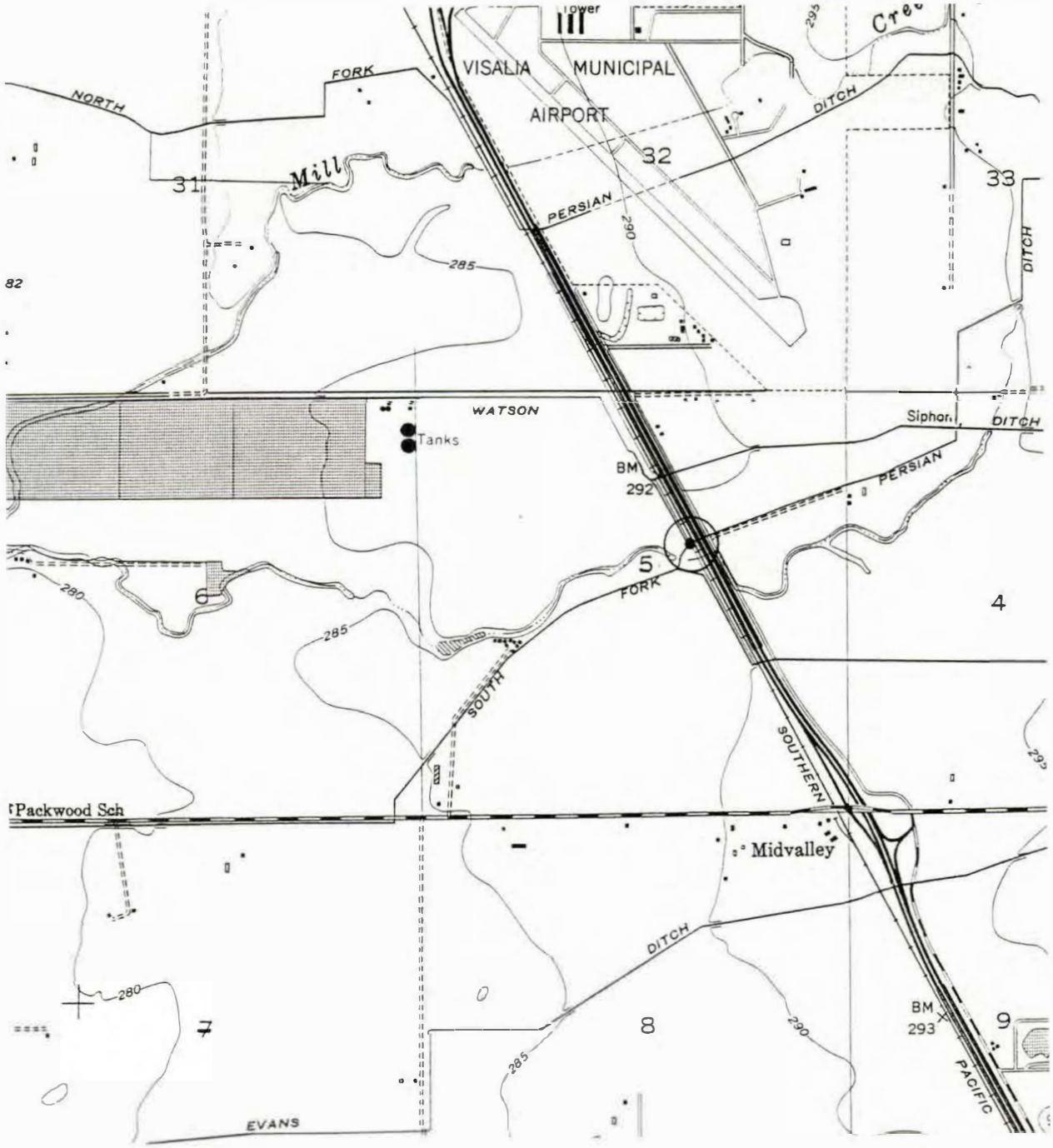
*P9. Date Recorded: April 26, 1995

*P10. Survey Type: (Describe)
Reconnaissance.

*P11. Report Citation (Cite survey report and other sources, or enter "none."): Class I Overview Santa Fe Pacific Pipeline Partners, L.P., Proposed Concord to Colton Pipeline Project.

*Attachments: ☐ NONE ☒ Location Map ☐ Sketch Map
☐ Continuation Sheet ☐ Building, Structure, and Object Record
☐ Archaeological Record ☐ District Record ☐ Linear Resource Record
☐ Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☐ Photograph Record ☐ Other (List):

P-54-002177
CA-TUL-003259H



GOSHEN, CALIF.

7.5' QUADRANGLE
1949
PHOTOREVISED 1969

0 1000 2000 3000 4000 5000 6000 7000 FEET

1 5 0 1 KILOMETER

N

CONTOUR INTERVAL 5 FEET
DATUM IS MEAN SEA LEVEL

Santa Fe Pacific Pipeline
Concord to Colton Project

Location Map

Corporate Headquarters
1322 E. Shaw Avenue, Suite 400 Fresno, CA, 93710
www.soarhere.com • 559.547.8884

CULTURAL ISOLATED FIND RECORD
Resource ID (Isolated Find #): IS-01-2023
Project Name: 4Creeks Elliot SJVH

Visit Details	
Isolated Find Number	IF-01-2023
Project Name	4Creeks Elliot SJVH
Project Number	N/A
Date Identified	11/18/2023
Recorded By (name[s], affiliation)	Heather Froshour, SOAR Environmental
Artifact(s) Collected?	No
UTMs (or other locational information):	WGS 84 11N 287998 mE / 4021717 mN
Archaeological Data: (include artifact description[s], dimensions, setting and relevant comments)	
Ceramic, refined earthenware, white glaze with blue band, thick possible serving dish/platter sherd	

Attachments:

Corporate Headquarters
1322 E. Shaw Avenue, Suite 400 Fresno, CA, 93710
www.soarhere.com • 559.547.8884

CULTURAL ISOLATED FIND RECORD
Resource ID (Isolated Find #): IS-02-2023
Project Name: 4Creeks Elliot SJVH

Visit Details	
Isolated Find Number	IF-02-2023
Project Name	4Creeks Elliot SJVH
Project Number	N/A
Date Identified	11/18/2023
Recorded By (name[s], affiliation)	Heather Froshour, SOAR Environmental
Artifact(s) Collected?	No
UTMs (or other locational information):	WGS 84 11N 287768 mE / 4022028 mN
Archaeological Data: (include artifact description[s], dimensions, setting and relevant comments)	
Ceramic, refined earthenware body sherd, cream/yellow colored glaze	

Attachments:

Corporate Headquarters
1322 E. Shaw Avenue, Suite 400 Fresno, CA, 93710
www.soarhere.com • 559.547.8884

CULTURAL ISOLATED FIND RECORD
Resource ID (Isolated Find #): IS-03-2023
Project Name: 4Creeks Elliot SJVH

Visit Details	
Isolated Find Number	IF-03-2023
Project Name	4Creeks Elliot SJVH
Project Number	N/A
Date Identified	11/18/2023
Recorded By (name[s], affiliation)	Heather Froshour, SOAR Environmental
Artifact(s) Collected?	No
UTMs (or other locational information):	WGS 84 11N 287556 mE / 4021852 mN
Archaeological Data: (include artifact description[s], dimensions, setting and relevant comments)	
Ceramic, refined earthenware sherd, light cream colored glaze, possible platter sherd	

Attachments:

APPENDIX D

Staff Resume

Heather Froshour

Senior Archaeologist

12 Years of Relevant Experience

Biography

Ms. Froshour's background emphasises archaeology, anthropology, and cultural resources monitoring.

Education

- M.A. in Historical Archaeology, November 2014. University of Leicester, Leicester, UK.
- B.A. in Anthropology/Geography, June 2010. University of Southern Maine, Gorham/Portland, ME.

Professional Development

- 8 hr training in Wilderness Firest Aid (Sierra Rescue International)
- Adult, Child, Infant C.A.R.E. CPR & First Aid Training (Sierra Rescue International)
- Driver/Operator

Professional Affiliations

- Register of Professional Archaeologists
- CHRIS Qualified Archaeologist
- Society of American Archaeology - SAA
- Society of Historical Archaeology - SHA

Technical Expertise

- Lithic Analysis
- Technical Report Writing
- Lab analysis
- Cultural Monitoring
- Site Surveying – Phases 1-3
- Excavation
- Metal Detection
- Auguring
- Research
- MS Office
- Collector for ArchGIS

Practical Experience

Ms. Froshour is a registered professional archaeologist and cultural resources specialist with extensive experience in field and technical work. This experience including cultural resources monitoring, site survey, phase 1-3 excavations, and anthropology on various projects throughout the United States. She has a combined 8 years of experience in academic, consulting, museum, and public archaeology, and has worked in CRM since 2013 throughout various regions of the United States. Primary states of focus have included Maine, Massachusetts, Louisiana, Georgia, Virginia, Arizona, and California. She routinely assesses cultural resources for project related effects and their significance, provides cultural resource mitigation services, directs archaeological surveys of both excavation and pedestrian methods, and prepares documents for Section 106 of the NHPA, CEQA, and NRHP. Ms. Froshour also has experience working alongside trial monitors through survey with in the Colorado River and Mendocino National Forest regions. She has worked alongside the USDA Forest Service to provide post-fire monitoring and mitigation recommendations.

Ms. Froshour is certified by the Register for Professional Archeologists (Registrant ID: 5457).

Highlighted Projects

California High-Speed Rail Authority Construction Package 1, Cultural Resources Support, March 2023-Present
Heather is the Cultural Resources Support for this construction package. As such, she oversees staff archaeologist cultural reporting, monitoring, and artifact processing on the 33-mile right of way in Fresno and Madera Counties.

SOAR Environmental Consulting, Senior Archaeologist, January 2023-Present
Senior Archaeologist, Phase I Cultural Resources Evaluation, Yokuts Valley, California
Provided desktop research, tribal consultation, and full Phase 1 report for the construction a new saber transmission tower to accompany existing USACE and CAL FIRE structures on a 100 square feet area on top of Bear Mountain in Fresno County.

Senior Archaeologist, Phase I Cultural Resources Evaluation, Shirley Meadows, California
Provided desktop research, tribal consultation, and full Phase 1 report with DPR forms for the construction a new saber transmission tower, and concrete masonry shelter enclosed in an 8 foot tall wire fence on a 100 square feet area on top of Shirley Peak in Kern County.

Senior Archaeologist, Phase I Cultural Resources Evaluation, Mountain Ranch, California
Provided desktop research, tribal consultation, and full Phase 1 report with DPR forms for the construction a new saber transmission tower, and propane tank enclosed in an 8 foot tall wire fence on a 100 square feet area on top of Quiggs Mountain in Calaveras County.

Senior Archaeologist, Phase I Cultural Resources Assessment, Glennville, California
Provided desktop research, site pedestrian survey, tribal consultation, and full Phase 1 report for the construction a new saber transmission tower, CMU block shelter, and parking lot enclosed in a wire fence on a 100 square feet area on top of Mount Pheasant in Kern County.

Senior Archaeologist, Phase I Cultural Resources Assessment, Bakersfield, California
Provided desktop research, site pedestrian survey, and full Phase 1 report for rezoning project and multiple family residence construction project.

Senior Archaeologist, Phase I Cultural Resources Assessment, Joshua Tree, California
Provided desktop research, site pedestrian survey, and full Phase 1 report for upscale yurt campground construction project.

Post Fire Fuels and Priority Heritage Asset Assessment Surveys, Grindstone Region, CA (June 2022-December 2022). The Great Basin Institute, Archaeological Crew Lead.
Phase I pedestrian surveys and site recording on post-wildfire burned landscapes within the Mendocino National Forest. Overseeing a small crew in the field survey, site recording, and completion of extensive USDA Forest Service site reports and mapping of cultural resources in the area. Ensured that all pertinent data is documented and reported to Forest Services standards with specific attention to current field conditions, disturbances, vegetation, terrain, and geospatial data of cultural resources. Provided day to day support of the crew and worked as a liaison between the Great Basin Institute and Mendocino National Forest personnel. Conducted Section 106 and Section 110 Priority Heritage Asset assessments of archaeological resources throughout the eastern region of the Mendocino. Assisted in final Phase 1 survey report writing.

Various Cultural Resource Management Survey Projects, GA & NC (June 2021- April 2022). TerraXplorations, Inc., Archaeology Field Director.
Phase I shovel testing in various locations throughout Georgia, in addition to a single project just outside of Raleigh, NC. These projects include road, bridge, and culvert improvement surveys as well as solar tract, farm, and generator surveys. All projects were conducted in 30m intervals along transect within the ESB of the survey area. All positive shovel tests were then delineated in 15m interval cruciform to determine site boundaries. Several projects required the use of metal detection grids in order to thoroughly survey areas of known Civil War activity. A number of projects for the Georgia Department of Transportation also required the probing of areas within the project ESB that were located within 1km from a known cemetery, with potential anomalies delineated and all results fully recorded. Duties include overseeing and directing field crews in locating, collecting, recording, and interpreting data from the survey. The supervision of personnel, including aiding in hiring and firing, performance reviews, training, work allocation, and problem resolution. Ensuring safe work practices and directing morning safety meetings to address potential hazards and safety concerns in the areas scheduled for fieldwork that day. Participation in field and office meetings with PIs and company owners to address scheduling and management procedures based on client needs as well as those of state and federal regulations and requirements.

Cultural Resource Management Survey Project, VAM-1 and Glasgow Pipeline Replacement, VA (May 2021-June 2021). TerraXplorations, Inc., Archaeology Crew Chief.
Phase I shovel test excavations from the replacement of the VAM-1 and Glasgow natural gas pipelines in the Blue Ridge Mountains, near the Appalachian Trail. Evaluated and conducted field work in various conditions in primarily mountainous terrain. Under direct supervision helped to manage and organize field crew in order to complete the project in a timely and efficient manner. Maintained field equipment and assisted in the writing and compilation of

all field paperwork. Personally in charge of the majority of all mappings of and oversight of field crew for sites throughout the project area.

Various Cultural Resource Management Survey Projects, LA & MS (August 2020-May 2021). TerraXplorations, Inc., Archaeology Field Technician.
Phase I shovel test excavations for bank mitigation in North Eastern Mississippi along the Buttahatchee River. Phase III survey of two projects; the historic St. Amelia Plantation in Welcome, Louisiana and an unnamed prehistoric village in Plaquemine, Louisiana. The phase III projects both required excavating the foundations of various structures, and in the case of the prehistoric site excavating and mapping postholes within pits. The projects also required drawing plan views, and stratigraphic profiles, as well as feature and level write-ups. Unit excavations included 1mx1m to 3mx3m units, with a few requiring the extension of existing units to chase out observed features and artifact clusters.

Various Cultural Resource Management Survey Projects, ID & WI (June 2020 -July 2020). Tetra Tech, Inc., Archaeology Field Technician.
Phase I pedestrian surveying of various wind and solar farm projects throughout corn and soybean fields.

Cultural Resource Management Survey, Acadiana to Gillis, LA (January 2020-March 2020). BGE, Inc., Archaeology Field Technician.
Phase I shovel test excavations of proposed natural gas pipeline between Acadian and Gillis, Louisiana. This project entailed the excavation of 30mx30m units with distance varying based on HPA and LPA guidelines (a spacing of 30m to 50m respectively). A requirement of the survey was to maintain daily investigation point forms for individual shovel test units. In addition to this, it was required to aid in recording artifacts and photos of sites found throughout the project.

Various Cultural Resource Management Survey Projects, MN & IA (November 2019-December 2019). In Situ Archeological Consulting LLC, Archaeology Field Technician.
Phase I pedestrian surveying of various natural gas and cellular tower projects, as well as Phase II field work entailing the excavation of 45cmX45cm test units and GPS data collection. The projects also occasionally required the writing of site forms, and research for future projects at the Minnesota SHPO collections.

Cultural Resource Management Survey, Ten West Link Project, CA & AZ (August 2019-October 2019). POWER Engineers Inc., Archaeology Field Technician.
Phase I pedestrian survey of the proposed 500 kV transmission line connecting electrical substations in Tonopah, Arizona and Blythe, California. This project entailed working in one of five teams, and often included 1-2 tribal monitors from the Colorado River Indian Tribes. The right of way crews used a 400ft buffer for the corridor, with each team using a 15m spread to survey the proposed transmission line. This survey required the use of a Trimble GPS system to navigate the corridor and plot both isolate and site locations for GIS and recording crew use. As part of the recording crew later in the survey, it was also required to conduct thorough site analysis and recordation via site forms and Trimble points of each observed artifact and feature, both historic and prehistoric.

Authored Publications

2023 Froshour, Heather. “Phase I Cultural Resources Evaluation: 30811 Bear Mountain Rd., Yokuts Valley, California.”

2023 Froshour, Heather. “Phase I Cultural Resources Evaluation: Shirley Peak, Rd. 622, Kern County, California.”

2023 Froshour, Heather. “Phase I Cultural Resources Evaluation: Sierra Vista Lookout., Quiggs Mountain, Mountain Ranch, California.”

2023 Froshour, Heather. “Phase I Cultural Resources Evaluation: Granite Rd., Mount Pheasant, Glennville, California.”

2023 Froshour, Heather. “Phase I Cultural Resources Assessment: 4415 Wilson Rd., Bakersfield, California.”

2023 Froshour, Heather. “Cultural Resources Desktop Assessment: 1941 N. Golden State Blvd., Fresno, California."

2023 Froshour, Heather. “Phase I Cultural Resources Assessment: 3174 Bonair Ave., Joshua Tree, California.”

2023 Froshour, Heather. “Cultural Resources Desktop Assessment: 3200 Rio Linda Blvd., Sacramento, California."

2023 Hawley, Maria and Froshour, Heather. “Cultural Resources Assessment, 18644 16th Ave., Stratford, California.”

2022 Lashway, Nick, Hovis, Chad, and Froshour, Heather. “Upper Thomes Forestwide Fuels Phase I Report: U.S.D.A. Forest Service Mendocino National Forest Covelo and Grindstone Ranger Districts, California.”

Academic Publications

2013 Hamilton, Nathan D. and Froshour, Heather D (presenter). “Explore 5,000 Years of History in Danvers, Massachusetts.”

2013 Froshour, Heather D. “Preserving the Past: Public and Historical Archaeology at the Rebecca Nurse Homestead, Danvers, Massachusetts.”

2012 Froshour, Heather D (presenter). “17th-18th Century Occupations in Danvers, Massachusetts.”

Appendix D

Traffic Study

Project No: 624-03

TRAFFIC STUDY

ELLIOT PROPERTY TENTATIVE SUBDIVISION
LOCATED EAST OF SHIRK STREET AND SOUTH OF TULARE AVENUE
VISALIA, CALIFORNIA

Prepared for:

4CREEKS

December 2023

UPDATED June 2024

Prepared by:

RUETTGERS & SCHULER CIVIL ENGINEERS

1800 30TH STREET, SUITE 260
BAKERSFIELD, CA 93301

Ian J. Parks, RCE 58155

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The proposed residential development is located east of Shirk Street and south of Tulare Avenue in Visalia, CA.

Project Description

The proposed project includes 225 single-family residential dwelling units. Access will be provided along Shirk Road, Tulare Road, and Roeben Street.

Project Trip Generation

The following table shows the anticipated project trip generation and peak hour volumes calculated using the Institute of Transportation Engineers (ITE) Trip Generation, 11th Edition.

Project Trip Generation

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
210	Single-Family detached Housing	225 Dwelling Units	eq	2128	eq	25% 39	75% 117	eq	63% 134	37% 79

Project Study Scope

The project study scope was approved by the City of Visalia on October 20, 2023. Based on the number of peak hour trips calculated (between 200-499 residential trips in the peak hour), the study falls into Category II traffic impact analysis. Category II requires all signalized and major intersections be studied within a 1/2-mile radius of the project.

Following are the intersections included in the study:

Study Intersections:

- Road 92/Shirk Street & State Route 198 Eastbound Ramps
- Road 92/Shirk Street & State Route 198 Westbound Ramps
- Road 92/Shirk Street & Tulare Avenue
- Road 92/Shirk Street & Walnut Avenue
- Roeben Street & Tulare Avenue
- Roeben Street & Walnut Avenue
- Street 3 & Tulare Avenue
- Street 6 & Tulare Avenue
- Avenue 4 & Shirk St
- Avenue 6 & Roeben St

Analysis Scenarios

In accordance with Category II requirements, analysis will be provided for the following scenarios:

- Existing
- 2028 Cumulative (Opening Year)
- 2028 Cumulative + Project
- 2028 Cumulative + Project with Mitigation (if applicable)
- 2033 Cumulative
- 2033 Cumulative + Project
- 2033 Cumulative + Project with Mitigation (if applicable)

Level of Service Analysis

PM Peak Hour Intersection Analysis

#	Intersection	Control Type	2023	2028	2028+ Project	2028+ Project w/Mitigation	2033	2033+ Project	2033+ Project w/Mitigation
1	Shirk St & SR 198 WB Ramps	AWSC	E (43.0)	F (118.7)	F (204.8)	-	F (238.1)	F (>300)	-
		Signal	-	-	-	B	-	-	B
2	Shirk St & SR 198 EB Ramps	AWSC	C	D (27.2)	D (28.1)	-	F (52.2)	F (56.2)	-
		Signal	-	-	-	B	-	-	B
3	Shirk St & Tulare Ave	WB	-	B	B	-	B	B	-
4	Roeben St & Tulare Ave	WB EB	A -	B A	B A	- -	B B	B B	- -
5	Shirk St & Walnut Ave	AWSC	C	E (44.7)	E (49.0)	-	F (114.2)	E (126.0)	-
		Signal	-	-	-	B	-	-	C
6	Roeben St & Walnut Ave	AWSC	B	B	B	-	B	C	-
7	Street 3 & Tulare Ave	NB	-	-	A	-	-	A	-
8	Street 6 & Tulare Ave	NB	-	-	-	-	-	A	-
9	Avenue 4 & Shirk St	WB	-	-	A	-	-	B	-
10	Avenue 6 & Roeben St	EB	-	-	A	-	-	A	-

AM Peak Hour Intersection Analysis

#	Intersection	Control Type	2023	2028	2028+ Project	2028+ Project w/Mitigation	2033	2033+ Project	2033+ Project w/Mitigation
1	Shirk St & SR 198 WB Ramps	AWSC	C	F (50.6)	F (131.3)	-	F (114.6)	F (238.2)	-
		Signal	-	-	-	B	-	-	C
2	Shirk St & SR 198 EB Ramps	AWSC	B	C	C	-	E (37.0)	E (38.2)	-
		Signal	-	-	-	B	-	-	B
3	Shirk St & Tulare Ave	WB	-	B	B	-	B	A	-
4	Roeben St & Tulare Ave	WB EB	A -	B A	B A	- -	B A	B A	- -
5	Shirk St & Walnut Ave	AWSC	B	C	C	-	D (25.5)	D (27.9)	-
		Signal	-	-	-	B	-	-	B
6	Roeben St & Walnut Ave	AWSC	B	B	B	-	B	C	-
7	Street 3 & Tulare Ave	NB	-	-	A	-	-	A	-
8	Street 6 & Tulare Ave	NB	-	-	-	-	-	A	-
9	Avenue 4 & Shirk St	WB	-	-	A	-	-	B	-
10	Avenue 6 & Roeben St	EB	-	-	A	-	-	A	-

Mitigation

Based on the results of the Level of Service (LOS) analysis and the eight-hour vehicular volume warrants, and the City of Visalia thresholds for mitigation, it is recommended that signals be constructed at three intersections in order to operate at an acceptable level of service by the year 2033.

#	Intersection	Improvements Recommended by 2028	Improvements Recommended by 2033	Percent Share
1	Shirk St & SR 198 WB Ramps	Signal	-	5.11%
2	Shirk St & SR 198 EB Ramps	Signal	-	9.69%
5	Shirk St & Walnut Ave	Signal	-	8.29%

INTRODUCTION

The purpose of this study is to evaluate the potential traffic impacts of a proposed single-family development located east of Shirk Street and south of Tulare Avenue in Visalia, CA. A vicinity map, location map, and a site plan are presented in Figures 1 through 3, respectively.

The proposed project includes 225 single-family dwelling units.

A. Land Use, Site and Study Area Boundaries

The existing zoning is Agriculture and the general plan is Low Density Residential.

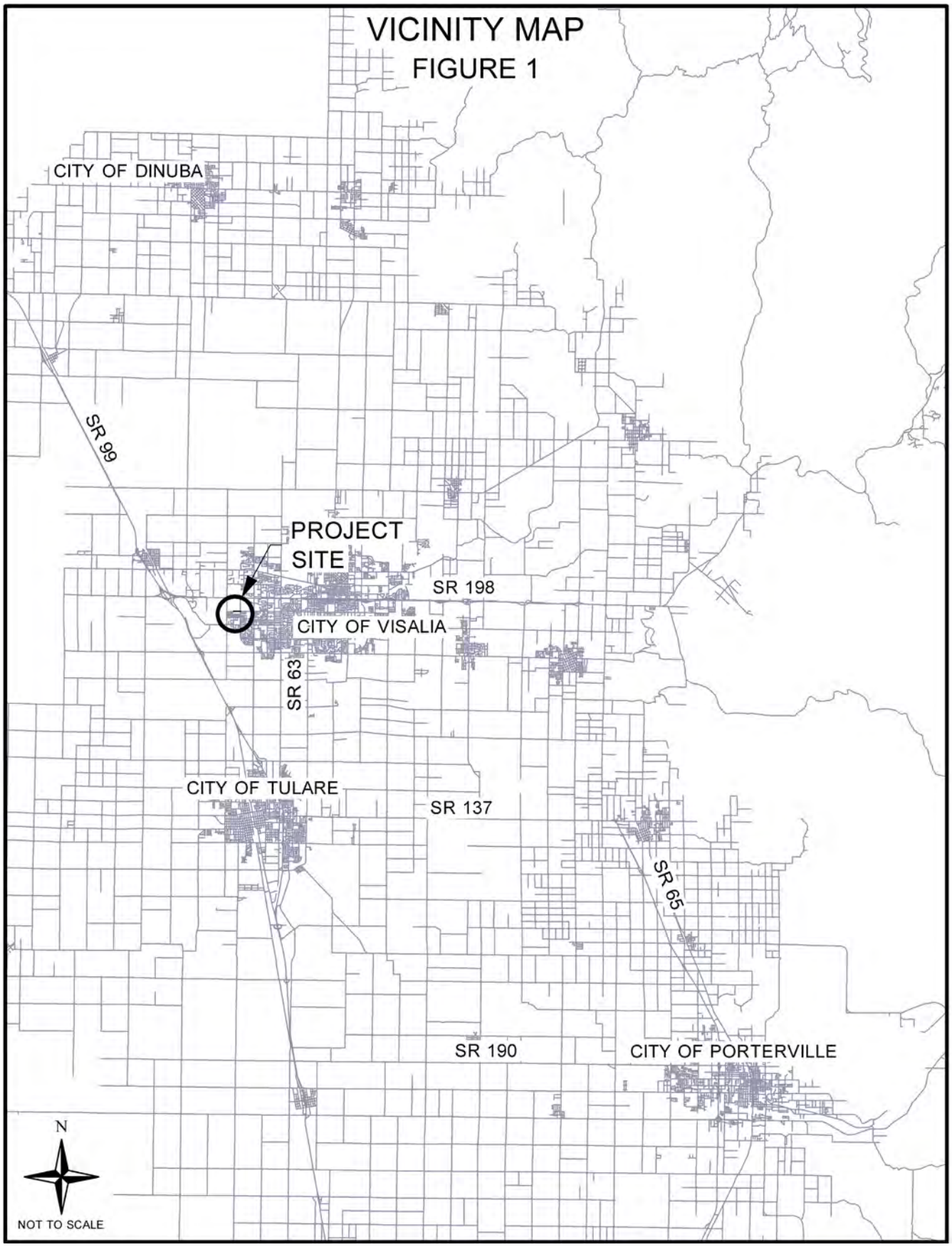
Based on the number of peak hour trips calculated (between 200-499 trips in the peak hour for residential projects), the study falls into Category II traffic impact analysis. Category II requires all signalized and major intersections be studied within a one-half mile radius of the project. The study area includes a total of six intersections (all unsignalized). The scope of the study was developed in conjunction with, and approved by the City of Visalia on October 20, 2023.

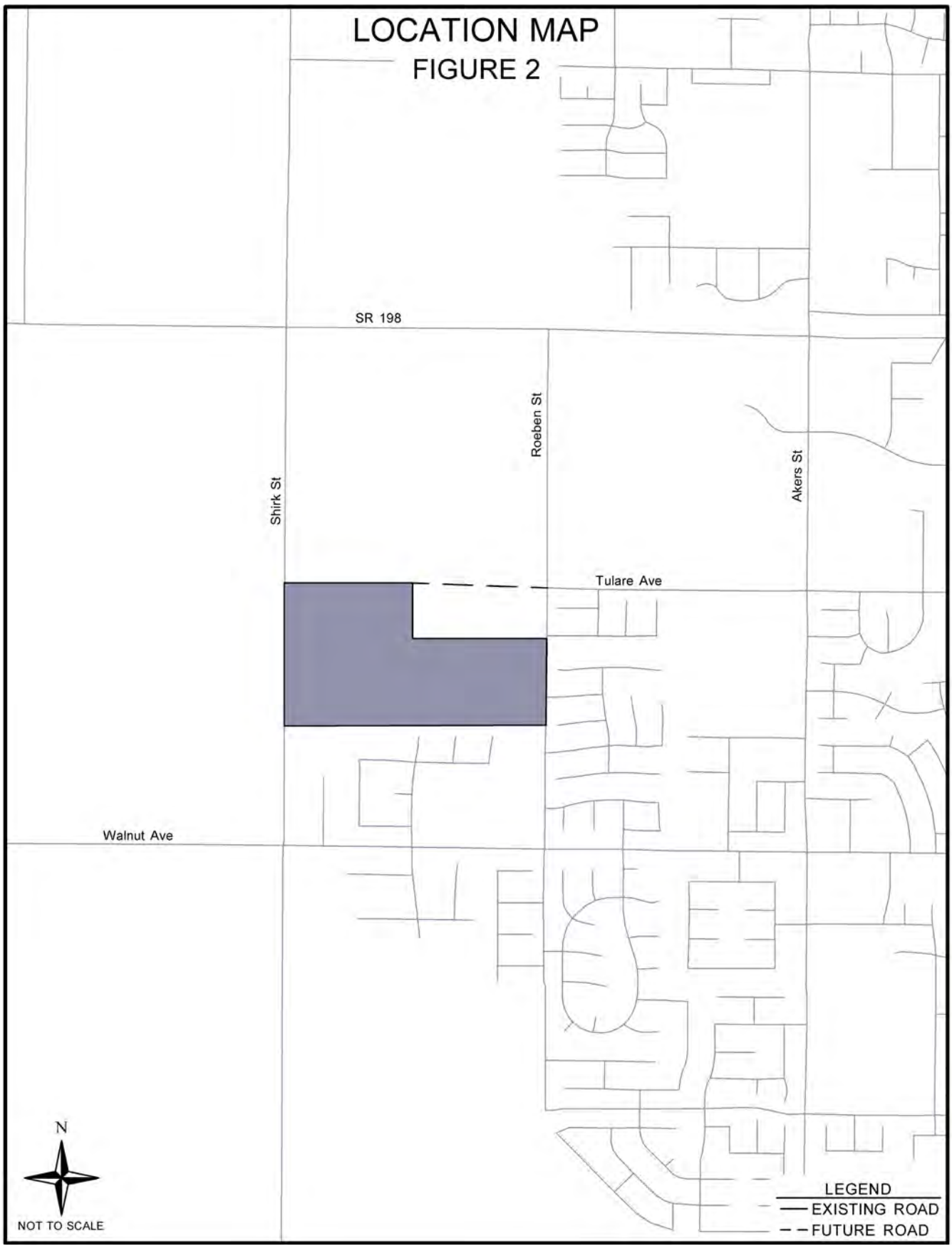
B. Existing Site Uses and Site Access

The project site is currently undeveloped and used for agriculture. Access will be provided along Shirk Road, Tulare Road, and Roeben Street.

C. Existing Uses in Vicinity of the Site

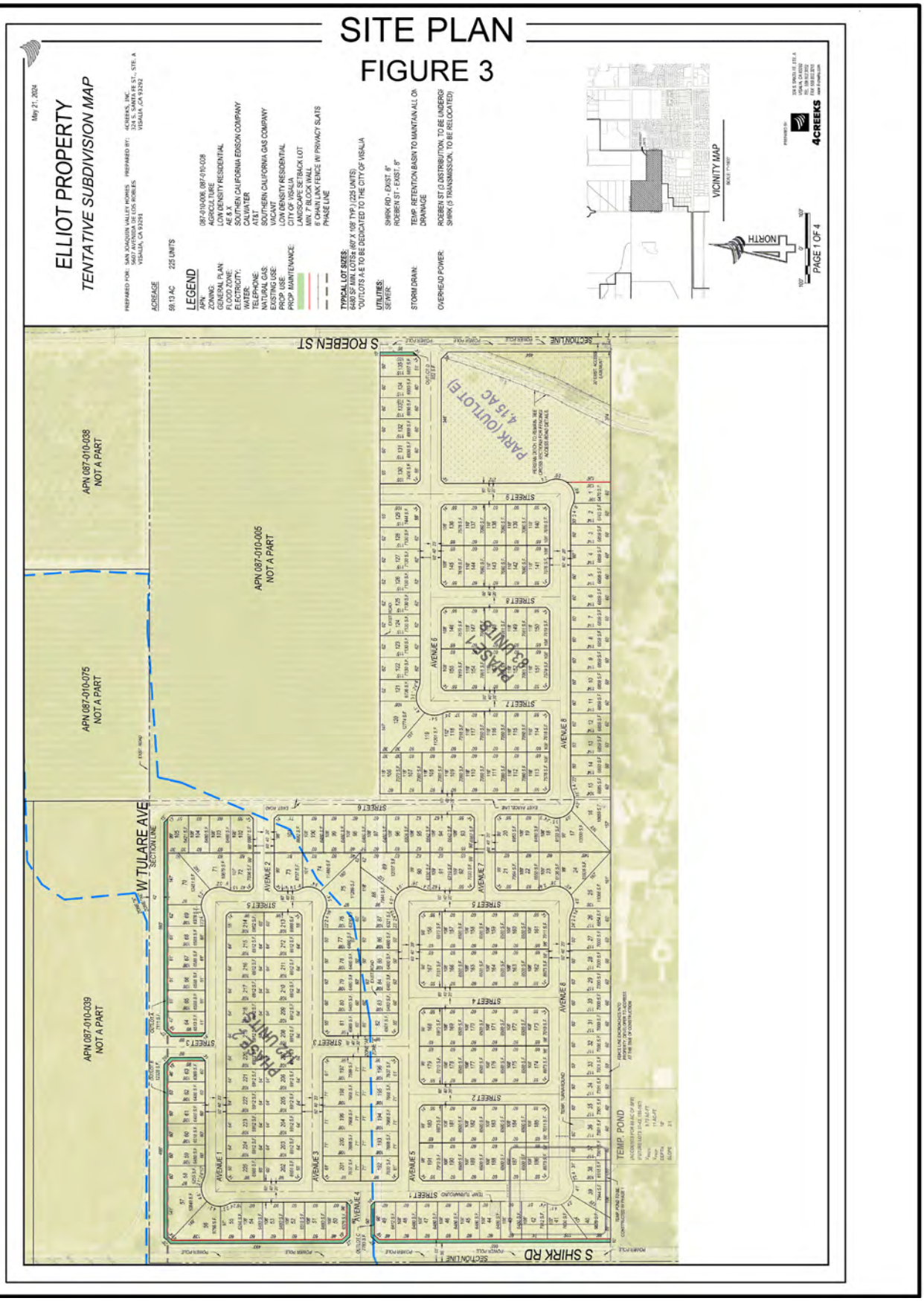
Existing land uses in the vicinity of the project site include adjacent residential to the east and south and agricultural land uses to the north and west. Central Valley Christian Schools exists further east along with commercial and medical land uses.


VICINITY MAP
FIGURE 1
CITY OF DINUBA
SR 99
PROJECT SITE
SR 198
CITY OF VISALIA
SR 63
CITY OF TULARE
SR 137
SR 65
SR 190
CITY OF PORTERVILLE
N
NOT TO SCALE


LOCATION MAP
FIGURE 2
SR 198
Shirk St
Roeben St
Akers St
Tulare Ave
Walnut Ave
N
NOT TO SCALE
LEGEND
EXISTING ROAD
FUTURE ROAD

SITE PLAN

FIGURE 3



D. Roadway Descriptions

Roeben Street is a north-south collector that exists from Whitendale Avenue to State Route 198 in the vicinity of the project. It exists as a two-lane roadway and provides access to residential land uses.

Shirk Street/Road 92 is a north-south arterial that exists from Avenue 272 north. In the vicinity of the project it exists as a two-lane roadway and provides access to residential, retail, and agricultural land uses.

State Route 198 is an east-west freeway that extends through Visalia. In the vicinity of the project it exists as four-lane freeway and has several interchanges in the City of Visalia, including at Shirk Street.

Tulare Avenue is an east-west collector that extends east from Roeben Street through the City of Visalia. In the vicinity of the project it exists as a two-lane roadway and provides access to residential land uses. It was assumed for the purposes of this study that Tulare would be extended, by others, in the future scenarios.

Walnut Avenue is an east-west arterial that extends throughout the City of Visalia. In the vicinity of the project it exists as two-lane roadway and provides access to residential land uses.

PROJECT TRIP GENERATION AND DESIGN HOUR VOLUMES

The trip generation and design hour volumes for the commercial development was calculated using the Institute of Transportation Engineers (ITE) Trip Generation, 11th Edition. The ADT, AM and PM peak hour of adjacent street traffic rate and equations, and peak hour directional splits for ITE Land Use Code 210 (Single-Family detached Housing) were used to estimate the project traffic. The trip generations for Phase I and full build out are shown in Tables 1a and 1b.

Table 1a
Phase I Project Trip Generation

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
210	Single-Family detached Housing	83 Dwelling Units	eq	850	eq	25% 16	75% 47	eq	63% 53	37% 31

Table 1b
Full Build-Out Project Trip Generation

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
210	Single-Family detached Housing	225 Dwelling Units	eq	2128	eq	25% 39	75% 117	eq	63% 134	37% 79

The project trip distribution was based on a review of the potential draw from population centers within the region as well as the types of land uses involved. These assumptions were used to distribute project traffic as shown in Table 2 and Figure 4 for the roadway system within the study scope.

Table 2
Project Trip Distribution

Direction	Percent
North	30
East	40
South	20
West	10

EXISTING AND FUTURE TRAFFIC

Traffic counts were conducted between the hours of 6:00 to 8:00 AM and 4:00 to 6:00 PM at the study intersections and are shown in Figure 5.

Annual growth rates ranging between 0.50% and 7.25% were applied to existing traffic volumes to estimate future traffic volumes for the project phases. These growth rates were estimated based on future TCAG traffic model data.

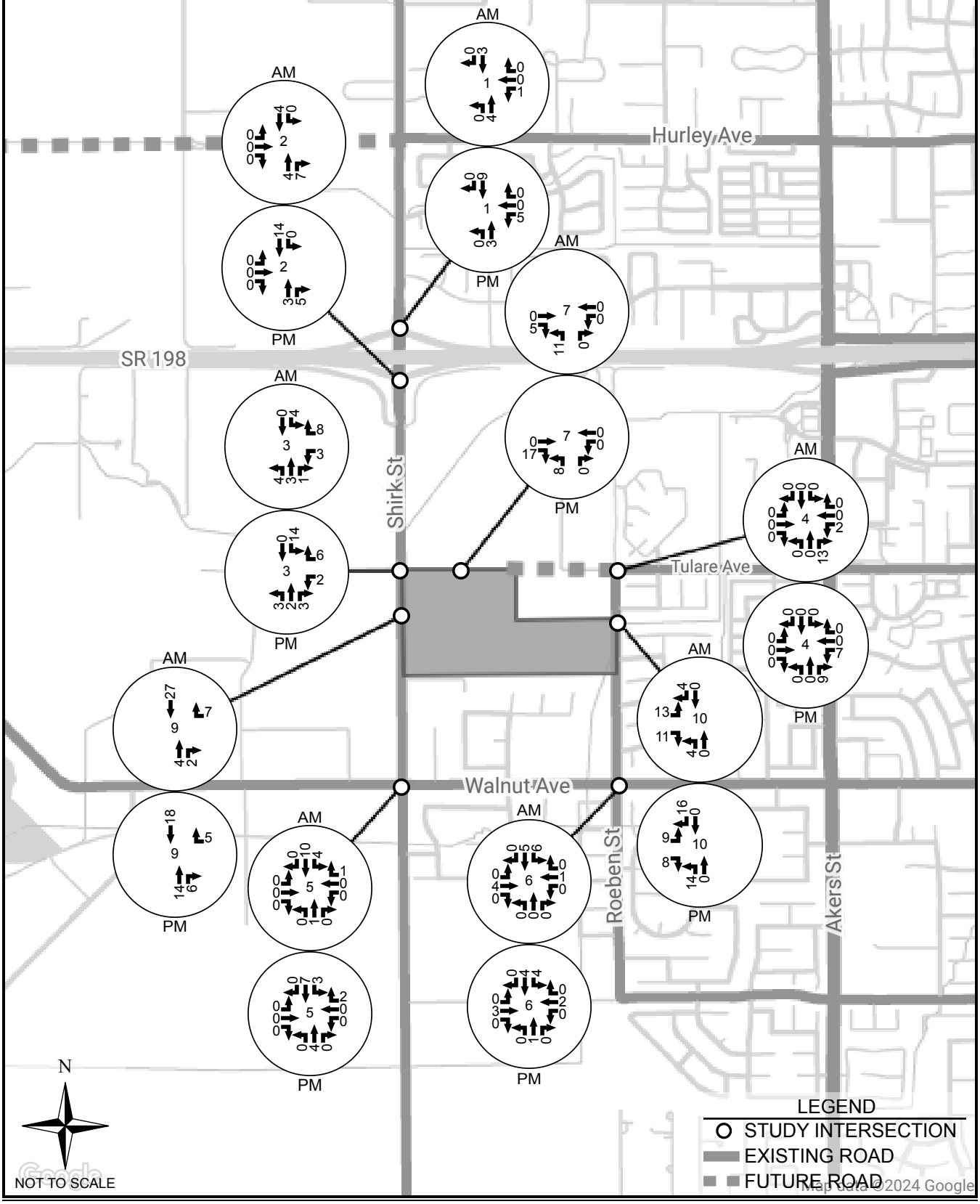
In accordance with Category II requirements, analysis will be provided for the following scenarios:

- Existing
- 2028 Cumulative (Opening Year)
- 2028 Cumulative + Project
- 2028 Cumulative + Project with Mitigation (if applicable)
- 2033 Cumulative
- 2033 Cumulative + Project
- 2033 Cumulative + Project with Mitigation (if applicable)

Project, existing and future peak hour volumes are shown in Figures 4 through 11.

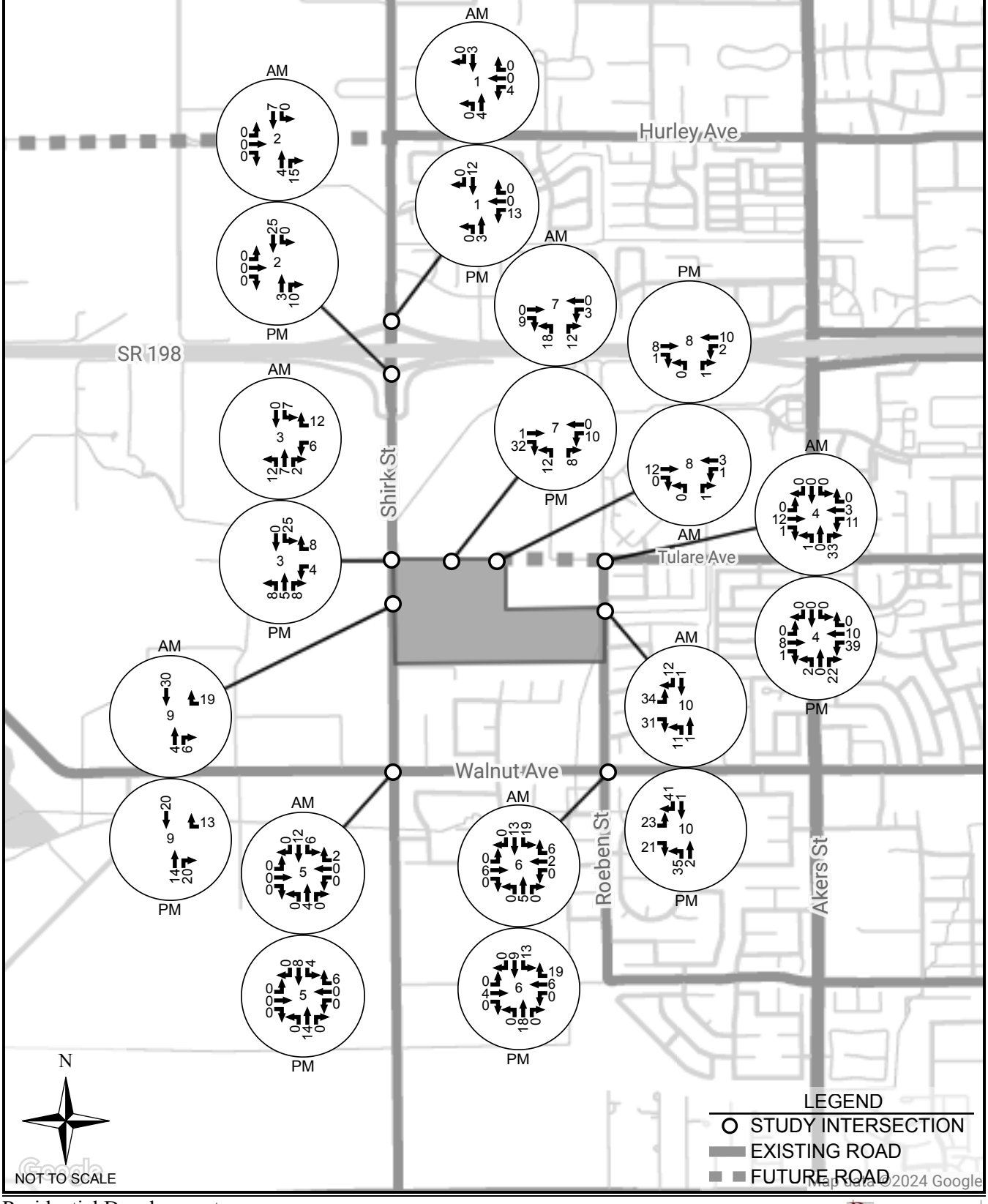
PROJECT (EXISTING) PEAK HOUR TRAFFIC

FIGURE 4

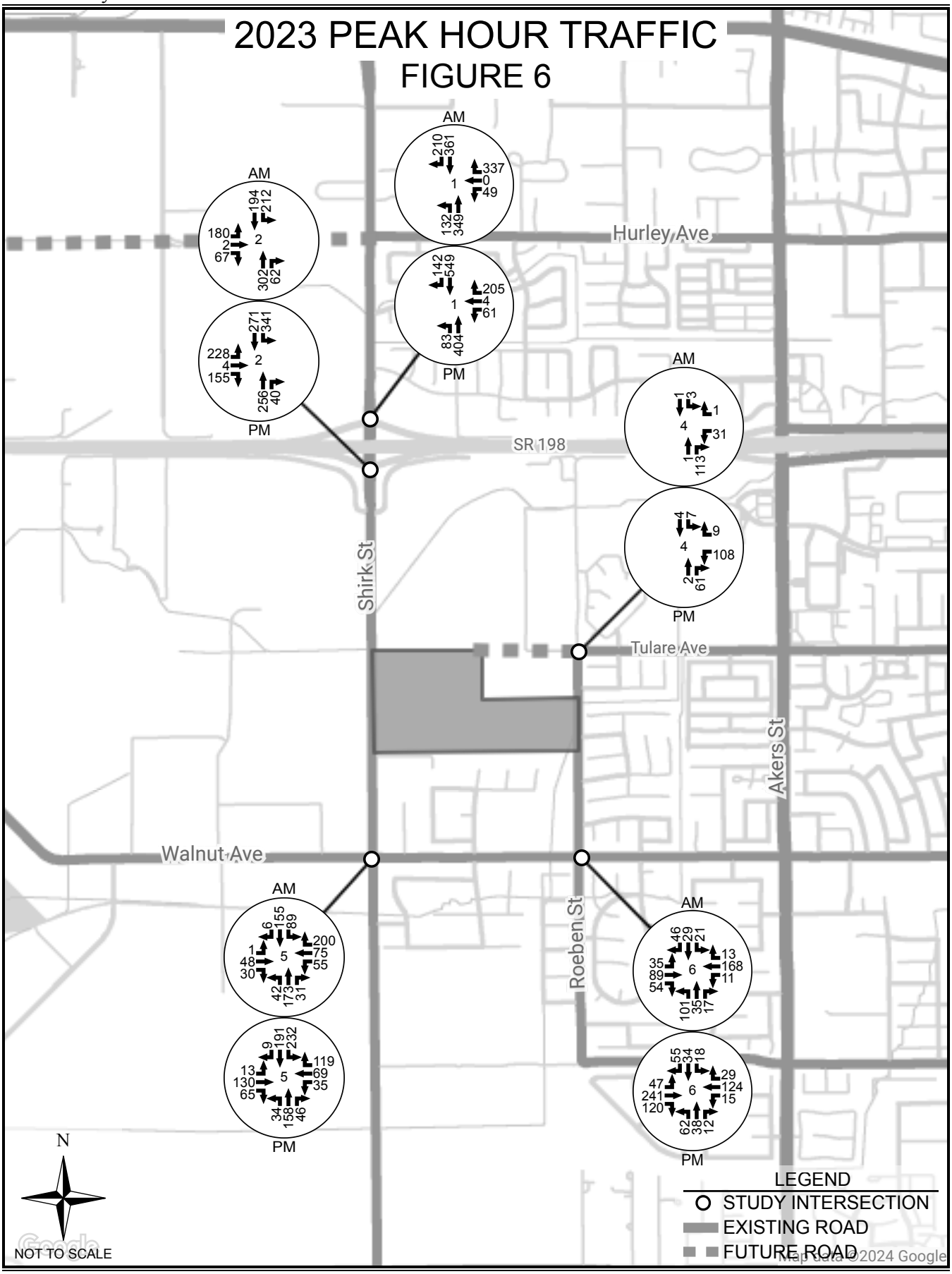


PROJECT (FUTURE) PEAK HOUR TRAFFIC

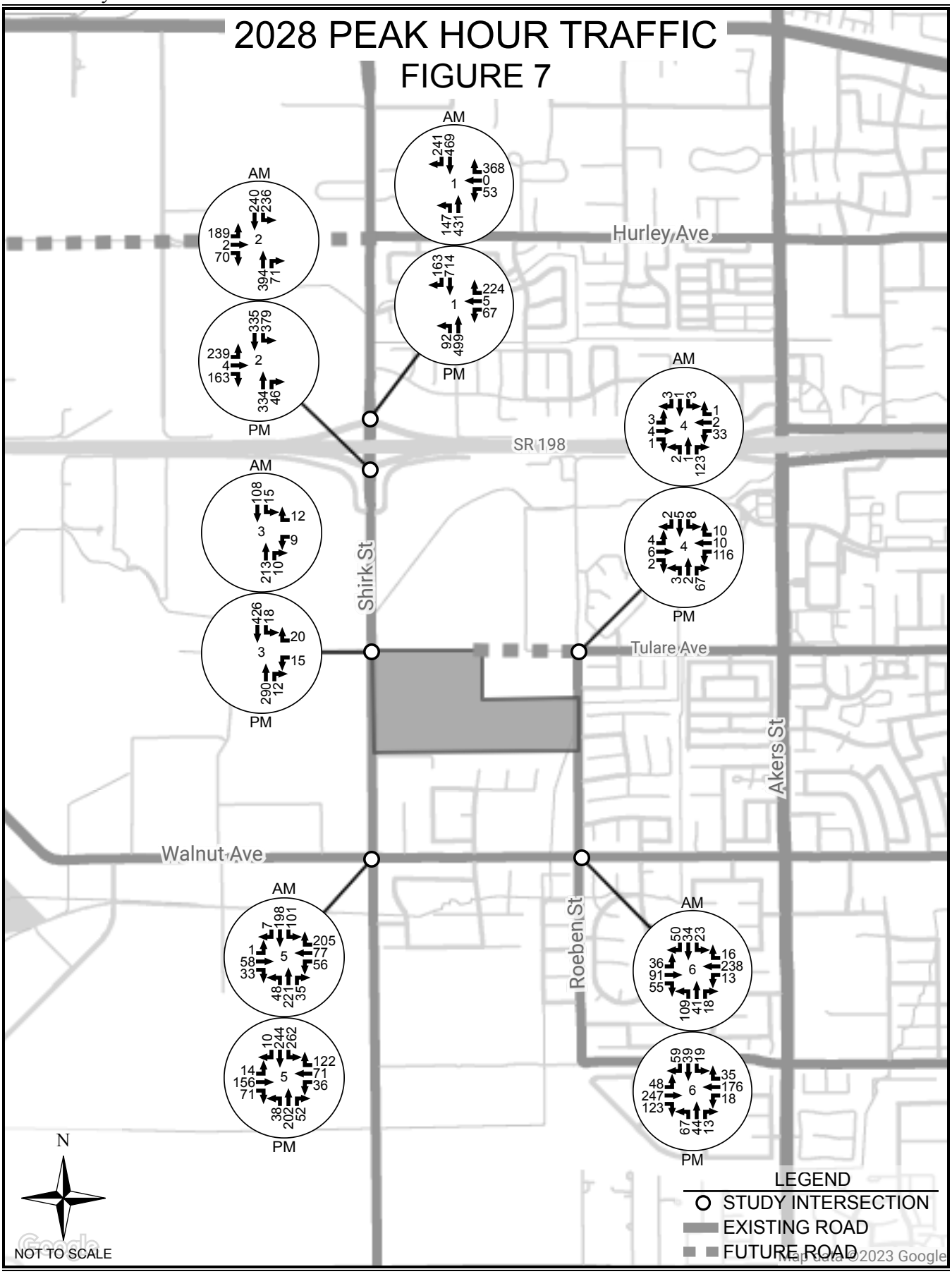
FIGURE 5



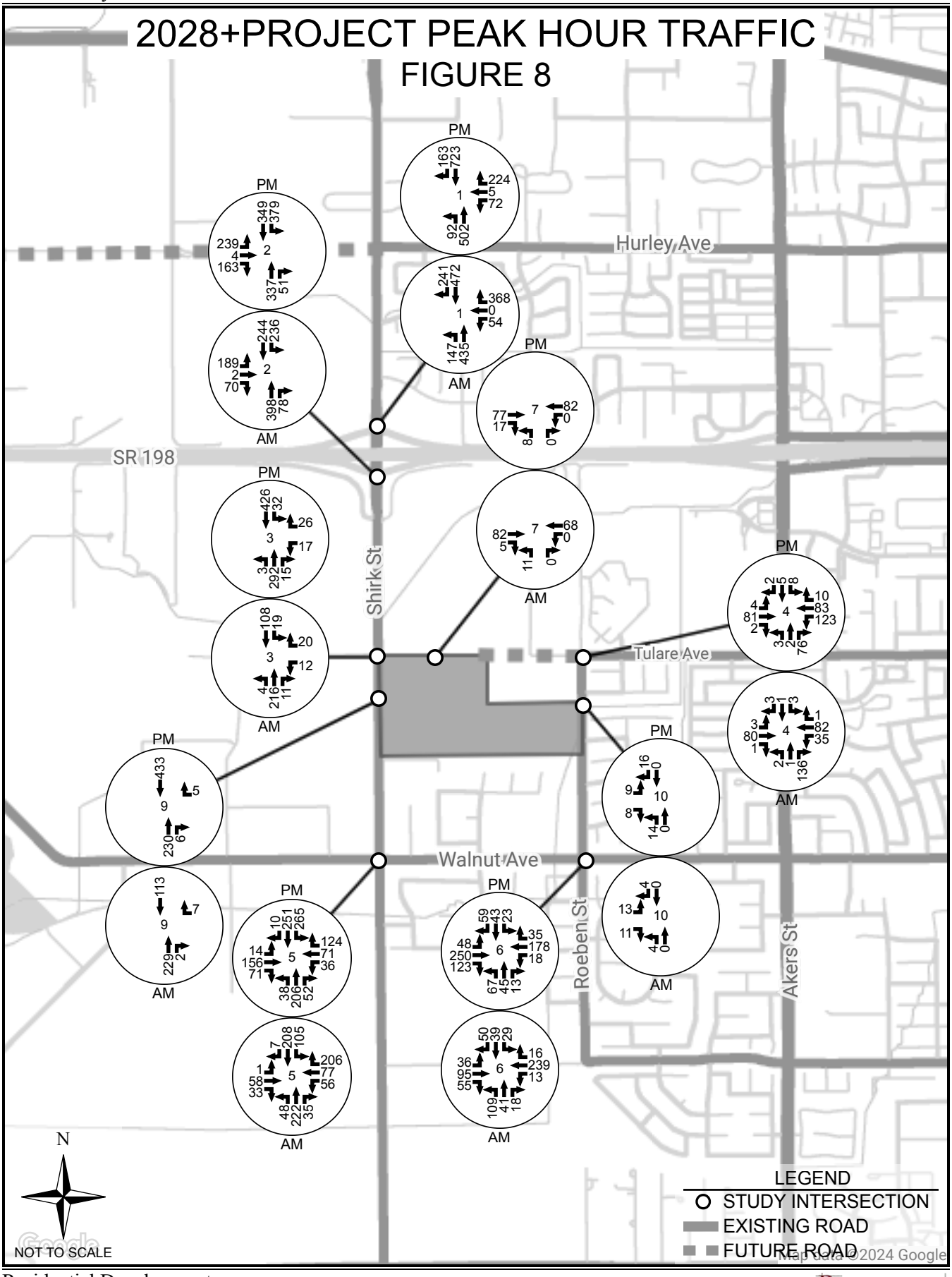
2023 PEAK HOUR TRAFFIC
FIGURE 6



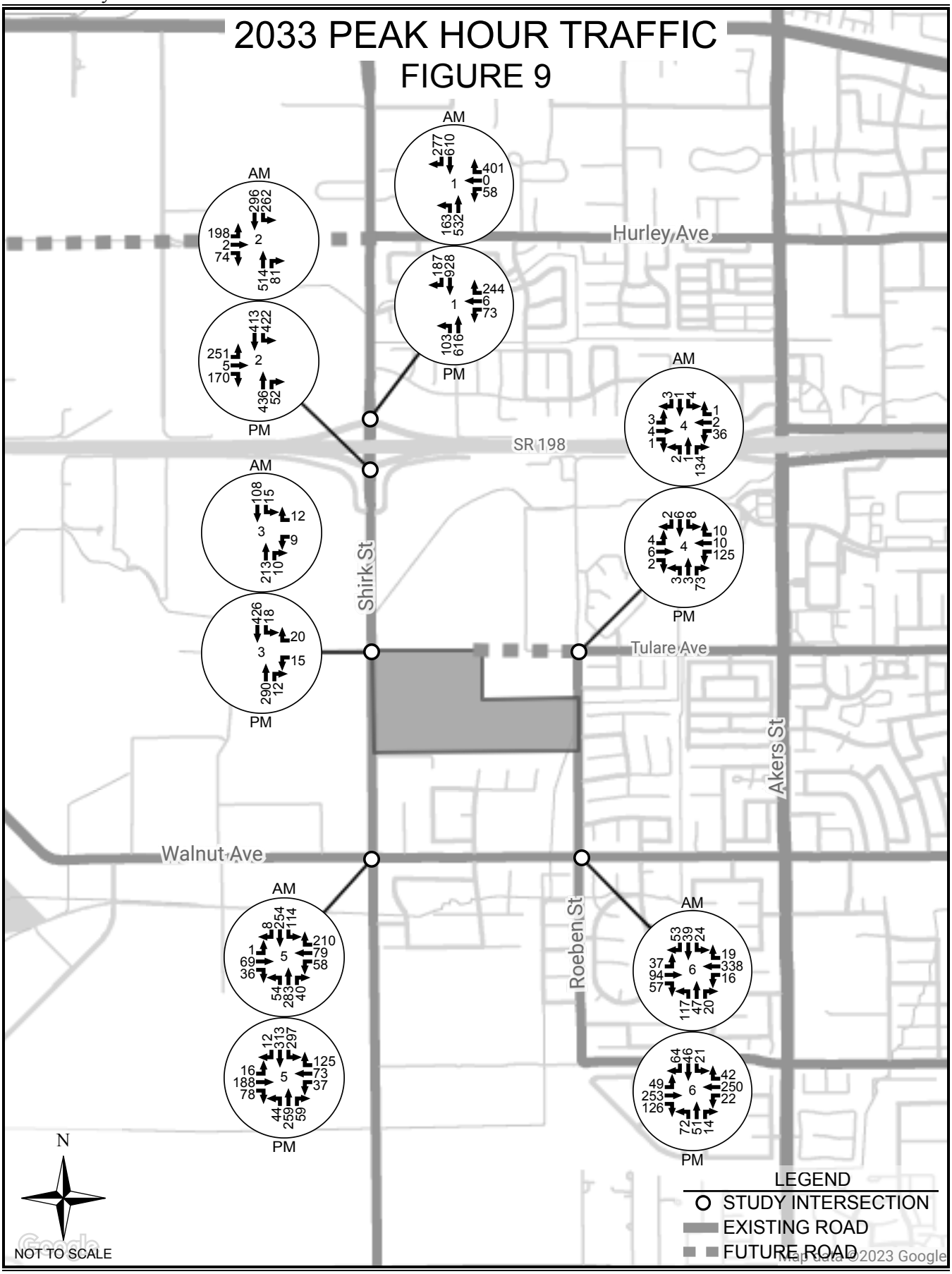
2028 PEAK HOUR TRAFFIC
FIGURE 7



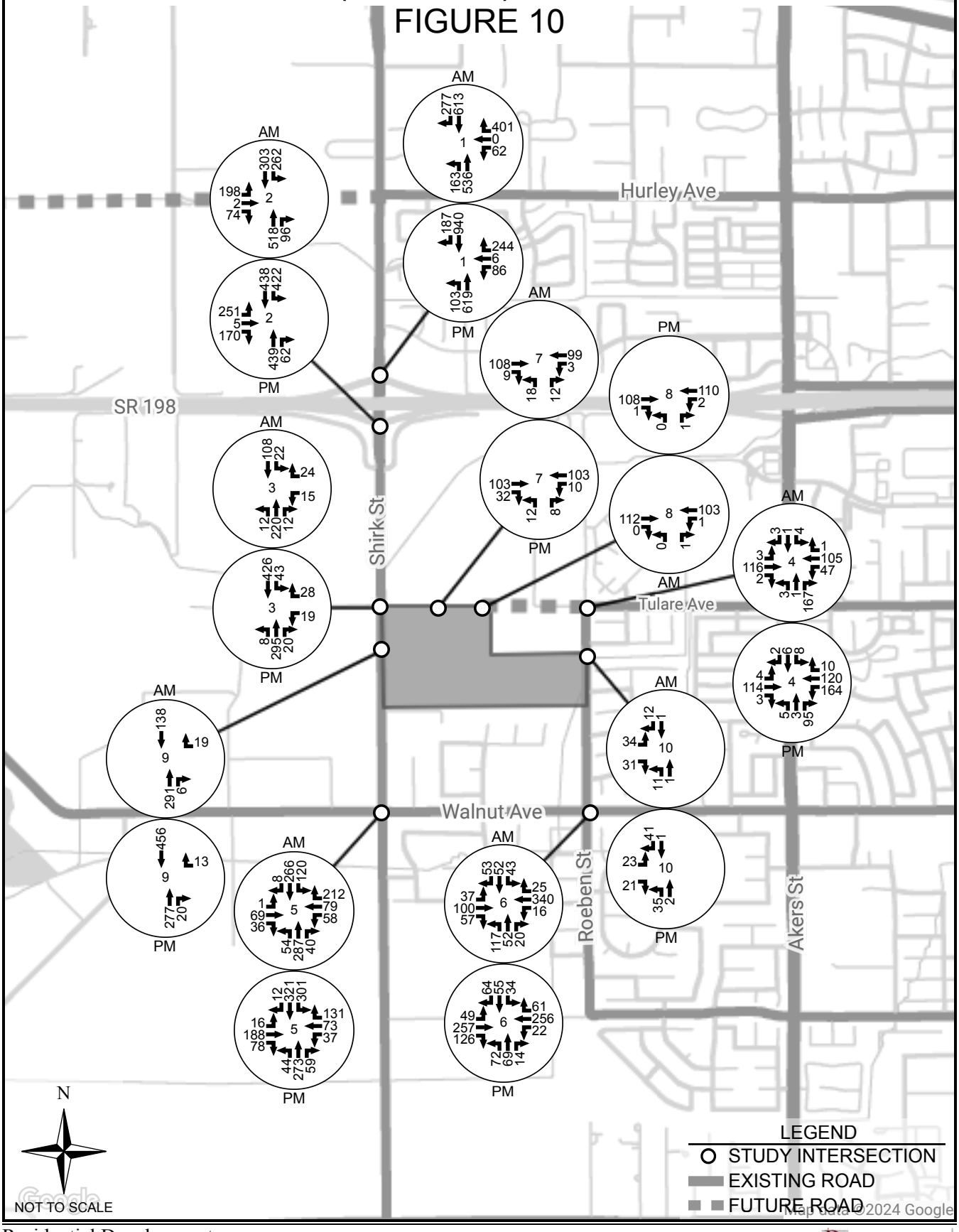
2028+PROJECT PEAK HOUR TRAFFIC
FIGURE 8



2033 PEAK HOUR TRAFFIC
FIGURE 9



2033+PROJECT (FUTURE) PEAK HOUR TRAFFIC
FIGURE 10



INTERSECTION ANALYSIS

A capacity analysis of the study intersections was conducted using Synchro software from Trafficware. Level of service for the study intersections is presented in Tables 3a and 3b. The level of service goal for roadway facilities in Visalia is LOS D.

Criteria for intersection level of service (LOS) are shown in the tables below.

LEVEL OF SERVICE CRITERIA
UNSIGNALIZED INTERSECTION

Average Control Delay (sec/veh)	Level of Service	Expected Delay to Minor Street Traffic
≤ 10	A	Little or no delay
> 10 and ≤ 15	B	Short traffic delays
> 15 and ≤ 25	C	Average traffic delays
> 25 and ≤ 35	D	Long traffic delays
> 35 and ≤ 50	E	Very long traffic delays
> 50	F	Extreme delays

LEVEL OF SERVICE CRITERIA
SIGNALIZED INTERSECTIONS

Volume/Capacity	Control Delay (sec/veh)	Level of Service
< 0.60	≤ 10	A
0.61 - 0.70	> 10 and ≤ 20	B
0.71 - 0.80	> 20 and ≤ 35	C
0.81 - 0.90	> 35 and ≤ 55	D
0.91 - 1.00	> 55 and ≤ 80	E
> 1.0	> 80	F

Table 3a
PM Intersection Level of Service

#	Intersection	Control Type	2023	2028	2028+ Project	2028+ Project w/Mitigation	2033	2033+ Project	2033+ Project w/Mitigation
1	Shirk St & SR 198 WB Ramps	AWSC	E (43.0)	F (118.7)	F (204.8)	-	F (238.1)	F (>300)	-
		Signal	-	-	-	B	-	-	B
2	Shirk St & SR 198 EB Ramps	AWSC	C	D (27.2)	D (28.1)	-	F (52.2)	F (56.2)	-
		Signal	-	-	-	B	-	-	B
3	Shirk St & Tulare Ave	WB	-	B	B	-	B	B	-
4	Roeben St & Tulare Ave	WB EB	A -	B A	B A	- -	B B	B B	- -
5	Shirk St & Walnut Ave	AWSC	C	E (44.7)	E (49.0)	-	F (114.2)	E (126.0)	-
		Signal	-	-	-	B	-	-	C
6	Roeben St & Walnut Ave	AWSC	B	B	B	-	B	C	-
7	Street 3 & Tulare Ave	NB	-	-	A	-	-	A	-
8	Street 6 & Tulare Ave	NB	-	-	-	-	-	A	-
9	Avenue 4 & Shirk St	WB	-	-	A	-	-	B	-
10	Avenue 6 & Roeben St	EB	-	-	A	-	-	A	-

Table 3b
AM Intersection Level of Service

#	Intersection	Control Type	2023	2028	2028+ Project	2028+ Project w/Mitigation	2033	2033+ Project	2033+ Project w/Mitigation
1	Shirk St & SR 198 WB Ramps	AWSC	C	F (50.6)	F (131.3)	-	F (114.6)	F (238.2)	-
		Signal	-	-	-	B	-	-	C
2	Shirk St & SR 198 EB Ramps	AWSC	B	C	C	-	E (37.0)	E (38.2)	-
		Signal	-	-	-	B	-	-	B
3	Shirk St & Tulare Ave	WB	-	B	B	-	B	A	-
4	Roeben St & Tulare Ave	WB EB	A -	B A	B A	- -	B A	B A	- -
5	Shirk St & Walnut Ave	AWSC	B	C	C	-	D (25.5)	D (27.9)	-
		Signal	-	-	-	B	-	-	B
6	Roeben St & Walnut Ave	AWSC	B	B	B	-	B	C	-
7	Street 3 & Tulare Ave	NB	-	-	A	-	-	A	-
8	Street 6 & Tulare Ave	NB	-	-	-	-	-	A	-
9	Avenue 4 & Shirk St	WB	-	-	A	-	-	B	-
10	Avenue 6 & Roeben St	EB	-	-	A	-	-	A	-

TRAFFIC SIGNAL WARRANT ANALYSIS

In accordance with the City of Visalia policy, intersections were evaluated for Warrant #1 (Eight-Hour Vehicular Volume) as defined by the California Manual on Uniform Traffic Control Devices (MUTCD). Signal warrant analysis results are shown in Table 4. Traffic signals would be considered at intersections which meet the signal warrant and are not able to be mitigated by adding capacity to intersections with additional lanes. Warrant analysis was performed on arterial and collector street intersections. Count data for signal warrant analysis was obtained in May 2021 and November 2023. The count data is included in the appendix.

Table 4
8-Hour Traffic Signal Warrants

#	Intersection	2023	2023+ Project	2028	2028+ Project	2033	2033+ Project
1	SR 198 WB Off-Ramp & Shirk Rd	YES	YES	YES	YES	YES	YES
2	SR 198 EB Off-Ramp & Shirk Rd	YES	YES	YES	YES	YES	YES
3	Shirk St & Tulare Ave	-	-	NO	NO	NO	NO
4	Roeben St & Tulare Ave	NO	NO	NO	NO	NO	NO
5	Shirk St & Walnut Ave	NO	NO	YES	YES	YES	YES
6	Roeben St & Walnut Ave	NO	NO	NO	NO	NO	NO

QUEUE LENGTH ANALYSIS

Existing volumes and future volumes, both with and without project traffic were used to analyze turn movements at all intersections. Queue length analysis was conducted using the equations provided in the City of Visalia Traffic Guidelines. The results of the queue length analysis are shown in Tables 5a and 5b below. The length of the queue is shown in feet under the Queue column.

A review of the data shows that there are a small number of turn lanes which have longer queues than available storage length (shown in bold). With the addition of project traffic, some queue lengths (which exceed available storage) are increased from existing or future base traffic, but by 9 feet or less. This is less than the average car length. Therefore, project traffic queue length impacts are minor and no mitigation was recommended. The intersection of Shirk Street & Walnut Avenue does not have any dedicated turn lanes; therefore, no queue analysis was performed.

Table 5a
PM Queue Length Analysis

#	Intersection	Turn Movement	Storage Length	2023		2023+Project		2028		2028+Project		2033		2033+Project	
				VOL	QUEUE	VOL	QUEUE	VOL	QUEUE	VOL	QUEUE	VOL	QUEUE	VOL	QUEUE
1	Shirk St & SR 198 WB Ramps	WBL	350	61	25	64	27	67	28	74	31	73	30	86	36
		WBR	350	205	171	205	171	224	187	224	187	244	203	244	203
		NBL	200	83	35	83	35	92	38	92	38	103	86	103	86
		SBL	150	142	59	142	59	163	68	163	68	187	**156**	187	**156**
2	Shirk St & SR 198 EB Ramps	EBR	220	155	129	155	129	163	136	163	136	170	142	170	142
		NBR	90	40	17	50	21	46	19	51	21	52	43	62	52
		SBL	400	341	284	341	284	379	316	379	316	422	352	422	352
3	Shirk St & Tulare Ave	WBL	100	-	-	-	-	15	13	17	14	15	13	18	15
		WBR	50	-	-	-	-	20	17	26	22	20	17	28	23
		NBR	50	-	-	-	-	12	10	15	13	12	10	16	13
		SBL	100	-	-	-	-	18	15	32	27	18	15	34	28
4	Roeben St & Tulare Ave	EBL	100	-	-	-	-	4	2	4	2	4	3	8	7
		EBR	50	-	-	-	-	2	2	2	2	2	2	5	4
		WBL	100	108	45	124	52	116	48	123	51	125	**104**	136	**113**
		WBR	50	9	8	9	8	10	8	10	8	10	8	10	8
		NBL	100	-	-	-	-	3	1	3	1	3	3	8	7
		NBR	100	61	51	71	59	67	56	76	63	73	61	79	66
		SBL	100	7	3	7	3	8	3	3	1	8	7	8	7
		SBR	50	-	-	-	-	2	2	3	3	2	2	9	8
6	Roeben St & Walnut Ave	EBR[1]	-	120	50	120	50	123	103	123	103	126	105	126	105
		WBR[1]	-	29	12	47	20	35	29	35	29	42	35	53	44
		NBR[1]	-	12	5	12	5	13	11	13	11	14	12	14	12

[1]There are no physical limitations to the storage length

Table 5b
AM Queue Length Analysis

#	Intersection	Turn Movement	Storage Length	2023		2023+Project		2028		2028+Project		2033		2033+Project	
				VOL	QUEUE	VOL	QUEUE	VOL	QUEUE	VOL	QUEUE	VOL	QUEUE	VOL	QUEUE
1	Shirk St & SR 198 WB Ramps	WBL	350	49	20	53	22	53	22	54	23	58	24	62	26
		WBR	350	337	281	337	281	368	307	368	307	401	334	401	334
		NBL	200	132	55	132	55	147	61	147	61	163	136	163	136
		SBL	150	210	88	210	88	241	100	241	100	277	**231**	277	**231**
2	Shirk St & SR 198 EB Ramps	EBR	220	67	56	67	56	70	58	70	58	74	62	74	62
		NBR	90	62	26	77	32	71	30	76	32	81	68	96	80
		SBL	400	212	177	212	177	236	197	236	197	262	218	262	218
3	Shirk St & Tulare Ave	WBL	100	-	-	-	-	9	8	12	10	9	8	13	11
		WBR	50	-	-	-	-	12	10	16	13	12	10	23	19
		NBR	50	-	-	-	-	10	8	11	9	10	8	11	9
		SBL	100	-	-	-	-	15	13	19	16	15	13	20	17
4	Tulare Ave & Roeben St	EBL	100	-	-	-	-	3	1	3	1	3	3	9	8
		EBR	50	-	-	-	-	1	1	1	1	1	1	5	4
		WBL	100	31	13	35	15	33	14	35	15	36	30	40	33
		WBR	50	1	1	1	1	1	1	1	1	1	1	1	1
		NBL	100	-	-	-	-	2	1	2	1	2	2	3	3
		NBR	120	113	94	121	101	123	103	136	113	134	112	142	118
		SBL	100	3	1	3	1	3	1	3	1	4	3	4	3
		SBR	50	-	-	-	-	3	3	3	3	3	3	5	4
6	Roeben St & Walnut Ave	EBR[1]	-	54	23	54	23	55	46	55	46	57	48	57	48
		WBR[1]	-	13	5	17	7	16	13	16	13	19	16	23	19
		NBR[1]	-	17	7	17	7	18	15	18	15	20	17	20	17

[1]There are no physical limitations to the storage length

DECELERATION LANE ANALYSIS

A review of the project intersection number 7, 8, 9, and 10 was conducted to determine if they meet the deceleration lane criteria in accordance with the traffic study guidelines. The following table shows the intersection and whether or not the intersection meets any of the four deceleration lane criteria:

Intersection	5,000 ADT	35mph Posted Speed Limit	1,000 ADT Using Driveways	40 Right Turns in Peak Hour
7	No	-[1]	No	No
8	No	-[1]	No	No
9	Yes	-[1]	No	No
10	No	-[1]	No	No

[1]No posted speed limit. For Shirk Street, it is currently considered 55 mph. However, it is not known what the posted speed limit will be when development builds out.

Intersection 9 is the only intersection that meets one of the criteria. Due to the low number of right turns into the development at intersection 9 (20 in the PM peak hour), it is recommended that a striped right

turn deceleration lane be installed. The following table shows the right turn length recommended based on storage length (queue) length and deceleration length.

Intersection	Int #	Movement	Right Turn Volume (veh/hr)	Speed Limit (mph)	Storage length (ft)	Decel Lane Length (ft)[1]	Recommended length (ft)
Avenue 4 & Shirk St	9	NBR	20	45[2]	17	275	300

[1]From Table 405.2B in the Caltrans Highway Design Manual

[2]It is assumed that the speed limit will be 45mph once Shirk is built to ultimate width based on other portions of Shirk St

ACCIDENT INVESTIGATION

City Intersections

Accident data was investigated from the SWITRS database for the previous two years. Upon review of the data provided, it was determined that there was a total of one accident located within City of Visalia jurisdiction intersections, which was located at Shirk Street & Walnut Avenue (driver DUI).

Caltrans Safety Crash Analysis

Traffic accident data was received from Caltrans on April 17, 2024 for State Route 198 Westbound and Eastbound ramps at Shirk Road. Between the years 2020 and 2023, there were a total of two accidents, both on the SR 198 eastbound oof ramp to Shirk Road. Both accidents were related to speeding, with one resulting in a rear-end collision and one resulting in a collision with a dike or curb. There were no other accidents reported. The total collisions for each location shown in the TASAS report provided show the actual rates are below the average rates for all facilities.

The relatively low volume of traffic which will be added to the ramps by the project will not be expected to increase accidents rates on the ramps as there are no specific patterns of accidents that the project would increase. Additionally, as outlined in the mitigation shown in Table 6, the addition of signals at the ramps will provide an additional safety measure with the signal control.

The *Traffic Accident Surveillance and Analysis System (TASAS) Collision Data Summary*, provided by Caltrans, is included in the appendix.

MITIGATION

Based on the results of the Level of Service (LOS) analysis and eight-hour vehicular volume warrant, and the City of Visalia thresholds for mitigation, it is recommended that signals be constructed at the three intersections identified in Table 6 in order to operate at an acceptable level of service by the year 2033. The project's fair share percentage for the improvements identified is included in Table 6.

Table 6
Future Intersection Improvements

#	Intersection	Improvements Recommended by 2028	Improvements Recommended by 2033	Fair Share Percentage
1	Shirk St & SR 198 WB Ramps	Signal	-	9.71%
2	Shirk St & SR 198 EB Ramps	Signal	-	18.00%
5	Shirk St & Walnut Ave	Signal	-	13.66%

VEHICLE MILES TRAVELED (VMT) ANALYSIS

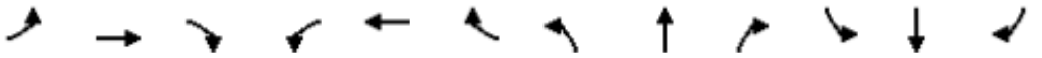
An evaluation of project vehicle miles traveled (VMT) was conducted based on VMT analysis guidelines adopted by the City of Visalia. The guidelines provide "screening thresholds" for identifying whether a land use project should be expected to result in a less than significant transportation impact under CEQA. Projects meeting one or more of these criteria would not be required to undergo a detailed VMT analysis. One of the screening criteria is "Project Location Screening". Development projects that are located in a low VMT zone would be expected to generate similar low vehicle miles travelled. Using the City of Visalia online VMT screening application, the project was determined to be located in TAZ 1358. Utilizing the "VMT Per Capita" metric due to residential project, the average VMT was determined to be 8.61 miles per capita. The average VMT per capita for Tulare County is 11.9. Therefore, the project is determined to be in a low VMT zone and the project would be expected to result in a less than significant transportation impact under CEQA.

A printout of the application findings and mapping is included in the appendix.

REFERENCES

1. Annual Traffic Census, TCAG
2. Highway Capacity Manual, Special Report 209, Transportation Research Board
3. California Manual on Uniform Traffic Control Devices for Streets and Highways, 2014 Edition, Federal Highway Administration (FHA)
4. Trip Generation, 11th Edition, Institute of Transportation Engineers (ITE)
5. Visalia General Plan, October 2014

APPENDIX



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	49	0	337	132	349	0	0	361	210
Future Volume (vph)	0	0	0	49	0	337	132	349	0	0	361	210
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		350	200		0	80		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1458	1630	1863	0	0	1863	1458
Flt Permitted					0.950		0.950					
Satd. Flow (perm)	0	0	0	0	1770	1458	1630	1863	0	0	1863	1458
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1153			2492			645			504	
Travel Time (s)		14.3			30.9			8.0			6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	53	0	366	143	379	0	0	392	228
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	53	366	143	379	0	0	392	228
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

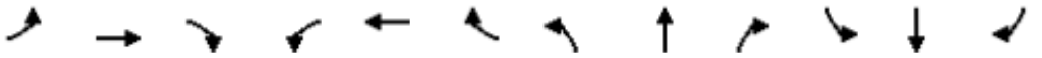
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	23
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	49	0	337	132	349	0	0	361	210
Future Vol, veh/h	0	0	0	49	0	337	132	349	0	0	361	210
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	53	0	366	143	379	0	0	392	228
Number of Lanes	0	0	0	0	1	1	1	1	0	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay, s/veh	22	23.8	22.9
HCM LOS	C	C	C

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	132	349	49	337	361	210
LT Vol	132	0	49	0	0	0
Through Vol	0	349	0	0	361	0
RT Vol	0	0	0	337	0	210
Lane Flow Rate	143	379	53	366	392	228
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.302	0.743	0.119	0.692	0.76	0.397
Departure Headway (Hd)	7.565	7.052	8.026	6.799	6.974	6.256
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	476	512	447	531	518	575
Service Time	5.303	4.79	5.76	4.532	4.712	3.993
HCM Lane V/C Ratio	0.3	0.74	0.119	0.689	0.757	0.397
HCM Control Delay, s/veh	13.6	27.6	11.8	23.5	28.6	13.1
HCM Lane LOS	B	D	B	C	D	B
HCM 95th-tile Q	1.3	6.3	0.4	5.3	6.6	1.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	2	67	0	0	0	0	302	62	212	194	0
Future Volume (vph)	180	2	67	0	0	0	0	302	62	212	194	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		220	0		0	0		90	150		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1076			2120			4993			645	
Travel Time (s)		13.3			26.3			61.9			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	2	73	0	0	0	0	328	67	230	211	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	198	73	0	0	0	0	328	67	230	211	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

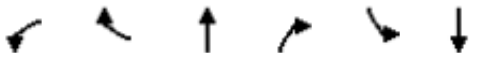
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	13.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	180	2	67	0	0	0	0	302	62	212	194	0
Future Vol, veh/h	180	2	67	0	0	0	0	302	62	212	194	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	196	2	73	0	0	0	0	328	67	230	211	0
Number of Lanes	0	1	1	0	0	0	0	1	1	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	13.3	15	13
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	99%	0%	100%	0%
Vol Thru, %	100%	0%	1%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	302	62	182	67	212	194
LT Vol	0	0	180	0	212	0
Through Vol	302	0	2	0	0	194
RT Vol	0	62	0	67	0	0
Lane Flow Rate	328	67	198	73	230	211
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.556	0.101	0.396	0.121	0.417	0.352
Departure Headway (Hd)	6.098	5.387	7.201	5.989	6.518	6.01
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	591	664	500	598	553	597
Service Time	3.844	3.133	4.948	3.735	4.263	3.755
HCM Lane V/C Ratio	0.555	0.101	0.396	0.122	0.416	0.353
HCM Control Delay, s/veh	16.3	8.7	14.6	9.6	13.9	12
HCM Lane LOS	C	A	B	A	B	B
HCM 95th-tile Q	3.4	0.3	1.9	0.4	2	1.6



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	31	1	1	113	3	1
Future Volume (vph)	31	1	1	113	3	1
Ideal Flow (vphpl)	1750	1750	1900	1750	1750	1900
Storage Length (ft)	100	50		50	100	
Storage Lanes	1	0		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1630	1458	1863	1458	1630	1863
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1630	1458	1863	1458	1630	1863
Link Speed (mph)	55		55			55
Link Distance (ft)	1533		2637			1348
Travel Time (s)	19.0		32.7			16.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	34	1	1	123	3	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	34	1	1	123	3	1
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.00	1.11	1.11	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	17.6%	ICU Level of Service	A
Analysis Period (min)	15		

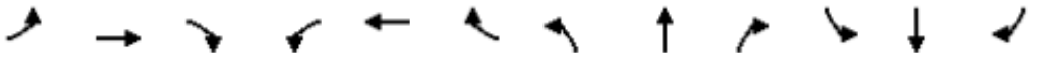
Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	1	1	113	3	1
Future Vol, veh/h	31	1	1	113	3	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	50	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	1	1	123	3	1

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	8	1	0	0	124	0
Stage 1	1	-	-	-	-	-
Stage 2	7	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	1013	1084	-	-	1463	-
Stage 1	1022	-	-	-	-	-
Stage 2	1016	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1011	1084	-	-	1463	-
Mov Cap-2 Maneuver	1011	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	1014	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	8.7	0	5.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	1011	1084	1463	-
HCM Lane V/C Ratio	-	-	0.033	0.001	0.002	-
HCM Control Delay (s/veh)	-	-	8.7	8.3	7.5	-
HCM Lane LOS	-	-	A	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	48	30	55	75	200	42	173	31	89	155	6
Future Volume (vph)	1	48	30	55	75	200	42	173	31	89	155	6
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.948			0.918			0.983			0.997	
Flt Protected		0.999			0.992			0.991			0.982	
Satd. Flow (prot)	0	1764	0	0	1696	0	0	1815	0	0	1824	0
Flt Permitted		0.999			0.992			0.991			0.982	
Satd. Flow (perm)	0	1764	0	0	1696	0	0	1815	0	0	1824	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1796			2695			2949			4993	
Travel Time (s)		22.3			33.4			36.6			61.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	52	33	60	82	217	46	188	34	97	168	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	86	0	0	359	0	0	268	0	0	272	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

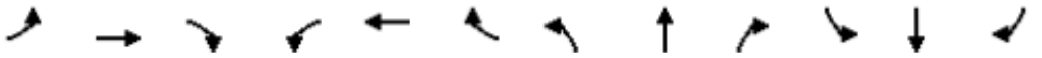
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 57.8%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	13
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	48	30	55	75	200	42	173	31	89	155	6
Future Vol, veh/h	1	48	30	55	75	200	42	173	31	89	155	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	52	33	60	82	217	46	188	34	97	168	7
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	9.9	14.1	12.6	13
HCM LOS	A	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	1%	17%	36%
Vol Thru, %	70%	61%	23%	62%
Vol Right, %	13%	38%	61%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	246	79	330	250
LT Vol	42	1	55	89
Through Vol	173	48	75	155
RT Vol	31	30	200	6
Lane Flow Rate	267	86	359	272
Geometry Grp	1	1	1	1
Degree of Util (X)	0.416	0.14	0.525	0.429
Departure Headway (Hd)	5.597	5.878	5.267	5.681
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	639	605	682	630
Service Time	3.657	3.958	3.324	3.741
HCM Lane V/C Ratio	0.418	0.142	0.526	0.432
HCM Control Delay, s/veh	12.6	9.9	14.1	13
HCM Lane LOS	B	A	B	B
HCM 95th-tile Q	2	0.5	3.1	2.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	89	54	11	168	13	101	35	17	21	29	46
Future Volume (vph)	35	89	54	11	168	13	101	35	17	21	29	46
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		50	0		140	0		50	0		0
Storage Lanes	0		1	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.936	
Flt Protected		0.986			0.997			0.964			0.989	
Satd. Flow (prot)	0	1837	1458	0	1857	1458	0	1796	1458	0	1724	0
Flt Permitted		0.986			0.997			0.964			0.989	
Satd. Flow (perm)	0	1837	1458	0	1857	1458	0	1796	1458	0	1724	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2695			2169			2270			2637	
Travel Time (s)		33.4			26.9			28.1			32.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	38	97	59	12	183	14	110	38	18	23	32	50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	135	59	0	195	14	0	148	18	0	105	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

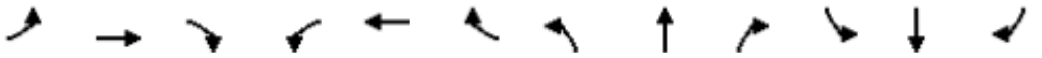
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	40.2%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	89	54	11	168	13	101	35	17	21	29	46
Future Vol, veh/h	35	89	54	11	168	13	101	35	17	21	29	46
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	97	59	12	183	14	110	38	18	23	32	50
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay, s/veh	9.4	10.5	10.6	9.8
HCM LOS	A	B	B	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	74%	0%	28%	0%	6%	0%	22%
Vol Thru, %	26%	0%	72%	0%	94%	0%	30%
Vol Right, %	0%	100%	0%	100%	0%	100%	48%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	136	17	124	54	179	13	96
LT Vol	101	0	35	0	11	0	21
Through Vol	35	0	89	0	168	0	29
RT Vol	0	17	0	54	0	13	46
Lane Flow Rate	148	18	135	59	195	14	104
Geometry Grp	5	5	5	5	5	5	4b
Degree of Util (X)	0.249	0.026	0.213	0.079	0.3	0.019	0.165
Departure Headway (Hd)	6.061	4.981	5.68	4.831	5.547	4.809	5.686
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	587	709	625	732	642	735	634
Service Time	3.861	2.78	3.475	2.625	3.339	2.601	3.686
HCM Lane V/C Ratio	0.252	0.025	0.216	0.081	0.304	0.019	0.164
HCM Control Delay, s/veh	10.9	7.9	10	8	10.7	7.7	9.8
HCM Lane LOS	B	A	A	A	B	A	A
HCM 95th-tile Q	1	0.1	0.8	0.3	1.3	0.1	0.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	53	0	368	147	431	0	0	469	241
Future Volume (vph)	0	0	0	53	0	368	147	431	0	0	469	241
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		350	200		0	80		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1458	1630	1863	0	0	1863	1458
Flt Permitted					0.950		0.950					
Satd. Flow (perm)	0	0	0	0	1770	1458	1630	1863	0	0	1863	1458
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1153			2492			645			504	
Travel Time (s)		14.3			30.9			8.0			6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	58	0	400	160	468	0	0	510	262
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	58	400	160	468	0	0	510	262
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

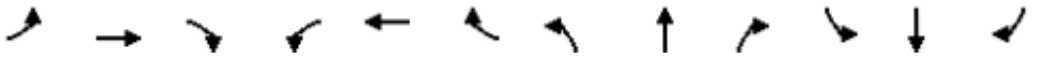
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.5%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	50.6
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	53	0	368	147	431	0	0	469	241
Future Vol, veh/h	0	0	0	53	0	368	147	431	0	0	469	241
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	58	0	400	160	468	0	0	510	262
Number of Lanes	0	0	0	0	1	1	1	1	0	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay, s/veh	31.6	50.3	62.2
HCM LOS	D	F	F

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	147	431	53	368	469	241
LT Vol	147	0	53	0	0	0
Through Vol	0	431	0	0	469	0
RT Vol	0	0	0	368	0	241
Lane Flow Rate	160	468	58	400	510	262
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.354	0.972	0.136	0.806	1.063	0.494
Departure Headway (Hd)	8.166	7.649	8.658	7.42	7.508	6.786
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	443	478	417	492	489	534
Service Time	5.866	5.349	6.358	5.12	5.208	4.486
HCM Lane V/C Ratio	0.361	0.979	0.139	0.813	1.043	0.491
HCM Control Delay, s/veh	15.3	62.2	12.7	34.3	86	15.9
HCM Lane LOS	C	F	B	D	F	C
HCM 95th-tile Q	1.6	12.3	0.5	7.6	15.8	2.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	189	2	70	0	0	0	0	394	71	236	240	0
Future Volume (vph)	189	2	70	0	0	0	0	394	71	236	240	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		220	0		0	0		90	150		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1076			2120			2339			645	
Travel Time (s)		13.3			26.3			29.0			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	205	2	76	0	0	0	0	428	77	257	261	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	207	76	0	0	0	0	428	77	257	261	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

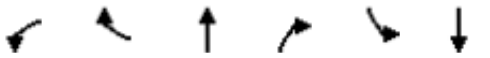
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.5%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	18.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	189	2	70	0	0	0	0	394	71	236	240	0
Future Vol, veh/h	189	2	70	0	0	0	0	394	71	236	240	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	205	2	76	0	0	0	0	428	77	257	261	0
Number of Lanes	0	1	1	0	0	0	0	1	1	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	14.7	23.5	15.1
HCM LOS	B	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	99%	0%	100%	0%
Vol Thru, %	100%	0%	1%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	394	71	191	70	236	240
LT Vol	0	0	189	0	236	0
Through Vol	394	0	2	0	0	240
RT Vol	0	71	0	70	0	0
Lane Flow Rate	428	77	208	76	257	261
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.754	0.121	0.44	0.136	0.485	0.456
Departure Headway (Hd)	6.338	5.626	7.638	6.42	6.806	6.296
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	570	634	471	556	528	569
Service Time	4.102	3.389	5.406	4.187	4.571	4.062
HCM Lane V/C Ratio	0.751	0.121	0.442	0.137	0.487	0.459
HCM Control Delay, s/veh	26.1	9.2	16.3	10.2	15.9	14.3
HCM Lane LOS	D	A	C	B	C	B
HCM 95th-tile Q	6.6	0.4	2.2	0.5	2.6	2.4



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	9	12	213	10	15	108
Future Volume (vph)	9	12	213	10	15	108
Ideal Flow (vphpl)	1750	1750	1900	1750	1750	1900
Storage Length (ft)	100	50		50	100	
Storage Lanes	1	0		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1630	1458	1863	1458	1630	1863
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1630	1458	1863	1458	1630	1863
Link Speed (mph)	55		55			55
Link Distance (ft)	2679		2654			2339
Travel Time (s)	33.2		32.9			29.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	13	232	11	16	117
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	13	232	11	16	117
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.00	1.11	1.11	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	23.5%	ICU Level of Service	A
Analysis Period (min)	15		

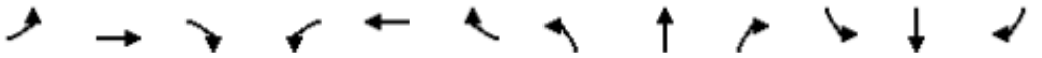
Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	12	213	10	15	108
Future Vol, veh/h	9	12	213	10	15	108
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	50	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	13	232	11	16	117

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	381	232	0	0	243	0
Stage 1	232	-	-	-	-	-
Stage 2	149	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	621	807	-	-	1323	-
Stage 1	807	-	-	-	-	-
Stage 2	879	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	614	807	-	-	1323	-
Mov Cap-2 Maneuver	614	-	-	-	-	-
Stage 1	807	-	-	-	-	-
Stage 2	868	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	10.1	0	0.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	614	807	1323	-
HCM Lane V/C Ratio	-	-	0.016	0.016	0.012	-
HCM Control Delay (s/veh)	-	-	11	9.5	7.8	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	80	1	33	82	1	2	1	123	3	1	3
Future Volume (vph)	3	80	1	33	82	1	2	1	123	3	1	3
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	100		50	100		50	100		50	100		50
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2679			1533			2637			1348	
Travel Time (s)		33.2			19.0			32.7			16.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	87	1	36	89	1	2	1	134	3	1	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	3	87	1	36	89	1	2	1	134	3	1	3
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.8%		ICU Level of Service A	
Analysis Period (min) 15			

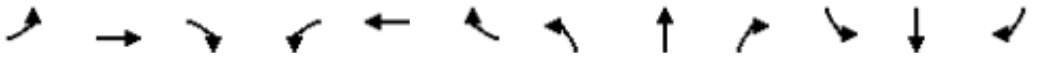
Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	80	1	33	82	1	2	1	123	3	1	3
Future Vol, veh/h	3	80	1	33	82	1	2	1	123	3	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	50	100	-	50	100	-	50	100	-	50
Veh in Median Storage, #	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	87	1	36	89	1	2	1	134	3	1	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	124	146	1	58	15	1	4	0	0	135	0	0
Stage 1	7	7	-	5	5	-	-	-	-	-	-	-
Stage 2	117	139	-	53	10	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	850	745	1084	939	879	1084	1618	-	-	1449	-	-
Stage 1	1015	890	-	1017	892	-	-	-	-	-	-	-
Stage 2	888	782	-	960	887	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	781	743	1084	852	876	1084	1618	-	-	1449	-	-
Mov Cap-2 Maneuver	781	743	-	852	876	-	-	-	-	-	-	-
Stage 1	1014	888	-	1016	891	-	-	-	-	-	-	-
Stage 2	797	781	-	863	885	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.4	9.5	0.1	3.2
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1618	-	-	781	743	1084	852	876	1084	1449	-	-
HCM Lane V/C Ratio	0.001	-	-	0.004	0.117	0.001	0.042	0.102	0.001	0.002	-	-
HCM Control Delay (s/veh)	7.2	-	-	9.6	10.5	8.3	9.4	9.6	8.3	7.5	-	-
HCM Lane LOS	A	-	-	A	B	A	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.4	0	0.1	0.3	0	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	58	33	56	77	205	48	221	35	101	198	7
Future Volume (vph)	1	58	33	56	77	205	48	221	35	101	198	7
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.951			0.918			0.984			0.997	
Flt Protected					0.992			0.992			0.984	
Satd. Flow (prot)	0	1771	0	0	1696	0	0	1818	0	0	1827	0
Flt Permitted					0.992			0.992			0.984	
Satd. Flow (perm)	0	1771	0	0	1696	0	0	1818	0	0	1827	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1796			2695			2949			2654	
Travel Time (s)		22.3			33.4			36.6			32.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	63	36	61	84	223	52	240	38	110	215	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	100	0	0	368	0	0	330	0	0	333	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

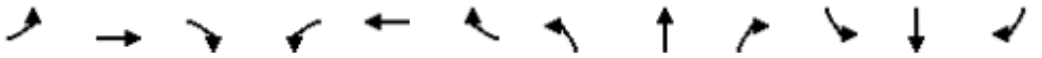
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 63.7%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	16.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	58	33	56	77	205	48	221	35	101	198	7
Future Vol, veh/h	1	58	33	56	77	205	48	221	35	101	198	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	63	36	61	84	223	52	240	38	110	215	8
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	11.1	17.1	16.3	16.8
HCM LOS	B	C	C	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	16%	1%	17%	33%
Vol Thru, %	73%	63%	23%	65%
Vol Right, %	12%	36%	61%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	304	92	338	306
LT Vol	48	1	56	101
Through Vol	221	58	77	198
RT Vol	35	33	205	7
Lane Flow Rate	330	100	367	333
Geometry Grp	1	1	1	1
Degree of Util (X)	0.553	0.183	0.595	0.563
Departure Headway (Hd)	6.021	6.593	5.826	6.099
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	598	543	621	592
Service Time	4.065	4.651	3.865	4.144
HCM Lane V/C Ratio	0.552	0.184	0.591	0.563
HCM Control Delay, s/veh	16.3	11.1	17.1	16.8
HCM Lane LOS	C	B	C	C
HCM 95th-tile Q	3.4	0.7	3.9	3.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	91	55	13	238	16	109	41	18	23	34	50
Future Volume (vph)	36	91	55	13	238	16	109	41	18	23	34	50
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		50	0		140	0		50	0		0
Storage Lanes	0		1	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.937	
Flt Protected		0.986			0.997			0.965			0.989	
Satd. Flow (prot)	0	1837	1458	0	1857	1458	0	1798	1458	0	1726	0
Flt Permitted		0.986			0.997			0.965			0.989	
Satd. Flow (perm)	0	1837	1458	0	1857	1458	0	1798	1458	0	1726	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2695			2169			2270			2637	
Travel Time (s)		33.4			26.9			28.1			32.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	99	60	14	259	17	118	45	20	25	37	54
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	138	60	0	273	17	0	163	20	0	116	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

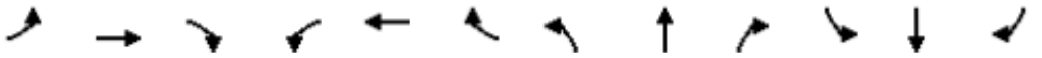
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	44.9%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	11.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	36	91	55	13	238	16	109	41	18	23	34	50
Future Vol, veh/h	36	91	55	13	238	16	109	41	18	23	34	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	39	99	60	14	259	17	118	45	20	25	37	54
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay, s/veh	9.9	12.7	11.4	10.5
HCM LOS	A	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	73%	0%	28%	0%	5%	0%	21%
Vol Thru, %	27%	0%	72%	0%	95%	0%	32%
Vol Right, %	0%	100%	0%	100%	0%	100%	47%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	150	18	127	55	251	16	107
LT Vol	109	0	36	0	13	0	23
Through Vol	41	0	91	0	238	0	34
RT Vol	0	18	0	55	0	16	50
Lane Flow Rate	163	20	138	60	273	17	116
Geometry Grp	5	5	5	5	5	5	4b
Degree of Util (X)	0.292	0.029	0.231	0.086	0.438	0.024	0.195
Departure Headway (Hd)	6.456	5.381	6.028	5.175	5.779	5.045	6.024
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	558	665	596	692	625	710	595
Service Time	4.19	3.114	3.76	2.906	3.507	2.773	4.06
HCM Lane V/C Ratio	0.292	0.03	0.232	0.087	0.437	0.024	0.195
HCM Control Delay, s/veh	11.8	8.3	10.6	8.4	13	7.9	10.5
HCM Lane LOS	B	A	B	A	B	A	B
HCM 95th-tile Q	1.2	0.1	0.9	0.3	2.2	0.1	0.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	54	0	368	147	432	0	0	472	241
Future Volume (vph)	0	0	0	54	0	368	147	432	0	0	472	241
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		350	200		0	80		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.949	
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1458	1630	1863	0	1716	1768	0
Flt Permitted					0.950		0.950					
Satd. Flow (perm)	0	0	0	0	1770	1458	1630	1863	0	1716	1768	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1153			2492			645			504	
Travel Time (s)		14.3			30.9			8.0			6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	59	0	400	160	470	0	0	513	262
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	59	400	160	470	0	0	775	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

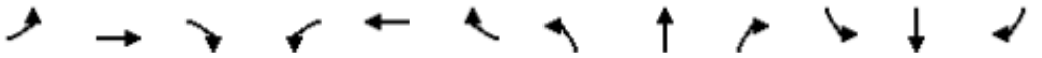
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	131.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	54	0	368	147	432	0	0	472	241
Future Vol, veh/h	0	0	0	54	0	368	147	432	0	0	472	241
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	59	0	400	160	470	0	0	513	262
Number of Lanes	0	0	0	0	1	1	1	1	0	1	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay, s/veh	28.9	43.6	263.1
HCM LOS	D	E	F

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	66%
Vol Right, %	0%	0%	0%	100%	0%	34%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	147	432	54	368	0	713
LT Vol	147	0	54	0	0	0
Through Vol	0	432	0	0	0	472
RT Vol	0	0	0	368	0	241
Lane Flow Rate	160	470	59	400	0	775
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.337	0.925	0.132	0.767	0	1.52
Departure Headway (Hd)	8.343	7.825	8.898	7.649	7.305	7.061
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	435	465	406	476	0	519
Service Time	6.043	5.525	6.598	5.349	5.07	4.826
HCM Lane V/C Ratio	0.368	1.011	0.145	0.84	0	1.493
HCM Control Delay, s/veh	15.2	53.2	12.9	31.3	10.1	263.1
HCM Lane LOS	C	F	B	D	N	F
HCM 95th-tile Q	1.5	10.7	0.5	6.6	0	40



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	189	2	70	0	0	0	0	395	76	236	244	0
Future Volume (vph)	189	2	70	0	0	0	0	395	76	236	244	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		220	0		0	0		90	150		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1076			2120			2339			645	
Travel Time (s)		13.3			26.3			29.0			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	205	2	76	0	0	0	0	429	83	257	265	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	207	76	0	0	0	0	429	83	257	265	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 56.4%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	18.4
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	189	2	70	0	0	0	0	395	76	236	244	0
Future Vol, veh/h	189	2	70	0	0	0	0	395	76	236	244	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	205	2	76	0	0	0	0	429	83	257	265	0
Number of Lanes	0	1	1	0	0	0	0	1	1	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	14.7	23.6	15.2
HCM LOS	B	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	99%	0%	100%	0%
Vol Thru, %	100%	0%	1%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	395	76	191	70	236	244
LT Vol	0	0	189	0	236	0
Through Vol	395	0	2	0	0	244
RT Vol	0	76	0	70	0	0
Lane Flow Rate	429	83	208	76	257	265
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.757	0.129	0.441	0.136	0.486	0.465
Departure Headway (Hd)	6.347	5.635	7.655	6.438	6.817	6.307
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	567	633	469	555	526	568
Service Time	4.112	3.399	5.425	4.206	4.582	4.073
HCM Lane V/C Ratio	0.757	0.131	0.443	0.137	0.489	0.467
HCM Control Delay, s/veh	26.4	9.2	16.4	10.2	15.9	14.5
HCM Lane LOS	D	A	C	B	C	B
HCM 95th-tile Q	6.7	0.4	2.2	0.5	2.6	2.4

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	12	16	216	11	19	108
Future Volume (vph)	12	16	216	11	19	108
Ideal Flow (vphpl)	1750	1750	1900	1750	1750	1900
Storage Length (ft)	100	50		50	100	
Storage Lanes	1	0		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1630	1458	1863	1458	1630	1863
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1630	1458	1863	1458	1630	1863
Link Speed (mph)	55		55			55
Link Distance (ft)	739		548			2339
Travel Time (s)	9.2		6.8			29.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	17	235	12	21	117
Shared Lane Traffic (%)						
Lane Group Flow (vph)	13	17	235	12	21	117
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.00	1.11	1.11	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	27.1%	ICU Level of Service	A
Analysis Period (min)	15		

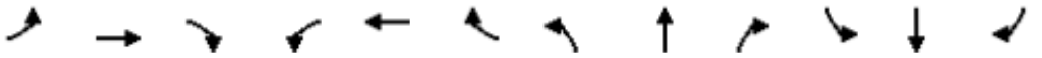
Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	16	216	11	19	108
Future Vol, veh/h	12	16	216	11	19	108
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	50	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	17	235	12	21	117

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	394	235	0	0	247	0
Stage 1	235	-	-	-	-	-
Stage 2	159	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	611	804	-	-	1319	-
Stage 1	804	-	-	-	-	-
Stage 2	870	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	601	804	-	-	1319	-
Mov Cap-2 Maneuver	601	-	-	-	-	-
Stage 1	804	-	-	-	-	-
Stage 2	856	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	10.2	0	1.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	601	804	1319	-
HCM Lane V/C Ratio	-	-	0.022	0.022	0.016	-
HCM Control Delay (s/veh)	-	-	11.1	9.6	7.8	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	84	1	35	82	1	2	1	136	3	1	3
Future Volume (vph)	3	84	1	35	82	1	2	1	136	3	1	3
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	100		50	100		50	100		50	100		50
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1360			1533			635			1348	
Travel Time (s)		16.9			19.0			7.9			16.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	91	1	38	89	1	2	1	148	3	1	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	3	91	1	38	89	1	2	1	148	3	1	3
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.9%		ICU Level of Service A	
Analysis Period (min) 15			

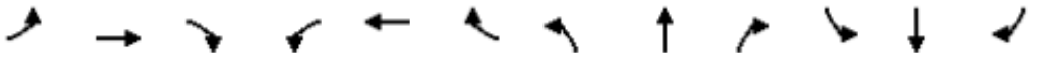
Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	84	1	35	82	1	2	1	136	3	1	3
Future Vol, veh/h	3	84	1	35	82	1	2	1	136	3	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	50	100	-	50	100	-	50	100	-	50
Veh in Median Storage, #	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	91	1	38	89	1	2	1	148	3	1	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	131	160	1	60	15	1	4	0	0	149	0	0
Stage 1	7	7	-	5	5	-	-	-	-	-	-	-
Stage 2	124	153	-	55	10	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	841	732	1084	936	879	1084	1618	-	-	1432	-	-
Stage 1	1015	890	-	1017	892	-	-	-	-	-	-	-
Stage 2	880	771	-	957	887	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	773	730	1084	843	876	1084	1618	-	-	1432	-	-
Mov Cap-2 Maneuver	773	730	-	843	876	-	-	-	-	-	-	-
Stage 1	1014	888	-	1016	891	-	-	-	-	-	-	-
Stage 2	790	770	-	856	885	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.5	9.6	0.1	3.2
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1618	-	-	773	730	1084	843	876	1084	1432	-	-
HCM Lane V/C Ratio	0.001	-	-	0.004	0.125	0.001	0.045	0.102	0.001	0.002	-	-
HCM Control Delay (s/veh)	7.2	-	-	9.7	10.6	8.3	9.5	9.6	8.3	7.5	-	-
HCM Lane LOS	A	-	-	A	B	A	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.4	0	0.1	0.3	0	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	58	33	56	77	206	48	222	35	105	208	7
Future Volume (vph)	1	58	33	56	77	206	48	222	35	105	208	7
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.951			0.918			0.985			0.997	
Flt Protected					0.992			0.992			0.984	
Satd. Flow (prot)	0	1771	0	0	1696	0	0	1820	0	0	1827	0
Flt Permitted					0.992			0.992			0.984	
Satd. Flow (perm)	0	1771	0	0	1696	0	0	1820	0	0	1827	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1796			2695			2949			2106	
Travel Time (s)		22.3			33.4			36.6			26.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	63	36	61	84	224	52	241	38	114	226	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	100	0	0	369	0	0	331	0	0	348	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

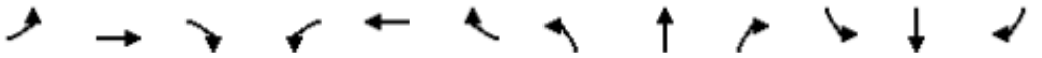
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 65.1%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	16.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	58	33	56	77	206	48	222	35	105	208	7
Future Vol, veh/h	1	58	33	56	77	206	48	222	35	105	208	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	63	36	61	84	224	52	241	38	114	226	8
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	11.3	17.5	16.6	17.7
HCM LOS	B	C	C	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	16%	1%	17%	33%
Vol Thru, %	73%	63%	23%	65%
Vol Right, %	11%	36%	61%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	305	92	339	320
LT Vol	48	1	56	105
Through Vol	222	58	77	208
RT Vol	35	33	206	7
Lane Flow Rate	332	100	368	348
Geometry Grp	1	1	1	1
Degree of Util (X)	0.559	0.185	0.602	0.592
Departure Headway (Hd)	6.075	6.675	5.886	6.126
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	593	536	612	588
Service Time	4.122	4.738	3.929	4.171
HCM Lane V/C Ratio	0.56	0.187	0.601	0.592
HCM Control Delay, s/veh	16.6	11.3	17.5	17.7
HCM Lane LOS	C	B	C	C
HCM 95th-tile Q	3.4	0.7	4	3.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	95	55	13	239	16	109	41	18	29	39	50
Future Volume (vph)	36	95	55	13	239	16	109	41	18	29	39	50
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		50	0		140	0		50	0		0
Storage Lanes	0		1	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.943	
Flt Protected		0.986			0.997			0.965			0.988	
Satd. Flow (prot)	0	1837	1458	0	1857	1458	0	1798	1458	0	1735	0
Flt Permitted		0.986			0.997			0.965			0.988	
Satd. Flow (perm)	0	1837	1458	0	1857	1458	0	1798	1458	0	1735	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2695			2169			2270			2002	
Travel Time (s)		33.4			26.9			28.1			24.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	103	60	14	260	17	118	45	20	32	42	54
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	142	60	0	274	17	0	163	20	0	128	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	11.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	36	95	55	13	239	16	109	41	18	29	39	50
Future Vol, veh/h	36	95	55	13	239	16	109	41	18	29	39	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	39	103	60	14	260	17	118	45	20	32	42	54
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay, s/veh	10	12.9	11.6	10.8
HCM LOS	A	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	73%	0%	27%	0%	5%	0%	25%
Vol Thru, %	27%	0%	73%	0%	95%	0%	33%
Vol Right, %	0%	100%	0%	100%	0%	100%	42%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	150	18	131	55	252	16	118
LT Vol	109	0	36	0	13	0	29
Through Vol	41	0	95	0	239	0	39
RT Vol	0	18	0	55	0	16	50
Lane Flow Rate	163	20	142	60	274	17	128
Geometry Grp	5	5	5	5	5	5	4b
Degree of Util (X)	0.295	0.03	0.24	0.087	0.444	0.025	0.217
Departure Headway (Hd)	6.506	5.43	6.077	5.228	5.833	5.099	6.086
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	553	659	591	685	619	702	590
Service Time	4.244	3.168	3.816	2.967	3.567	2.833	4.128
HCM Lane V/C Ratio	0.295	0.03	0.24	0.088	0.443	0.024	0.217
HCM Control Delay, s/veh	12	8.3	10.7	8.5	13.2	8	10.8
HCM Lane LOS	B	A	B	A	B	A	B
HCM 95th-tile Q	1.2	0.1	0.9	0.3	2.3	0.1	0.8

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	82	5	0	68	11	0
Future Volume (vph)	82	5	0	68	11	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.993					
Flt Protected					0.950	
Satd. Flow (prot)	1850	0	0	1863	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	1850	0	0	1863	1770	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	739			580	300	
Travel Time (s)	9.2			7.2	3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	89	5	0	74	12	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	94	0	0	74	12	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 14.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	82	5	0	68	11	0
Future Vol, veh/h	82	5	0	68	11	0
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, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	89	5	0	74	12	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	94	0	166	92
Stage 1	-	-	-	-	92	-
Stage 2	-	-	-	-	74	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1500	-	824	965
Stage 1	-	-	-	-	932	-
Stage 2	-	-	-	-	949	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1500	-	824	965
Mov Cap-2 Maneuver	-	-	-	-	824	-
Stage 1	-	-	-	-	932	-
Stage 2	-	-	-	-	949	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	824	-	-	1500	-
HCM Lane V/C Ratio	0.015	-	-	-	-
HCM Control Delay (s/veh)	9.4	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	7	229	2	0	113
Future Volume (vph)	0	7	229	2	0	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865	0.999			
Flt Protected						
Satd. Flow (prot)	0	1611	1861	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	1611	1861	0	0	1863
Link Speed (mph)	55		55			55
Link Distance (ft)	2684		2106			548
Travel Time (s)	33.3		26.1			6.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	8	249	2	0	123
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	8	251	0	0	123
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 22.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	7	229	2	0	113
Future Vol, veh/h	0	7	229	2	0	113
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	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	8	249	2	0	123

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	250	0	0	251	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	4.12	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	0	789	-	-	1314	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	789	-	-	1314	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	789	1314	-
HCM Lane V/C Ratio	-	-	0.01	-	-
HCM Control Delay (s/veh)	-	-	9.6	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	13	11	4	0	0	4
Future Volume (vph)	13	11	4	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.938				0.865	
Flt Protected	0.974			0.950		
Satd. Flow (prot)	1702	0	0	1770	1611	0
Flt Permitted	0.974			0.950		
Satd. Flow (perm)	1702	0	0	1770	1611	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2684			2002	635	
Travel Time (s)	33.3			24.8	7.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	12	4	0	0	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	26	0	0	4	4	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 13.3%		ICU Level of Service A	
Analysis Period (min) 15			

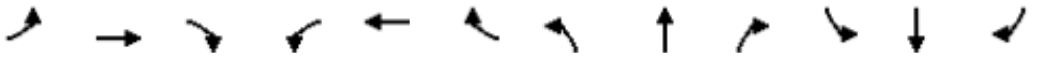
Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	11	4	0	0	4
Future Vol, veh/h	13	11	4	0	0	4
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	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	12	4	0	0	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	10	2	4	0	-	0
Stage 1	2	-	-	-	-	-
Stage 2	8	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1010	1082	1618	-	-	-
Stage 1	1021	-	-	-	-	-
Stage 2	1015	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1008	1082	1618	-	-	-
Mov Cap-2 Maneuver	1008	-	-	-	-	-
Stage 1	1019	-	-	-	-	-
Stage 2	1015	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.5	7.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1618	-	1041	-	-
HCM Lane V/C Ratio	0.003	-	0.025	-	-
HCM Control Delay (s/veh)	7.2	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	54	0	368	147	432	0	0	472	241
Future Volume (vph)	0	0	0	54	0	368	147	432	0	0	472	241
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		350	200		0	80		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1458	1630	1863	0	0	1863	1458
Flt Permitted					0.950		0.449					
Satd. Flow (perm)	0	0	0	0	1770	1458	770	1863	0	0	1863	1458
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						348						262
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1153			2492			645			504	
Travel Time (s)		14.3			30.9			8.0			6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	59	0	400	160	470	0	0	513	262
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	59	400	160	470	0	0	513	262
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	1	1	1	1			1	1
Detector Template												
Leading Detector (ft)				50	50	50	50	50			50	50
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				50	50	50	50	50			50	50
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Turn Type				Perm	NA	Perm	Perm	NA			NA	Perm
Protected Phases					8			2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	2	2			6	6
Switch Phase												
Minimum Initial (s)				4.0	4.0	4.0	4.0	4.0			4.0	4.0
Minimum Split (s)				24.0	24.0	24.0	24.0	24.0			24.0	24.0
Total Split (s)				36.0	36.0	36.0	54.0	54.0			54.0	54.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)				40.0%	40.0%	40.0%	60.0%	60.0%			60.0%	60.0%
Maximum Green (s)				30.0	30.0	30.0	48.0	48.0			48.0	48.0
Yellow Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
All-Red Time (s)				1.0	1.0	1.0	1.0	1.0			1.0	1.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0	6.0	6.0	6.0			6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
Recall Mode				None	None	None	C-Max	C-Max			C-Max	C-Max
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	7.0
Flash Don't Walk (s)				11.0	11.0	11.0	11.0	11.0			11.0	11.0
Pedestrian Calls (#/hr)				0	0	0	0	0			0	0
Act Effct Green (s)					12.0	12.0	66.0	66.0			66.0	66.0
Actuated g/C Ratio					0.13	0.13	0.73	0.73			0.73	0.73
v/c Ratio					0.25	0.81	0.28	0.34			0.38	0.23
Control Delay (s/veh)					34.6	19.7	5.0	4.2			6.5	1.4
Queue Delay					0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)					34.6	19.7	5.0	4.2			6.5	1.4
LOS					C	B	A	A			A	A
Approach Delay (s/veh)					21.6			4.4			4.8	
Approach LOS					C			A			A	

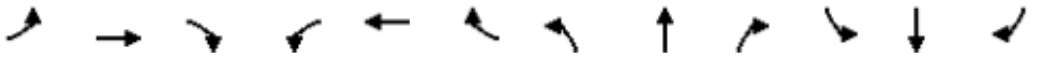
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay (s/veh): 8.8		Intersection LOS: A	
Intersection Capacity Utilization 60.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Shirk St & SR 198 WB Ramps

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	54	0	368	147	432	0	0	472	241
Future Volume (veh/h)	0	0	0	54	0	368	147	432	0	0	472	241
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				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
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1750	1863	1716	1716	1863	0	0	1863	1716
Adj Flow Rate, veh/h				59	0	400	160	470	0	0	513	262
Adj No. of Lanes				0	1	1	1	1	0	0	1	1
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				526	0	433	340	1062	0	0	1062	831
Arrive On Green				0.30	0.00	0.30	1.00	1.00	0.00	0.00	0.57	0.57
Sat Flow, veh/h				1774	0	1458	638	1863	0	0	1863	1458
Grp Volume(v), veh/h				59	0	400	160	470	0	0	513	262
Grp Sat Flow(s),veh/h/ln				1774	0	1458	638	1863	0	0	1863	1458
Q Serve(g_s), s				2.2	0.0	23.9	11.5	0.0	0.0	0.0	14.7	8.5
Cycle Q Clear(g_c), s				2.2	0.0	23.9	26.2	0.0	0.0	0.0	14.7	8.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				526	0	433	340	1062	0	0	1062	831
V/C Ratio(X)				0.11	0.00	0.92	0.47	0.44	0.00	0.00	0.48	0.32
Avail Cap(c_a), veh/h				591	0	486	340	1062	0	0	1062	831
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.95	0.95	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				23.0	0.0	30.7	3.8	0.0	0.0	0.0	11.5	10.1
Incr Delay (d2), s/veh				0.1	0.0	22.3	4.4	1.3	0.0	0.0	1.6	1.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.1	0.0	12.2	2.4	0.4	0.0	0.0	8.0	3.6
LnGrp Delay(d), s/veh				23.1	0.0	53.0	8.2	1.3	0.0	0.0	13.1	11.1
LnGrp LOS				C		D	A	A			B	B
Approach Vol, veh/h					459			630			775	
Approach Delay, s/veh					49.1			3.0			12.4	
Approach LOS					D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		57.3				57.3		32.7
Change Period (Y+Rc), s		6.0				6.0		6.0
Max Green Setting (Gmax), s		48.0				48.0		30.0
Max Q Clear Time (g_c+I1), s		28.2				16.7		25.9
Green Ext Time (p_c), s		3.2				3.1		0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.3
HCM 2010 LOS	B



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	189	2	70	0	0	0	0	395	76	236	244	0
Future Volume (vph)	189	2	70	0	0	0	0	395	76	236	244	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		220	0		0	0		90	150		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Flt Permitted		0.953								0.493		
Satd. Flow (perm)	0	1775	1458	0	0	0	0	1863	1458	846	1863	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			76						83			
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1076			2120			2339			645	
Travel Time (s)		13.3			26.3			29.0			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	205	2	76	0	0	0	0	429	83	257	265	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	207	76	0	0	0	0	429	83	257	265	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1					1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50					50	50	50	50	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	50	50	50					50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Turn Type	Perm	NA	Perm					NA	Perm	Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4		4						2	6		
Detector Phase	4	4	4					2	2	6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Minimum Split (s)	24.0	24.0	24.0					24.0	24.0	24.0	24.0	
Total Split (s)	24.0	24.0	24.0					66.0	66.0	66.0	66.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	26.7%	26.7%	26.7%					73.3%	73.3%	73.3%	73.3%	
Maximum Green (s)	18.0	18.0	18.0					60.0	60.0	60.0	60.0	
Yellow Time (s)	5.0	5.0	5.0					5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0	6.0					6.0	6.0	6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Recall Mode	None	None	None					C-Max	C-Max	C-Max	C-Max	
Walk Time (s)	7.0	7.0	7.0					7.0	7.0	7.0	7.0	
Flash Don't Walk (s)	11.0	11.0	11.0					11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0					0	0	0	0	
Act Effct Green (s)		15.0	15.0					63.0	63.0	63.0	63.0	
Actuated g/C Ratio		0.17	0.17					0.70	0.70	0.70	0.70	
v/c Ratio		0.70	0.25					0.33	0.08	0.43	0.20	
Control Delay (s/veh)		48.1	9.9					6.7	2.2	8.5	4.4	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay (s/veh)		48.1	9.9					6.7	2.2	8.5	4.4	
LOS		D	A					A	A	A	A	
Approach Delay (s/veh)		37.9						6.0			6.4	
Approach LOS		D						A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 13.0		Intersection LOS: B	
Intersection Capacity Utilization 60.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Shirk St & SR 138 EB Ramps

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	2	70	0	0	0	0	395	76	236	244	0
Future Volume (veh/h)	189	2	70	0	0	0	0	395	76	236	244	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	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
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1750	1863	1716				0	1863	1716	1716	1863	0
Adj Flow Rate, veh/h	205	2	76				0	429	83	257	265	0
Adj No. of Lanes	0	1	1				0	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	248	2	206				0	1352	1058	604	1352	0
Arrive On Green	0.14	0.14	0.14				0.00	0.73	0.73	1.00	1.00	0.00
Sat Flow, veh/h	1758	17	1458				0	1863	1458	815	1863	0
Grp Volume(v), veh/h	207	0	76				0	429	83	257	265	0
Grp Sat Flow(s),veh/h/ln	1775	0	1458				0	1863	1458	815	1863	0
Q Serve(g_s), s	10.2	0.0	4.3				0.0	7.4	1.5	5.7	0.0	0.0
Cycle Q Clear(g_c), s	10.2	0.0	4.3				0.0	7.4	1.5	13.1	0.0	0.0
Prop In Lane	0.99		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	250	0	206				0	1352	1058	604	1352	0
V/C Ratio(X)	0.83	0.00	0.37				0.00	0.32	0.08	0.43	0.20	0.00
Avail Cap(c_a), veh/h	355	0	292				0	1352	1058	604	1352	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.93	0.93	0.00
Uniform Delay (d), s/veh	37.6	0.0	35.0				0.0	4.4	3.6	0.7	0.0	0.0
Incr Delay (d2), s/veh	10.5	0.0	1.1				0.0	0.6	0.1	2.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	0.0	1.8				0.0	3.9	0.6	1.6	0.1	0.0
LnGrp Delay(d), s/veh	48.1	0.0	36.1				0.0	5.0	3.7	2.8	0.3	0.0
LnGrp LOS	D		D					A	A	A	A	
Approach Vol, veh/h		283						512			522	
Approach Delay, s/veh		44.9						4.8			1.5	
Approach LOS		D						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		71.3		18.7		71.3		
Change Period (Y+Rc), s		6.0		6.0		6.0		
Max Green Setting (Gmax), s		60.0		18.0		60.0		
Max Q Clear Time (g_c+I1), s		9.4		12.2		15.1		
Green Ext Time (p_c), s		1.9		0.5		3.0		

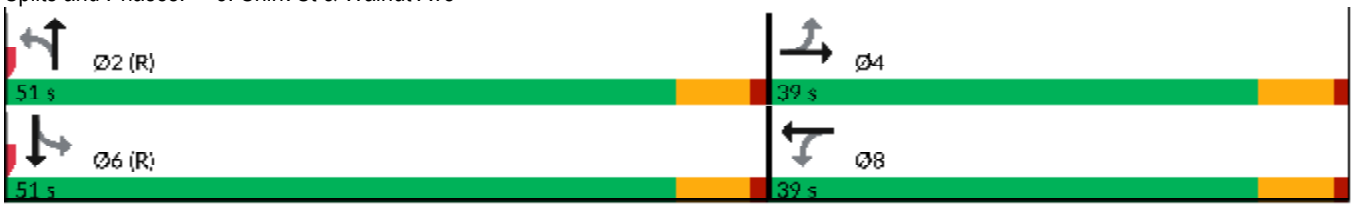
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.1
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	58	33	56	77	206	48	222	35	105	208	7
Future Volume (vph)	1	58	33	56	77	206	48	222	35	105	208	7
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.951			0.918			0.985			0.997	
Flt Protected					0.992			0.992			0.984	
Satd. Flow (prot)	0	1771	0	0	1696	0	0	1820	0	0	1827	0
Flt Permitted		0.996			0.927			0.901			0.784	
Satd. Flow (perm)	0	1764	0	0	1585	0	0	1653	0	0	1456	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		36			98			10			2	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1796			2695			2949			2654	
Travel Time (s)		22.3			33.4			36.6			32.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	63	36	61	84	224	52	241	38	114	226	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	100	0	0	369	0	0	331	0	0	348	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	39.0	39.0		39.0	39.0		51.0	51.0		51.0	51.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%		56.7%	56.7%		56.7%	56.7%	
Maximum Green (s)	33.0	33.0		33.0	33.0		45.0	45.0		45.0	45.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		21.7			21.7			56.3			56.3	
Actuated g/C Ratio		0.24			0.24			0.63			0.63	
v/c Ratio		0.22			0.81			0.32			0.38	
Control Delay (s/veh)		17.3			36.8			10.0			12.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		17.3			36.8			10.0			12.3	
LOS		B			D			B			B	
Approach Delay (s/veh)		17.3			36.8			10.0			12.3	
Approach LOS		B			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay (s/veh): 19.9		Intersection LOS: B	
Intersection Capacity Utilization 68.4%		ICU Level of Service C	
Analysis Period (min) 15			

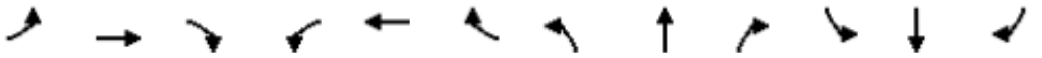
Splits and Phases: 5: Shirk St & Walnut Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	58	33	56	77	206	48	222	35	105	208	7
Future Volume (veh/h)	1	58	33	56	77	206	48	222	35	105	208	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1750	1863	1750	1750	1863	1750	1750	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	1	63	36	61	84	224	52	241	38	114	226	8
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	287	162	97	111	249	175	787	119	337	645	22
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	3	1119	631	199	431	973	211	1290	195	465	1057	36
Grp Volume(v), veh/h	100	0	0	369	0	0	331	0	0	348	0	0
Grp Sat Flow(s),veh/h/ln	1753	0	0	1603	0	0	1695	0	0	1558	0	0
Q Serve(g_s), s	0.0	0.0	0.0	14.4	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
Cycle Q Clear(g_c), s	4.1	0.0	0.0	20.0	0.0	0.0	7.8	0.0	0.0	8.3	0.0	0.0
Prop In Lane	0.01		0.36	0.17		0.61	0.16		0.11	0.33		0.02
Lane Grp Cap(c), veh/h	490	0	0	457	0	0	1081	0	0	1004	0	0
V/C Ratio(X)	0.20	0.00	0.00	0.81	0.00	0.00	0.31	0.00	0.00	0.35	0.00	0.00
Avail Cap(c_a), veh/h	682	0	0	632	0	0	1081	0	0	1004	0	0
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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.4	0.0	0.0	32.2	0.0	0.0	8.3	0.0	0.0	8.4	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	5.4	0.0	0.0	0.7	0.0	0.0	0.9	0.0	0.0
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	2.0	0.0	0.0	9.5	0.0	0.0	4.1	0.0	0.0	4.4	0.0	0.0
LnGrp Delay(d), s/veh	26.6	0.0	0.0	37.6	0.0	0.0	9.1	0.0	0.0	9.4	0.0	0.0
LnGrp LOS	C			D			A			A		
Approach Vol, veh/h		100			369			331			348	
Approach Delay, s/veh		26.6			37.6			9.1			9.4	
Approach LOS		C			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		60.9		29.1		60.9		29.1
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		45.0		33.0		45.0		33.0
Max Q Clear Time (g_c+I1), s		9.8		6.1		10.3		22.0
Green Ext Time (p_c), s		1.2		0.3		1.4		1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.9
HCM 2010 LOS	B



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	58	0	401	163	532	0	0	610	277
Future Volume (vph)	0	0	0	58	0	401	163	532	0	0	610	277
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		350	200		0	80		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1458	1630	1863	0	0	1863	1458
Flt Permitted					0.950		0.950					
Satd. Flow (perm)	0	0	0	0	1770	1458	1630	1863	0	0	1863	1458
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1153			2492			645			504	
Travel Time (s)		14.3			30.9			8.0			6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	63	0	436	177	578	0	0	663	301
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	63	436	177	578	0	0	663	301
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

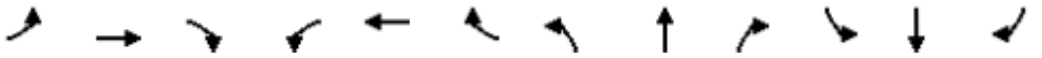
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	114.6
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	58	0	401	163	532	0	0	610	277
Future Vol, veh/h	0	0	0	58	0	401	163	532	0	0	610	277
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	63	0	436	177	578	0	0	663	301
Number of Lanes	0	0	0	0	1	1	1	1	0	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay, s/veh	42.9	115.1	151.3
HCM LOS	E	F	F

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	163	532	58	401	610	277
LT Vol	163	0	58	0	0	0
Through Vol	0	532	0	0	610	0
RT Vol	0	0	0	401	0	277
Lane Flow Rate	177	578	63	436	663	301
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.4	1.225	0.149	0.887	1.391	0.573
Departure Headway (Hd)	8.615	8.097	9.212	7.967	7.929	7.203
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	420	451	391	458	464	503
Service Time	6.315	5.797	6.912	5.667	5.629	4.903
HCM Lane V/C Ratio	0.421	1.282	0.161	0.952	1.429	0.598
HCM Control Delay, s/veh	16.9	145.2	13.5	47.1	211.3	19.1
HCM Lane LOS	C	F	B	E	F	C
HCM 95th-tile Q	1.9	21.9	0.5	9.5	30.1	3.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	198	2	74	0	0	0	0	514	81	262	296	0
Future Volume (vph)	198	2	74	0	0	0	0	514	81	262	296	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		220	0		0	0		90	150		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1076			2120			2339			645	
Travel Time (s)		13.3			26.3			29.0			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	215	2	80	0	0	0	0	559	88	285	322	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	217	80	0	0	0	0	559	88	285	322	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

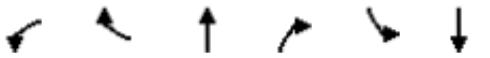
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	37
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	198	2	74	0	0	0	0	514	81	262	296	0
Future Vol, veh/h	198	2	74	0	0	0	0	514	81	262	296	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	215	2	80	0	0	0	0	559	88	285	322	0
Number of Lanes	0	1	1	0	0	0	0	1	1	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	16.6	63.3	19
HCM LOS	C	F	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	99%	0%	100%	0%
Vol Thru, %	100%	0%	1%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	514	81	200	74	262	296
LT Vol	0	0	198	0	262	0
Through Vol	514	0	2	0	0	296
RT Vol	0	81	0	74	0	0
Lane Flow Rate	559	88	217	80	285	322
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	1.028	0.145	0.492	0.155	0.568	0.596
Departure Headway (Hd)	6.627	5.912	8.146	6.92	7.18	6.669
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	542	601	439	515	498	537
Service Time	4.417	3.702	5.939	4.712	4.978	4.466
HCM Lane V/C Ratio	1.031	0.146	0.494	0.155	0.572	0.6
HCM Control Delay, s/veh	71.8	9.7	18.7	11	19.1	19
HCM Lane LOS	F	A	C	B	C	C
HCM 95th-tile Q	15.3	0.5	2.7	0.5	3.5	3.9



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	9	12	213	10	15	108
Future Volume (vph)	9	12	213	10	15	108
Ideal Flow (vphpl)	1750	1750	1900	1750	1750	1900
Storage Length (ft)	100	50		50	100	
Storage Lanes	1	0		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1630	1458	1863	1458	1630	1863
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1630	1458	1863	1458	1630	1863
Link Speed (mph)	55		55			55
Link Distance (ft)	2679		2654			2339
Travel Time (s)	33.2		32.9			29.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	13	232	11	16	117
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	13	232	11	16	117
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.00	1.11	1.11	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	23.5%	ICU Level of Service	A
Analysis Period (min)	15		

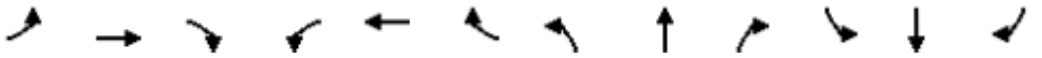
Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	12	213	10	15	108
Future Vol, veh/h	9	12	213	10	15	108
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	50	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	13	232	11	16	117

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	381	232	0	0	243	0
Stage 1	232	-	-	-	-	-
Stage 2	149	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	621	807	-	-	1323	-
Stage 1	807	-	-	-	-	-
Stage 2	879	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	614	807	-	-	1323	-
Mov Cap-2 Maneuver	614	-	-	-	-	-
Stage 1	807	-	-	-	-	-
Stage 2	868	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	10.1	0	0.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	614	807	1323	-
HCM Lane V/C Ratio	-	-	0.016	0.016	0.012	-
HCM Control Delay (s/veh)	-	-	11	9.5	7.8	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	104	1	36	102	1	2	1	134	4	1	3
Future Volume (vph)	3	104	1	36	102	1	2	1	134	4	1	3
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	100		50	100		50	100		50	100		50
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2679			1533			2637			1348	
Travel Time (s)		33.2			19.0			32.7			16.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	113	1	39	111	1	2	1	146	4	1	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	3	113	1	39	111	1	2	1	146	4	1	3
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	27.8%	ICU Level of Service	A
Analysis Period (min)	15		

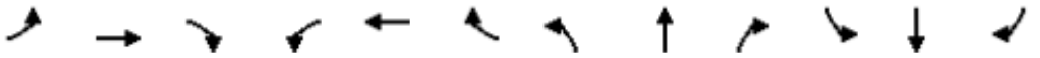
Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	104	1	36	102	1	2	1	134	4	1	3
Future Vol, veh/h	3	104	1	36	102	1	2	1	134	4	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	50	100	-	50	100	-	50	100	-	50
Veh in Median Storage, #	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	113	1	39	111	1	2	1	146	4	1	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	143	160	1	73	17	1	4	0	0	147	0	0
Stage 1	9	9	-	5	5	-	-	-	-	-	-	-
Stage 2	134	151	-	68	12	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	826	732	1084	918	877	1084	1618	-	-	1435	-	-
Stage 1	1012	888	-	1017	892	-	-	-	-	-	-	-
Stage 2	869	772	-	942	886	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	743	729	1084	805	873	1084	1618	-	-	1435	-	-
Mov Cap-2 Maneuver	743	729	-	805	873	-	-	-	-	-	-	-
Stage 1	1011	885	-	1016	891	-	-	-	-	-	-	-
Stage 2	759	771	-	819	883	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.8	9.7	0.1	3.8
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1618	-	-	743	729	1084	805	873	1084	1435	-	-
HCM Lane V/C Ratio	0.001	-	-	0.004	0.155	0.001	0.049	0.127	0.001	0.003	-	-
HCM Control Delay (s/veh)	7.2	-	-	9.9	10.8	8.3	9.7	9.7	8.3	7.5	-	-
HCM Lane LOS	A	-	-	A	B	A	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.5	0	0.2	0.4	0	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	69	36	58	79	210	54	283	40	114	254	8
Future Volume (vph)	1	69	36	58	79	210	54	283	40	114	254	8
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.954			0.918			0.986			0.997	
Flt Protected					0.992			0.993			0.985	
Satd. Flow (prot)	0	1777	0	0	1696	0	0	1824	0	0	1829	0
Flt Permitted					0.992			0.993			0.985	
Satd. Flow (perm)	0	1777	0	0	1696	0	0	1824	0	0	1829	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1796			2695			2949			2654	
Travel Time (s)		22.3			33.4			36.6			32.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	75	39	63	86	228	59	308	43	124	276	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	115	0	0	377	0	0	410	0	0	409	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

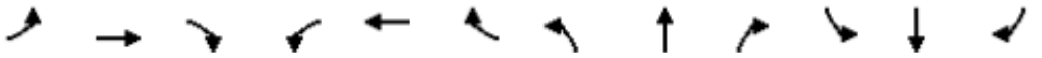
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 71.0%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	25.5
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	69	36	58	79	210	54	283	40	114	254	8
Future Vol, veh/h	1	69	36	58	79	210	54	283	40	114	254	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	75	39	63	86	228	59	308	43	124	276	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	13.2	23.6	27.7	28.5
HCM LOS	B	C	D	D

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	1%	17%	30%
Vol Thru, %	75%	65%	23%	68%
Vol Right, %	11%	34%	61%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	377	106	347	376
LT Vol	54	1	58	114
Through Vol	283	69	79	254
RT Vol	40	36	210	8
Lane Flow Rate	410	115	377	409
Geometry Grp	1	1	1	1
Degree of Util (X)	0.758	0.245	0.696	0.765
Departure Headway (Hd)	6.66	7.663	6.642	6.735
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	545	467	543	535
Service Time	4.702	5.739	4.683	4.777
HCM Lane V/C Ratio	0.752	0.246	0.694	0.764
HCM Control Delay, s/veh	27.7	13.2	23.6	28.5
HCM Lane LOS	D	B	C	D
HCM 95th-tile Q	6.7	1	5.4	6.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	94	57	16	338	19	117	47	20	24	39	53
Future Volume (vph)	37	94	57	16	338	19	117	47	20	24	39	53
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		50	0		140	0		50	0		0
Storage Lanes	0		1	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.938	
Flt Protected		0.986			0.998			0.966			0.990	
Satd. Flow (prot)	0	1837	1458	0	1859	1458	0	1799	1458	0	1730	0
Flt Permitted		0.986			0.998			0.966			0.990	
Satd. Flow (perm)	0	1837	1458	0	1859	1458	0	1799	1458	0	1730	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2695			2169			2270			2637	
Travel Time (s)		33.4			26.9			28.1			32.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	40	102	62	17	367	21	127	51	22	26	42	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	142	62	0	384	21	0	178	22	0	126	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

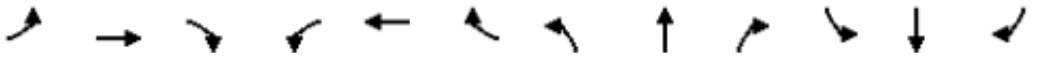
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	14.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	94	57	16	338	19	117	47	20	24	39	53
Future Vol, veh/h	37	94	57	16	338	19	117	47	20	24	39	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	40	102	62	17	367	21	127	51	22	26	42	58
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay, s/veh	10.6	18.1	12.7	11.5
HCM LOS	B	C	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	71%	0%	28%	0%	5%	0%	21%
Vol Thru, %	29%	0%	72%	0%	95%	0%	34%
Vol Right, %	0%	100%	0%	100%	0%	100%	46%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	164	20	131	57	354	19	116
LT Vol	117	0	37	0	16	0	24
Through Vol	47	0	94	0	338	0	39
RT Vol	0	20	0	57	0	19	53
Lane Flow Rate	178	22	142	62	385	21	126
Geometry Grp	5	5	5	5	5	5	4b
Degree of Util (X)	0.341	0.035	0.252	0.095	0.637	0.03	0.228
Departure Headway (Hd)	6.886	5.813	6.382	5.526	5.956	5.224	6.508
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	521	613	561	646	604	683	550
Service Time	4.647	3.574	4.142	3.286	3.704	2.971	4.577
HCM Lane V/C Ratio	0.342	0.036	0.253	0.096	0.637	0.031	0.229
HCM Control Delay, s/veh	13.2	8.8	11.3	8.9	18.6	8.1	11.5
HCM Lane LOS	B	A	B	A	C	A	B
HCM 95th-tile Q	1.5	0.1	1	0.3	4.5	0.1	0.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	62	0	401	163	536	0	0	613	277
Future Volume (vph)	0	0	0	62	0	401	163	536	0	0	613	277
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		350	200		0	80		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.953	
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1458	1630	1863	0	1716	1775	0
Flt Permitted					0.950		0.950					
Satd. Flow (perm)	0	0	0	0	1770	1458	1630	1863	0	1716	1775	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1153			2492			645			504	
Travel Time (s)		14.3			30.9			8.0			6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	67	0	436	177	583	0	0	666	301
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	67	436	177	583	0	0	967	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

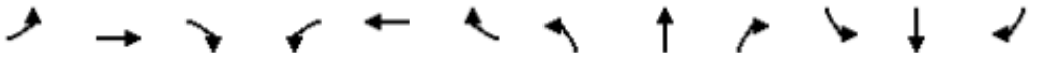
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 72.7%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	238.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	62	0	401	163	536	0	0	613	277
Future Vol, veh/h	0	0	0	62	0	401	163	536	0	0	613	277
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	67	0	436	177	583	0	0	666	301
Number of Lanes	0	0	0	0	1	1	1	1	0	1	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay, s/veh	38.2	105.3	446.6
HCM LOS	E	F	F

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	69%
Vol Right, %	0%	0%	0%	100%	0%	31%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	163	536	62	401	0	890
LT Vol	163	0	62	0	0	0
Through Vol	0	536	0	0	0	613
RT Vol	0	0	0	401	0	277
Lane Flow Rate	177	583	67	436	0	967
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.385	1.185	0.153	0.846	0	1.936
Departure Headway (Hd)	9.036	8.512	9.452	8.188	7.807	7.581
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	400	431	382	445	0	493
Service Time	6.736	6.212	7.152	5.888	5.507	5.281
HCM Lane V/C Ratio	0.443	1.353	0.175	0.98	0	1.961
HCM Control Delay, s/veh	17.3	132	13.9	41.9	10.5	446.6
HCM Lane LOS	C	F	B	E	N	F
HCM 95th-tile Q	1.8	19.4	0.5	8.3	0	61.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	198	2	74	0	0	0	0	518	96	262	303	0
Future Volume (vph)	198	2	74	0	0	0	0	518	96	262	303	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		220	0		0	0		90	150		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1076			2120			2339			645	
Travel Time (s)		13.3			26.3			29.0			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	215	2	80	0	0	0	0	563	104	285	329	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	217	80	0	0	0	0	563	104	285	329	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 64.9%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	38.2
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	198	2	74	0	0	0	0	518	96	262	303	0
Future Vol, veh/h	198	2	74	0	0	0	0	518	96	262	303	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	215	2	80	0	0	0	0	563	104	285	329	0
Number of Lanes	0	1	1	0	0	0	0	1	1	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	16.7	65.1	19.5
HCM LOS	C	F	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	99%	0%	100%	0%
Vol Thru, %	100%	0%	1%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	518	96	200	74	262	303
LT Vol	0	0	198	0	262	0
Through Vol	518	0	2	0	0	303
RT Vol	0	96	0	74	0	0
Lane Flow Rate	563	104	217	80	285	329
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	1.04	0.172	0.495	0.156	0.571	0.613
Departure Headway (Hd)	6.647	5.933	8.189	6.963	7.315	6.703
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	541	599	437	512	496	534
Service Time	4.44	3.725	5.984	4.756	5.015	4.503
HCM Lane V/C Ratio	1.041	0.174	0.497	0.156	0.575	0.616
HCM Control Delay, s/veh	75.3	10	18.8	11.1	19.3	19.7
HCM Lane LOS	F	A	C	B	C	C
HCM 95th-tile Q	15.8	0.6	2.7	0.5	3.5	4.1

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	15	24	220	12	22	108
Future Volume (vph)	15	24	220	12	22	108
Ideal Flow (vphpl)	1750	1750	1900	1750	1750	1900
Storage Length (ft)	100	50		50	100	
Storage Lanes	1	0		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1630	1458	1863	1458	1630	1863
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1630	1458	1863	1458	1630	1863
Link Speed (mph)	55		55			55
Link Distance (ft)	739		548			2339
Travel Time (s)	9.2		6.8			29.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	16	26	239	13	24	117
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	26	239	13	24	117
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.00	1.11	1.11	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Stop			Stop

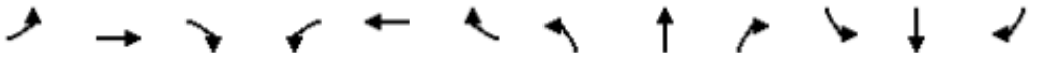
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	28.2%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	24	220	12	22	108
Future Vol, veh/h	15	24	220	12	22	108
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	26	239	13	24	117
Number of Lanes	1	1	1	1	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay, s/veh	8.1	9.5	8.4
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	0%	0%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	220	12	15	24	22	108
LT Vol	0	0	15	0	22	0
Through Vol	220	0	0	0	0	108
RT Vol	0	12	0	24	0	0
Lane Flow Rate	239	13	16	26	24	117
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.311	0.014	0.027	0.035	0.035	0.158
Departure Headway (Hd)	4.677	3.976	5.969	4.764	5.335	4.834
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	758	886	603	755	674	745
Service Time	2.468	1.766	3.676	2.47	3.044	2.542
HCM Lane V/C Ratio	0.315	0.015	0.027	0.034	0.036	0.157
HCM Control Delay, s/veh	9.6	6.8	8.8	7.6	8.2	8.4
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	1.3	0	0.1	0.1	0.1	0.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	116	2	47	105	1	3	1	167	4	1	3
Future Volume (vph)	3	116	2	47	105	1	3	1	167	4	1	3
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	100		50	100		50	100		50	100		50
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1360			1533			635			1348	
Travel Time (s)		16.9			19.0			7.9			16.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	126	2	51	114	1	3	1	182	4	1	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	3	126	2	51	114	1	3	1	182	4	1	3
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.7%		ICU Level of Service A	
Analysis Period (min) 15			

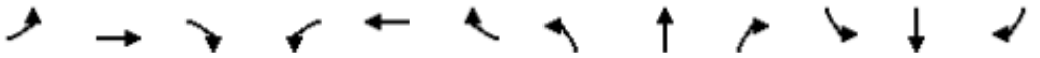
Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	116	2	47	105	1	3	1	167	4	1	3
Future Vol, veh/h	3	116	2	47	105	1	3	1	167	4	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	50	100	-	50	100	-	50	100	-	50
Veh in Median Storage, #	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	126	2	51	114	1	3	1	182	4	1	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	165	198	1	82	19	1	4	0	0	183	0	0
Stage 1	9	9	-	7	7	-	-	-	-	-	-	-
Stage 2	156	189	-	75	12	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	800	698	1084	905	875	1084	1618	-	-	1392	-	-
Stage 1	1012	888	-	1015	890	-	-	-	-	-	-	-
Stage 2	846	744	-	934	886	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	716	695	1084	775	871	1084	1618	-	-	1392	-	-
Mov Cap-2 Maneuver	716	695	-	775	871	-	-	-	-	-	-	-
Stage 1	1010	885	-	1013	888	-	-	-	-	-	-	-
Stage 2	735	743	-	797	883	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.2	9.9	0.1	3.8
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1618	-	-	716	695	1084	775	871	1084	1392	-	-
HCM Lane V/C Ratio	0.002	-	-	0.005	0.181	0.002	0.066	0.131	0.001	0.003	-	-
HCM Control Delay (s/veh)	7.2	-	-	10.1	11.3	8.3	10	9.8	8.3	7.6	-	-
HCM Lane LOS	A	-	-	B	B	A	B	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.7	0	0.2	0.5	0	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	69	36	58	79	212	54	287	40	120	266	8
Future Volume (vph)	1	69	36	58	79	212	54	287	40	120	266	8
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.954			0.918			0.986			0.997	
Flt Protected					0.992			0.993			0.985	
Satd. Flow (prot)	0	1777	0	0	1696	0	0	1824	0	0	1829	0
Flt Permitted					0.992			0.993			0.985	
Satd. Flow (perm)	0	1777	0	0	1696	0	0	1824	0	0	1829	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1796			2695			2949			2106	
Travel Time (s)		22.3			33.4			36.6			26.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	75	39	63	86	230	59	312	43	130	289	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	115	0	0	379	0	0	414	0	0	428	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

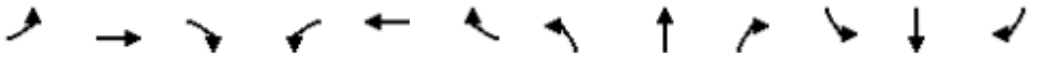
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 73.3%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	27.9
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	69	36	58	79	212	54	287	40	120	266	8
Future Vol, veh/h	1	69	36	58	79	212	54	287	40	120	266	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	75	39	63	86	230	59	312	43	130	289	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	13.5	24.8	29.6	32.8
HCM LOS	B	C	D	D

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	1%	17%	30%
Vol Thru, %	75%	65%	23%	68%
Vol Right, %	10%	34%	61%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	381	106	349	394
LT Vol	54	1	58	120
Through Vol	287	69	79	266
RT Vol	40	36	212	8
Lane Flow Rate	414	115	379	428
Geometry Grp	1	1	1	1
Degree of Util (X)	0.777	0.251	0.711	0.809
Departure Headway (Hd)	6.758	7.833	6.749	6.799
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	534	456	535	531
Service Time	4.813	5.912	4.802	4.854
HCM Lane V/C Ratio	0.775	0.252	0.708	0.806
HCM Control Delay, s/veh	29.6	13.5	24.8	32.8
HCM Lane LOS	D	B	C	D
HCM 95th-tile Q	7.1	1	5.7	7.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	100	57	16	340	25	117	52	20	43	52	53
Future Volume (vph)	37	100	57	16	340	25	117	52	20	43	52	53
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		50	0		140	0		50	0		0
Storage Lanes	0		1	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.952	
Flt Protected		0.987			0.998			0.967			0.986	
Satd. Flow (prot)	0	1839	1458	0	1859	1458	0	1801	1458	0	1749	0
Flt Permitted		0.987			0.998			0.967			0.986	
Satd. Flow (perm)	0	1839	1458	0	1859	1458	0	1801	1458	0	1749	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2695			2169			2270			2002	
Travel Time (s)		33.4			26.9			28.1			24.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	40	109	62	17	370	27	127	57	22	47	57	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	149	62	0	387	27	0	184	22	0	162	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	15.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	100	57	16	340	25	117	52	20	43	52	53
Future Vol, veh/h	37	100	57	16	340	25	117	52	20	43	52	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	40	109	62	17	370	27	127	57	22	47	57	58
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay, s/veh	11.1	19.3	13.3	12.6
HCM LOS	B	C	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	69%	0%	27%	0%	4%	0%	29%
Vol Thru, %	31%	0%	73%	0%	96%	0%	35%
Vol Right, %	0%	100%	0%	100%	0%	100%	36%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	169	20	137	57	356	25	148
LT Vol	117	0	37	0	16	0	43
Through Vol	52	0	100	0	340	0	52
RT Vol	0	20	0	57	0	25	53
Lane Flow Rate	184	22	149	62	387	27	161
Geometry Grp	5	5	5	5	5	5	4b
Degree of Util (X)	0.359	0.036	0.273	0.099	0.66	0.041	0.299
Departure Headway (Hd)	7.04	5.976	6.589	5.738	6.14	5.407	6.687
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	509	595	542	620	584	658	534
Service Time	4.824	3.759	4.369	3.516	3.905	3.171	4.775
HCM Lane V/C Ratio	0.361	0.037	0.275	0.1	0.663	0.041	0.301
HCM Control Delay, s/veh	13.8	9	11.9	9.2	20.1	8.4	12.6
HCM Lane LOS	B	A	B	A	C	A	B
HCM 95th-tile Q	1.6	0.1	1.1	0.3	4.9	0.1	1.2

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	108	9	3	99	18	12
Future Volume (vph)	108	9	3	99	18	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.989				0.947	
Flt Protected				0.999	0.971	
Satd. Flow (prot)	1842	0	0	1861	1713	0
Flt Permitted				0.999	0.971	
Satd. Flow (perm)	1842	0	0	1861	1713	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	739			580	300	
Travel Time (s)	9.2			7.2	3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	117	10	3	108	20	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	127	0	0	111	33	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 17.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	108	9	3	99	18	12
Future Vol, veh/h	108	9	3	99	18	12
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, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	117	10	3	108	20	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	127	0	236	122
Stage 1	-	-	-	-	122	-
Stage 2	-	-	-	-	114	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1459	-	752	929
Stage 1	-	-	-	-	903	-
Stage 2	-	-	-	-	911	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1459	-	750	929
Mov Cap-2 Maneuver	-	-	-	-	750	-
Stage 1	-	-	-	-	903	-
Stage 2	-	-	-	-	909	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.2	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	813	-	-	1459	-
HCM Lane V/C Ratio	0.04	-	-	0.002	-
HCM Control Delay (s/veh)	9.6	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	112	0	1	103	0	1
Future Volume (vph)	112	0	1	103	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected						
Satd. Flow (prot)	1863	0	0	1863	1611	0
Flt Permitted						
Satd. Flow (perm)	1863	0	0	1863	1611	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	580			1360	308	
Travel Time (s)	7.2			16.9	3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	122	0	1	112	0	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	122	0	0	113	1	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 16.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	112	0	1	103	0	1
Future Vol, veh/h	112	0	1	103	0	1
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, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	122	0	1	112	0	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	122	0	236	122
Stage 1	-	-	-	-	122	-
Stage 2	-	-	-	-	114	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1465	-	752	929
Stage 1	-	-	-	-	903	-
Stage 2	-	-	-	-	911	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1465	-	751	929
Mov Cap-2 Maneuver	-	-	-	-	751	-
Stage 1	-	-	-	-	903	-
Stage 2	-	-	-	-	910	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.1	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	929	-	-	1465	-
HCM Lane V/C Ratio	0.001	-	-	0.001	-
HCM Control Delay (s/veh)	8.9	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	19	291	6	0	138
Future Volume (vph)	0	19	291	6	0	138
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865	0.997			
Flt Protected						
Satd. Flow (prot)	0	1611	1857	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	1611	1857	0	0	1863
Link Speed (mph)	55		55			55
Link Distance (ft)	2684		2106			548
Travel Time (s)	33.3		26.1			6.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	21	316	7	0	150
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	21	323	0	0	150
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	19	291	6	0	138
Future Vol, veh/h	0	19	291	6	0	138
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	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	21	316	7	0	150

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	320	0	0	323	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	4.12	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	0	721	-	-	1237	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	721	-	-	1237	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	10.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	721	1237	-
HCM Lane V/C Ratio	-	-	0.029	-	-
HCM Control Delay (s/veh)	-	-	10.1	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	34	31	11	1	1	12
Future Volume (vph)	34	31	11	1	1	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.935				0.875	
Flt Protected	0.975			0.956		
Satd. Flow (prot)	1698	0	0	1781	1630	0
Flt Permitted	0.975			0.956		
Satd. Flow (perm)	1698	0	0	1781	1630	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2684			2002	635	
Travel Time (s)	33.3			24.8	7.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	37	34	12	1	1	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	71	0	0	13	14	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 17.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	7.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	34	31	11	1	1	12
Future Vol, veh/h	34	31	11	1	1	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	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	34	12	1	1	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	33	8	14	0	-	0
Stage 1	8	-	-	-	-	-
Stage 2	25	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	980	1074	1604	-	-	-
Stage 1	1015	-	-	-	-	-
Stage 2	998	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	973	1074	1604	-	-	-
Mov Cap-2 Maneuver	973	-	-	-	-	-
Stage 1	1008	-	-	-	-	-
Stage 2	998	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.8	6.7	0
HCM LOS	A		

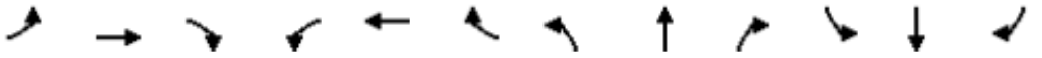
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1604	-	1019	-	-
HCM Lane V/C Ratio	0.007	-	0.069	-	-
HCM Control Delay (s/veh)	7.3	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	62	0	401	163	536	0	0	613	277
Future Volume (vph)	0	0	0	62	0	401	163	536	0	0	613	277
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		350	200		0	80		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1458	1630	1863	0	0	1863	1458
Flt Permitted					0.950		0.345					
Satd. Flow (perm)	0	0	0	0	1770	1458	592	1863	0	0	1863	1458
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						302						301
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1153			2492			645			504	
Travel Time (s)		14.3			30.9			8.0			6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	67	0	436	177	583	0	0	666	301
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	67	436	177	583	0	0	666	301
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	1	1	1	1			1	1
Detector Template												
Leading Detector (ft)				50	50	50	50	50			50	50
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				50	50	50	50	50			50	50
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Turn Type				Perm	NA	Perm	Perm	NA			NA	Perm
Protected Phases					8			2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	2	2			6	6
Switch Phase												
Minimum Initial (s)				4.0	4.0	4.0	4.0	4.0			4.0	4.0
Minimum Split (s)				24.0	24.0	24.0	24.0	24.0			24.0	24.0
Total Split (s)				31.0	31.0	31.0	59.0	59.0			59.0	59.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)				34.4%	34.4%	34.4%	65.6%	65.6%			65.6%	65.6%
Maximum Green (s)				25.0	25.0	25.0	53.0	53.0			53.0	53.0
Yellow Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
All-Red Time (s)				1.0	1.0	1.0	1.0	1.0			1.0	1.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0	6.0	6.0	6.0			6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
Recall Mode				None	None	None	C-Max	C-Max			C-Max	C-Max
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	7.0
Flash Don't Walk (s)				11.0	11.0	11.0	11.0	11.0			11.0	11.0
Pedestrian Calls (#/hr)				0	0	0	0	0			0	0
Act Effct Green (s)					15.5	15.5	62.5	62.5			62.5	62.5
Actuated g/C Ratio					0.17	0.17	0.69	0.69			0.69	0.69
v/c Ratio					0.22	0.87	0.43	0.45			0.52	0.27
Control Delay (s/veh)					30.4	29.1	9.8	6.8			9.8	1.7
Queue Delay					0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)					30.4	29.1	9.8	6.8			9.8	1.7
LOS					C	C	A	A			A	A
Approach Delay (s/veh)					29.2			7.5			7.3	
Approach LOS					C			A			A	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay (s/veh): 12.3	Intersection LOS: B
Intersection Capacity Utilization 69.1%	ICU Level of Service C
Analysis Period (min) 15	

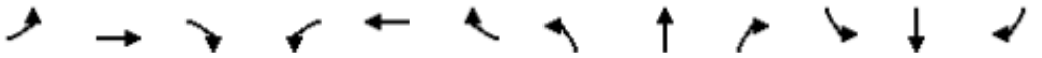
Splits and Phases: 1: Shirk St & SR 198 WB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	62	0	401	163	536	0	0	613	277
Future Volume (veh/h)	0	0	0	62	0	401	163	536	0	0	613	277
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				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
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1750	1863	1716	1716	1863	0	0	1863	1716
Adj Flow Rate, veh/h				67	0	436	177	583	0	0	666	301
Adj No. of Lanes				0	1	1	1	1	0	0	1	1
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				493	0	405	272	1097	0	0	1097	859
Arrive On Green				0.28	0.00	0.28	1.00	1.00	0.00	0.00	0.59	0.59
Sat Flow, veh/h				1774	0	1458	533	1863	0	0	1863	1458
Grp Volume(v), veh/h				67	0	436	177	583	0	0	666	301
Grp Sat Flow(s),veh/h/ln				1774	0	1458	533	1863	0	0	1863	1458
Q Serve(g_s), s				2.6	0.0	25.0	26.6	0.0	0.0	0.0	20.6	9.6
Cycle Q Clear(g_c), s				2.6	0.0	25.0	47.2	0.0	0.0	0.0	20.6	9.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				493	0	405	272	1097	0	0	1097	859
V/C Ratio(X)				0.14	0.00	1.08	0.65	0.53	0.00	0.00	0.61	0.35
Avail Cap(c_a), veh/h				493	0	405	272	1097	0	0	1097	859
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.90	0.90	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				24.4	0.0	32.5	9.2	0.0	0.0	0.0	11.8	9.6
Incr Delay (d2), s/veh				0.1	0.0	66.6	10.4	1.7	0.0	0.0	2.5	1.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.3	0.0	17.5	4.5	0.5	0.0	0.0	11.3	4.1
LnGrp Delay(d), s/veh				24.5	0.0	99.1	19.6	1.7	0.0	0.0	14.3	10.7
LnGrp LOS				C		F	B	A			B	B
Approach Vol, veh/h					503			760			967	
Approach Delay, s/veh					89.2			5.8			13.2	
Approach LOS					F			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		59.0				59.0		31.0
Change Period (Y+Rc), s		6.0				6.0		6.0
Max Green Setting (Gmax), s		53.0				53.0		25.0
Max Q Clear Time (g_c+I1), s		49.2				22.6		27.0
Green Ext Time (p_c), s		1.6				4.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.8
HCM 2010 LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	198	2	74	0	0	0	0	518	96	262	303	0
Future Volume (vph)	198	2	74	0	0	0	0	518	96	262	303	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		220	0		0	0		90	150		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Flt Permitted		0.953								0.407		
Satd. Flow (perm)	0	1775	1458	0	0	0	0	1863	1458	698	1863	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			80						102			
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1076			2120			2339			645	
Travel Time (s)		13.3			26.3			29.0			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	215	2	80	0	0	0	0	563	104	285	329	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	217	80	0	0	0	0	563	104	285	329	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1					1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50					50	50	50	50	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	50	50	50					50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Turn Type	Perm	NA	Perm					NA	Perm	Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4		4						2	6		
Detector Phase	4	4	4					2	2	6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Minimum Split (s)	24.0	24.0	24.0					24.0	24.0	24.0	24.0	
Total Split (s)	24.0	24.0	24.0					66.0	66.0	66.0	66.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	26.7%	26.7%	26.7%					73.3%	73.3%	73.3%	73.3%	
Maximum Green (s)	18.0	18.0	18.0					60.0	60.0	60.0	60.0	
Yellow Time (s)	5.0	5.0	5.0					5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0	6.0					6.0	6.0	6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Recall Mode	None	None	None					C-Max	C-Max	C-Max	C-Max	
Walk Time (s)	7.0	7.0	7.0					7.0	7.0	7.0	7.0	
Flash Don't Walk (s)	11.0	11.0	11.0					11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0					0	0	0	0	
Act Effct Green (s)		15.2	15.2					62.8	62.8	62.8	62.8	
Actuated g/C Ratio		0.17	0.17					0.70	0.70	0.70	0.70	
v/c Ratio		0.72	0.26					0.43	0.10	0.59	0.25	
Control Delay (s/veh)		49.2	9.7					8.2	2.1	8.2	2.4	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay (s/veh)		49.2	9.7					8.2	2.1	8.2	2.4	
LOS		D	A					A	A	A	A	
Approach Delay (s/veh)		38.6						7.2			5.1	
Approach LOS		D						A			A	

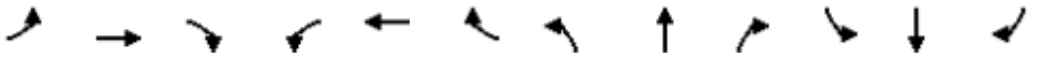
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 12.3		Intersection LOS: B	
Intersection Capacity Utilization 69.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Shirk St & SR 138 EB Ramps

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	198	2	74	0	0	0	0	518	96	262	303	0
Future Volume (veh/h)	198	2	74	0	0	0	0	518	96	262	303	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	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
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1750	1863	1716				0	1863	1716	1716	1863	0
Adj Flow Rate, veh/h	215	2	80				0	563	104	285	329	0
Adj No. of Lanes	0	1	1				0	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	258	2	214				0	1342	1050	503	1342	0
Arrive On Green	0.15	0.15	0.15				0.00	0.72	0.72	1.00	1.00	0.00
Sat Flow, veh/h	1758	16	1458				0	1863	1458	706	1863	0
Grp Volume(v), veh/h	217	0	80				0	563	104	285	329	0
Grp Sat Flow(s),veh/h/ln	1775	0	1458				0	1863	1458	706	1863	0
Q Serve(g_s), s	10.7	0.0	4.5				0.0	10.9	1.9	13.9	0.0	0.0
Cycle Q Clear(g_c), s	10.7	0.0	4.5				0.0	10.9	1.9	24.8	0.0	0.0
Prop In Lane	0.99		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	260	0	214				0	1342	1050	503	1342	0
V/C Ratio(X)	0.83	0.00	0.37				0.00	0.42	0.10	0.57	0.25	0.00
Avail Cap(c_a), veh/h	355	0	292				0	1342	1050	503	1342	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.85	0.85	0.00
Uniform Delay (d), s/veh	37.3	0.0	34.7				0.0	5.0	3.8	2.1	0.0	0.0
Incr Delay (d2), s/veh	11.8	0.0	1.1				0.0	1.0	0.2	3.9	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.0	1.9				0.0	5.8	0.8	3.0	0.1	0.0
LnGrp Delay(d), s/veh	49.1	0.0	35.8				0.0	6.0	4.0	6.0	0.4	0.0
LnGrp LOS	D		D					A	A	A	A	
Approach Vol, veh/h		297						667			614	
Approach Delay, s/veh		45.5						5.7			3.0	
Approach LOS		D						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		70.8		19.2		70.8		
Change Period (Y+Rc), s		6.0		6.0		6.0		
Max Green Setting (Gmax), s		60.0		18.0		60.0		
Max Q Clear Time (g_c+I1), s		12.9		12.7		26.8		
Green Ext Time (p_c), s		2.7		0.5		4.0		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.1
HCM 2010 LOS	B

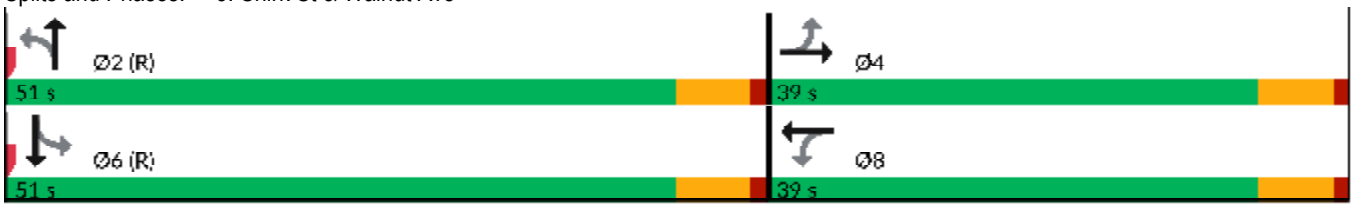


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	69	36	58	79	212	54	287	40	120	266	8
Future Volume (vph)	1	69	36	58	79	212	54	287	40	120	266	8
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.954			0.918			0.986			0.997	
Flt Protected					0.992			0.993			0.985	
Satd. Flow (prot)	0	1777	0	0	1696	0	0	1824	0	0	1829	0
Flt Permitted		0.997			0.928			0.892			0.771	
Satd. Flow (perm)	0	1772	0	0	1587	0	0	1638	0	0	1432	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32			97			9			2	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1796			2695			2949			2654	
Travel Time (s)		22.3			33.4			36.6			32.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	75	39	63	86	230	59	312	43	130	289	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	115	0	0	379	0	0	414	0	0	428	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	39.0	39.0		39.0	39.0		51.0	51.0		51.0	51.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%		56.7%	56.7%		56.7%	56.7%	
Maximum Green (s)	33.0	33.0		33.0	33.0		45.0	45.0		45.0	45.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		22.4			22.4			55.6			55.6	
Actuated g/C Ratio		0.25			0.25			0.62			0.62	
v/c Ratio		0.25			0.81			0.41			0.48	
Control Delay (s/veh)		18.7			36.6			11.6			13.5	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		18.7			36.6			11.6			13.5	
LOS		B			D			B			B	
Approach Delay (s/veh)		18.7			36.6			11.6			13.5	
Approach LOS		B			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay (s/veh): 19.9		Intersection LOS: B	
Intersection Capacity Utilization 76.6%		ICU Level of Service D	
Analysis Period (min) 15			

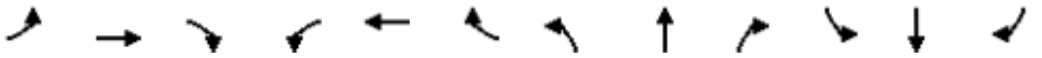
Splits and Phases: 5: Shirk St & Walnut Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	69	36	58	79	212	54	287	40	120	266	8
Future Volume (veh/h)	1	69	36	58	79	212	54	287	40	120	266	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1750	1863	1750	1750	1863	1750	1750	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	1	75	39	63	86	230	59	312	43	130	289	9
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	305	157	99	113	255	157	807	106	304	652	19
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	3	1160	597	200	428	970	185	1336	176	417	1080	32
Grp Volume(v), veh/h	115	0	0	379	0	0	414	0	0	428	0	0
Grp Sat Flow(s),veh/h/ln	1760	0	0	1599	0	0	1698	0	0	1529	0	0
Q Serve(g_s), s	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0
Cycle Q Clear(g_c), s	4.6	0.0	0.0	20.5	0.0	0.0	10.4	0.0	0.0	12.2	0.0	0.0
Prop In Lane	0.01		0.34	0.17		0.61	0.14		0.10	0.30		0.02
Lane Grp Cap(c), veh/h	503	0	0	467	0	0	1071	0	0	975	0	0
V/C Ratio(X)	0.23	0.00	0.00	0.81	0.00	0.00	0.39	0.00	0.00	0.44	0.00	0.00
Avail Cap(c_a), veh/h	684	0	0	630	0	0	1071	0	0	975	0	0
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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.2	0.0	0.0	31.9	0.0	0.0	9.1	0.0	0.0	9.3	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	5.8	0.0	0.0	1.1	0.0	0.0	1.4	0.0	0.0
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	2.3	0.0	0.0	9.8	0.0	0.0	5.5	0.0	0.0	6.0	0.0	0.0
LnGrp Delay(d), s/veh	26.4	0.0	0.0	37.7	0.0	0.0	10.2	0.0	0.0	10.8	0.0	0.0
LnGrp LOS	C			D			B			B		
Approach Vol, veh/h		115			379			414			428	
Approach Delay, s/veh		26.4			37.7			10.2			10.8	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		60.3		29.7		60.3		29.7
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		45.0		33.0		45.0		33.0
Max Q Clear Time (g_c+I1), s		12.4		6.6		14.2		22.5
Green Ext Time (p_c), s		1.6		0.3		1.8		1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.6
HCM 2010 LOS	B



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	61	4	205	83	404	0	0	549	142
Future Volume (vph)	0	0	0	61	4	205	83	404	0	0	549	142
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		350	200		0	80		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected					0.955		0.950					
Satd. Flow (prot)	0	0	0	0	1779	1458	1630	1863	0	0	1863	1458
Flt Permitted					0.955		0.950					
Satd. Flow (perm)	0	0	0	0	1779	1458	1630	1863	0	0	1863	1458
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1153			2492			645			504	
Travel Time (s)		14.3			30.9			8.0			6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	66	4	223	90	439	0	0	597	154
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	70	223	90	439	0	0	597	154
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

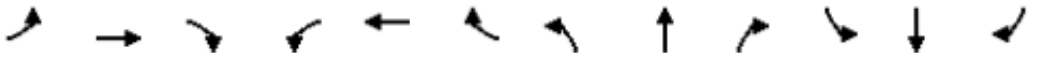
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 56.8%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	43
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	61	4	205	83	404	0	0	549	142
Future Vol, veh/h	0	0	0	61	4	205	83	404	0	0	549	142
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	66	4	223	90	439	0	0	597	154
Number of Lanes	0	0	0	0	1	1	1	1	0	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay, s/veh	14.2	27.5	65.2
HCM LOS	B	D	F

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	94%	0%	0%	0%
Vol Thru, %	0%	100%	6%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	83	404	65	205	549	142
LT Vol	83	0	61	0	0	0
Through Vol	0	404	4	0	549	0
RT Vol	0	0	0	205	0	142
Lane Flow Rate	90	439	71	223	597	154
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.176	0.797	0.157	0.423	1.059	0.243
Departure Headway (Hd)	7.224	6.713	8.231	7.029	6.389	5.675
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	500	545	439	515	567	631
Service Time	4.924	4.413	5.931	4.729	4.138	3.424
HCM Lane V/C Ratio	0.18	0.806	0.162	0.433	1.053	0.244
HCM Control Delay, s/veh	11.5	30.8	12.5	14.8	79.4	10.3
HCM Lane LOS	B	D	B	B	F	B
HCM 95th-tile Q	0.6	7.6	0.6	2.1	17.1	0.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	228	4	155	0	0	0	0	256	40	341	271	0
Future Volume (vph)	228	4	155	0	0	0	0	256	40	341	271	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		220	0		0	0		90	150		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1076			2120			4993			645	
Travel Time (s)		13.3			26.3			61.9			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	248	4	168	0	0	0	0	278	43	371	295	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	252	168	0	0	0	0	278	43	371	295	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

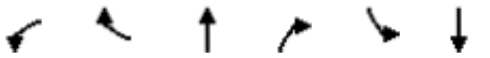
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 56.8%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	18.9
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	228	4	155	0	0	0	0	256	40	341	271	0
Future Vol, veh/h	228	4	155	0	0	0	0	256	40	341	271	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	248	4	168	0	0	0	0	278	43	371	295	0
Number of Lanes	0	1	1	0	0	0	0	1	1	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	16.1	16.7	21.8
HCM LOS	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	98%	0%	100%	0%
Vol Thru, %	100%	0%	2%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	256	40	232	155	341	271
LT Vol	0	0	228	0	341	0
Through Vol	256	0	4	0	0	271
RT Vol	0	40	0	155	0	0
Lane Flow Rate	278	43	252	168	371	295
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.541	0.076	0.534	0.3	0.721	0.531
Departure Headway (Hd)	6.994	6.277	7.627	6.415	7.004	6.494
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	512	567	472	558	515	554
Service Time	4.777	4.06	5.401	4.187	4.775	4.264
HCM Lane V/C Ratio	0.543	0.076	0.534	0.301	0.72	0.532
HCM Control Delay, s/veh	17.8	9.6	18.9	11.9	26	16.5
HCM Lane LOS	C	A	C	B	D	C
HCM 95th-tile Q	3.2	0.2	3.1	1.3	5.8	3.1



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	108	9	2	61	7	4
Future Volume (vph)	108	9	2	61	7	4
Ideal Flow (vphpl)	1750	1750	1900	1750	1750	1900
Storage Length (ft)	100	50		50	100	
Storage Lanes	1	0		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1630	1458	1863	1458	1630	1863
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1630	1458	1863	1458	1630	1863
Link Speed (mph)	55		55			55
Link Distance (ft)	1533		2637			1348
Travel Time (s)	19.0		32.7			16.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	117	10	2	66	8	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	117	10	2	66	8	4
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.00	1.11	1.11	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	19.5%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	5.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	108	9	2	61	7	4
Future Vol, veh/h	108	9	2	61	7	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	50	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	117	10	2	66	8	4

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	22	2	0	0	68	0
Stage 1	2	-	-	-	-	-
Stage 2	20	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	995	1082	-	-	1533	-
Stage 1	1021	-	-	-	-	-
Stage 2	1003	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	990	1082	-	-	1533	-
Mov Cap-2 Maneuver	990	-	-	-	-	-
Stage 1	1021	-	-	-	-	-
Stage 2	998	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9	0	4.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	990	1082	1533	-
HCM Lane V/C Ratio	-	-	0.119	0.009	0.005	-
HCM Control Delay (s/veh)	-	-	9.1	8.4	7.4	-
HCM Lane LOS	-	-	A	A	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	130	65	35	69	119	34	158	46	232	191	9
Future Volume (vph)	13	130	65	35	69	119	34	158	46	232	191	9
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.958			0.928			0.974			0.997	
Flt Protected		0.997			0.992			0.993			0.974	
Satd. Flow (prot)	0	1779	0	0	1715	0	0	1802	0	0	1809	0
Flt Permitted		0.997			0.992			0.993			0.974	
Satd. Flow (perm)	0	1779	0	0	1715	0	0	1802	0	0	1809	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1796			2695			2949			4993	
Travel Time (s)		22.3			33.4			36.6			61.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	141	71	38	75	129	37	172	50	252	208	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	226	0	0	242	0	0	259	0	0	470	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

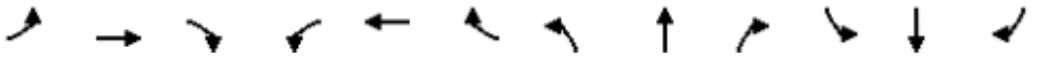
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 69.6%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	20.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	130	65	35	69	119	34	158	46	232	191	9
Future Vol, veh/h	13	130	65	35	69	119	34	158	46	232	191	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	141	71	38	75	129	37	172	50	252	208	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	14.5	14.7	15	29.9
HCM LOS	B	B	B	D

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	6%	16%	54%
Vol Thru, %	66%	63%	31%	44%
Vol Right, %	19%	31%	53%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	238	208	223	432
LT Vol	34	13	35	232
Through Vol	158	130	69	191
RT Vol	46	65	119	9
Lane Flow Rate	259	226	242	470
Geometry Grp	1	1	1	1
Degree of Util (X)	0.462	0.419	0.439	0.804
Departure Headway (Hd)	6.434	6.664	6.515	6.162
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	556	538	550	587
Service Time	4.512	4.744	4.593	4.225
HCM Lane V/C Ratio	0.466	0.42	0.44	0.801
HCM Control Delay, s/veh	15	14.5	14.7	29.9
HCM Lane LOS	B	B	B	D
HCM 95th-tile Q	2.4	2.1	2.2	7.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	241	120	15	124	29	62	38	12	18	34	55
Future Volume (vph)	47	241	120	15	124	29	62	38	12	18	34	55
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		50	0		140	0		50	0		0
Storage Lanes	0		1	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.931	
Flt Protected		0.992			0.995			0.970			0.992	
Satd. Flow (prot)	0	1848	1458	0	1853	1458	0	1807	1458	0	1720	0
Flt Permitted		0.992			0.995			0.970			0.992	
Satd. Flow (perm)	0	1848	1458	0	1853	1458	0	1807	1458	0	1720	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2695			2169			2270			2637	
Travel Time (s)		33.4			26.9			28.1			32.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	51	262	130	16	135	32	67	41	13	20	37	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	313	130	0	151	32	0	108	13	0	117	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

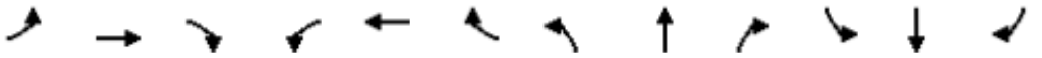
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	11.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	47	241	120	15	124	29	62	38	12	18	34	55
Future Vol, veh/h	47	241	120	15	124	29	62	38	12	18	34	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	51	262	130	16	135	32	67	41	13	20	37	60
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay, s/veh	12.1	10.2	10.8	10.6
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	62%	0%	16%	0%	11%	0%	17%
Vol Thru, %	38%	0%	84%	0%	89%	0%	32%
Vol Right, %	0%	100%	0%	100%	0%	100%	51%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	12	288	120	139	29	107
LT Vol	62	0	47	0	15	0	18
Through Vol	38	0	241	0	124	0	34
RT Vol	0	12	0	120	0	29	55
Lane Flow Rate	109	13	313	130	151	32	116
Geometry Grp	5	5	5	5	5	5	4b
Degree of Util (X)	0.201	0.02	0.489	0.176	0.248	0.045	0.196
Departure Headway (Hd)	6.656	5.633	5.626	4.858	5.905	5.141	6.082
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	540	636	642	743	609	697	591
Service Time	4.389	3.366	3.347	2.558	3.632	2.869	4.113
HCM Lane V/C Ratio	0.202	0.02	0.488	0.175	0.248	0.046	0.196
HCM Control Delay, s/veh	11.1	8.5	13.6	8.6	10.6	8.1	10.6
HCM Lane LOS	B	A	B	A	B	A	B
HCM 95th-tile Q	0.7	0.1	2.7	0.6	1	0.1	0.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	67	5	224	92	499	0	0	714	163
Future Volume (vph)	0	0	0	67	5	224	92	499	0	0	714	163
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		350	200		0	80		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected					0.955		0.950					
Satd. Flow (prot)	0	0	0	0	1779	1458	1630	1863	0	0	1863	1458
Flt Permitted					0.955		0.950					
Satd. Flow (perm)	0	0	0	0	1779	1458	1630	1863	0	0	1863	1458
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1153			2492			645			504	
Travel Time (s)		14.3			30.9			8.0			6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	73	5	243	100	542	0	0	776	177
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	78	243	100	542	0	0	776	177
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

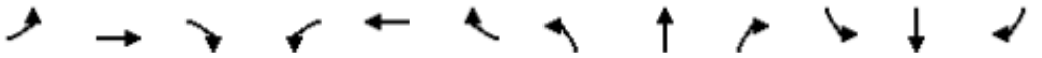
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 63.8%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	118.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	67	5	224	92	499	0	0	714	163
Future Vol, veh/h	0	0	0	67	5	224	92	499	0	0	714	163
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	73	5	243	100	542	0	0	776	177
Number of Lanes	0	0	0	0	1	1	1	1	0	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay, s/veh	16.3	61.1	192
HCM LOS	C	F	F

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	93%	0%	0%	0%
Vol Thru, %	0%	100%	7%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	92	499	72	224	714	163
LT Vol	92	0	67	0	0	0
Through Vol	0	499	5	0	714	0
RT Vol	0	0	0	224	0	163
Lane Flow Rate	100	542	78	243	776	177
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.2	1.012	0.179	0.478	1.453	0.297
Departure Headway (Hd)	7.755	7.241	8.861	7.651	6.742	6.026
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	466	504	408	475	543	595
Service Time	5.455	4.941	6.561	5.351	4.496	3.779
HCM Lane V/C Ratio	0.215	1.075	0.191	0.512	1.429	0.297
HCM Control Delay, s/veh	12.4	70.1	13.5	17.2	233.2	11.3
HCM Lane LOS	B	F	B	C	F	B
HCM 95th-tile Q	0.7	14.1	0.6	2.5	37.7	1.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	239	4	163	0	0	0	0	334	46	379	335	0
Future Volume (vph)	239	4	163	0	0	0	0	334	46	379	335	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		220	0		0	0		90	150		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1076			2120			2339			645	
Travel Time (s)		13.3			26.3			29.0			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	260	4	177	0	0	0	0	363	50	412	364	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	264	177	0	0	0	0	363	50	412	364	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

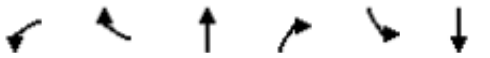
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	27.2
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	239	4	163	0	0	0	0	334	46	379	335	0
Future Vol, veh/h	239	4	163	0	0	0	0	334	46	379	335	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	260	4	177	0	0	0	0	363	50	412	364	0
Number of Lanes	0	1	1	0	0	0	0	1	1	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	18.4	26.9	32.4
HCM LOS	C	D	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	98%	0%	100%	0%
Vol Thru, %	100%	0%	2%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	334	46	243	163	379	335
LT Vol	0	0	239	0	379	0
Through Vol	334	0	4	0	0	335
RT Vol	0	46	0	163	0	0
Lane Flow Rate	363	50	264	177	412	364
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.749	0.093	0.59	0.336	0.851	0.7
Departure Headway (Hd)	7.432	6.713	8.163	6.942	7.433	6.921
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	490	536	444	521	490	524
Service Time	5.15	4.431	5.863	4.642	5.133	4.621
HCM Lane V/C Ratio	0.741	0.093	0.595	0.34	0.841	0.695
HCM Control Delay, s/veh	29.2	10.1	21.9	13.1	39.6	24.2
HCM Lane LOS	D	B	C	B	E	C
HCM 95th-tile Q	6.3	0.3	3.7	1.5	8.7	5.5



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	15	20	290	12	18	426
Future Volume (vph)	15	20	290	12	18	426
Ideal Flow (vphpl)	1750	1750	1900	1750	1750	1900
Storage Length (ft)	100	50		50	100	
Storage Lanes	1	0		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1630	1458	1863	1458	1630	1863
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1630	1458	1863	1458	1630	1863
Link Speed (mph)	55		55			55
Link Distance (ft)	2679		2654			2339
Travel Time (s)	33.2		32.9			29.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	16	22	315	13	20	463
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	22	315	13	20	463
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.00	1.11	1.11	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	32.4%	ICU Level of Service	A
Analysis Period (min)	15		

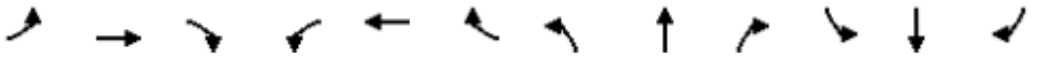
Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	20	290	12	18	426
Future Vol, veh/h	15	20	290	12	18	426
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	50	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	22	315	13	20	463

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	818	315	0	0	328	0
Stage 1	315	-	-	-	-	-
Stage 2	503	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	346	725	-	-	1232	-
Stage 1	740	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	340	725	-	-	1232	-
Mov Cap-2 Maneuver	340	-	-	-	-	-
Stage 1	740	-	-	-	-	-
Stage 2	597	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	12.7	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	340	725	1232	-
HCM Lane V/C Ratio	-	-	0.048	0.03	0.016	-
HCM Control Delay (s/veh)	-	-	16.1	10.1	8	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	81	2	116	83	10	3	2	67	8	5	2
Future Volume (vph)	4	81	2	116	83	10	3	2	67	8	5	2
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	100		50	100		50	100		50	100		50
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2679			1533			2637			1348	
Travel Time (s)		33.2			19.0			32.7			16.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4	88	2	126	90	11	3	2	73	9	5	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	88	2	126	90	11	3	2	73	9	5	2
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.5%		ICU Level of Service A	
Analysis Period (min) 15			

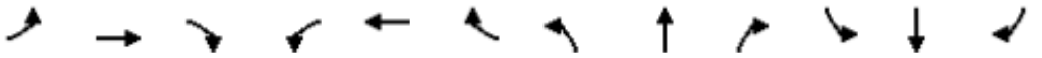
Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	81	2	116	83	10	3	2	67	8	5	2
Future Vol, veh/h	4	81	2	116	83	10	3	2	67	8	5	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	50	100	-	50	100	-	50	100	-	50
Veh in Median Storage, #	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	88	2	126	90	11	3	2	73	9	5	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	118	104	5	77	33	2	7	0	0	75	0	0
Stage 1	23	23	-	8	8	-	-	-	-	-	-	-
Stage 2	95	81	-	69	25	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	858	786	1078	912	860	1082	1614	-	-	1524	-	-
Stage 1	995	876	-	1013	889	-	-	-	-	-	-	-
Stage 2	912	828	-	941	874	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	776	780	1078	826	853	1082	1614	-	-	1524	-	-
Mov Cap-2 Maneuver	776	780	-	826	853	-	-	-	-	-	-	-
Stage 1	993	871	-	1011	887	-	-	-	-	-	-	-
Stage 2	810	826	-	839	869	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.1	9.9	0.3	3.9
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1614	-	-	776	780	1078	826	853	1082	1524	-	-
HCM Lane V/C Ratio	0.002	-	-	0.006	0.113	0.002	0.153	0.106	0.01	0.006	-	-
HCM Control Delay (s/veh)	7.2	-	-	9.7	10.2	8.3	10.1	9.7	8.4	7.4	-	-
HCM Lane LOS	A	-	-	A	B	A	B	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.4	0	0.5	0.4	0	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	156	71	36	71	122	38	202	52	262	244	10
Future Volume (vph)	14	156	71	36	71	122	38	202	52	262	244	10
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.960			0.928			0.976			0.997	
Flt Protected		0.997			0.992			0.994			0.975	
Satd. Flow (prot)	0	1783	0	0	1715	0	0	1807	0	0	1811	0
Flt Permitted		0.997			0.992			0.994			0.975	
Satd. Flow (perm)	0	1783	0	0	1715	0	0	1807	0	0	1811	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1796			2695			2949			2654	
Travel Time (s)		22.3			33.4			36.6			32.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	170	77	39	77	133	41	220	57	285	265	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	262	0	0	249	0	0	318	0	0	561	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

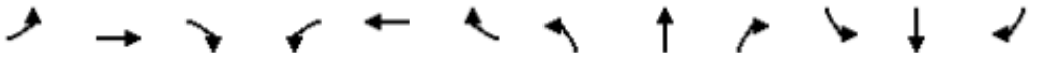
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 78.2%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	44.7
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	156	71	36	71	122	38	202	52	262	244	10
Future Vol, veh/h	14	156	71	36	71	122	38	202	52	262	244	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	170	77	39	77	133	41	220	57	285	265	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	19.4	18.3	21.8	81.3
HCM LOS	C	C	C	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	6%	16%	51%
Vol Thru, %	69%	65%	31%	47%
Vol Right, %	18%	29%	53%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	292	241	229	516
LT Vol	38	14	36	262
Through Vol	202	156	71	244
RT Vol	52	71	122	10
Lane Flow Rate	317	262	249	561
Geometry Grp	1	1	1	1
Degree of Util (X)	0.625	0.54	0.509	1.057
Departure Headway (Hd)	7.36	7.724	7.665	6.783
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	495	469	473	533
Service Time	5.36	5.724	5.665	4.865
HCM Lane V/C Ratio	0.64	0.559	0.526	1.053
HCM Control Delay, s/veh	21.8	19.4	18.3	81.3
HCM Lane LOS	C	C	C	F
HCM 95th-tile Q	4.2	3.2	2.8	16.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	247	123	18	176	35	67	44	13	19	39	59
Future Volume (vph)	48	247	123	18	176	35	67	44	13	19	39	59
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		50	0		140	0		50	0		0
Storage Lanes	0		1	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.932	
Flt Protected		0.992			0.995			0.971			0.992	
Satd. Flow (prot)	0	1848	1458	0	1853	1458	0	1809	1458	0	1722	0
Flt Permitted		0.992			0.995			0.971			0.992	
Satd. Flow (perm)	0	1848	1458	0	1853	1458	0	1809	1458	0	1722	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2695			2169			2270			2637	
Travel Time (s)		33.4			26.9			28.1			32.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	52	268	134	20	191	38	73	48	14	21	42	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	320	134	0	211	38	0	121	14	0	127	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

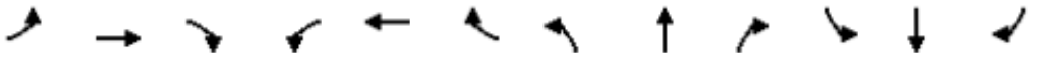
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	49.3%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	12.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	48	247	123	18	176	35	67	44	13	19	39	59
Future Vol, veh/h	48	247	123	18	176	35	67	44	13	19	39	59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	52	268	134	20	191	38	73	48	14	21	42	64
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay, s/veh	13.1	11.5	11.5	11.3
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	60%	0%	16%	0%	9%	0%	16%
Vol Thru, %	40%	0%	84%	0%	91%	0%	33%
Vol Right, %	0%	100%	0%	100%	0%	100%	50%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	111	13	295	123	194	35	117
LT Vol	67	0	48	0	18	0	19
Through Vol	44	0	247	0	176	0	39
RT Vol	0	13	0	123	0	35	59
Lane Flow Rate	121	14	321	134	211	38	127
Geometry Grp	5	5	5	5	5	5	4b
Degree of Util (X)	0.232	0.023	0.52	0.187	0.355	0.056	0.225
Departure Headway (Hd)	6.917	5.899	5.838	5.047	6.053	5.296	6.367
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	519	605	619	710	593	675	562
Service Time	4.67	3.652	3.577	2.786	3.798	3.04	4.419
HCM Lane V/C Ratio	0.233	0.023	0.519	0.189	0.356	0.056	0.226
HCM Control Delay, s/veh	11.8	8.8	14.8	9	12.1	8.4	11.3
HCM Lane LOS	B	A	B	A	B	A	B
HCM 95th-tile Q	0.9	0.1	3	0.7	1.6	0.2	0.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	72	5	224	92	502	0	0	723	163
Future Volume (vph)	0	0	0	72	5	224	92	502	0	0	723	163
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		350	200		0	80		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.972	
Flt Protected					0.955		0.950					
Satd. Flow (prot)	0	0	0	0	1779	1458	1630	1863	0	1716	1811	0
Flt Permitted					0.955		0.950					
Satd. Flow (perm)	0	0	0	0	1779	1458	1630	1863	0	1716	1811	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1153			2492			645			504	
Travel Time (s)		14.3			30.9			8.0			6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	78	5	243	100	546	0	0	786	177
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	83	243	100	546	0	0	963	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

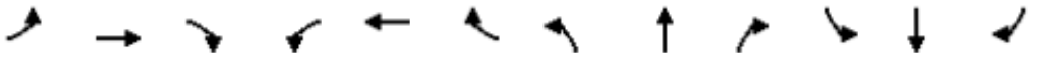
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	67.8%	ICU Level of Service	C
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	204.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	72	5	224	92	502	0	0	723	163
Future Vol, veh/h	0	0	0	72	5	224	92	502	0	0	723	163
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	78	5	243	100	546	0	0	786	177
Number of Lanes	0	0	0	0	1	1	1	1	0	1	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay, s/veh	16.7	56.3	368.3
HCM LOS	C	F	F

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	94%	0%	0%	0%
Vol Thru, %	0%	100%	6%	0%	100%	82%
Vol Right, %	0%	0%	0%	100%	0%	18%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	92	502	77	224	0	886
LT Vol	92	0	72	0	0	0
Through Vol	0	502	5	0	0	723
RT Vol	0	0	0	224	0	163
Lane Flow Rate	100	546	84	243	0	963
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.195	0.987	0.188	0.469	0	1.765
Departure Headway (Hd)	7.855	7.338	9.214	7.992	6.73	6.599
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	460	497	392	455	0	559
Service Time	5.555	5.038	6.914	5.692	4.465	4.333
HCM Lane V/C Ratio	0.217	1.099	0.214	0.534	0	1.723
HCM Control Delay, s/veh	12.4	64.3	14	17.6	9.5	368.3
HCM Lane LOS	B	F	B	C	N	F
HCM 95th-tile Q	0.7	13.1	0.7	2.4	0	58.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	239	4	163	0	0	0	0	337	51	379	349	0
Future Volume (vph)	239	4	163	0	0	0	0	337	51	379	349	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		220	0		0	0		90	150		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1076			2120			2339			645	
Travel Time (s)		13.3			26.3			29.0			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	260	4	177	0	0	0	0	366	55	412	379	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	264	177	0	0	0	0	366	55	412	379	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

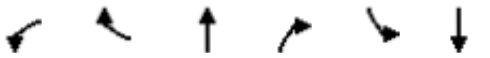
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	64.9%	ICU Level of Service	C
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	28.1
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	239	4	163	0	0	0	0	337	51	379	349	0
Future Vol, veh/h	239	4	163	0	0	0	0	337	51	379	349	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	260	4	177	0	0	0	0	366	55	412	379	0
Number of Lanes	0	1	1	0	0	0	0	1	1	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	18.8	27.6	33.6
HCM LOS	C	D	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	98%	0%	100%	0%
Vol Thru, %	100%	0%	2%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	337	51	243	163	379	349
LT Vol	0	0	239	0	379	0
Through Vol	337	0	4	0	0	349
RT Vol	0	51	0	163	0	0
Lane Flow Rate	366	55	264	177	412	379
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.76	0.104	0.601	0.343	0.854	0.732
Departure Headway (Hd)	7.465	6.746	8.188	6.967	7.46	6.947
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	484	532	444	519	486	523
Service Time	5.203	4.483	5.903	4.682	5.18	4.668
HCM Lane V/C Ratio	0.756	0.103	0.595	0.341	0.848	0.725
HCM Control Delay, s/veh	30.2	10.3	22.5	13.3	40.2	26.4
HCM Lane LOS	D	B	C	B	E	D
HCM 95th-tile Q	6.5	0.3	3.8	1.5	8.8	6.1



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	17	23	292	15	32	426
Future Volume (vph)	17	23	292	15	32	426
Ideal Flow (vphpl)	1750	1750	1900	1750	1750	1900
Storage Length (ft)	100	50		50	100	
Storage Lanes	1	0		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1630	1458	1863	1458	1630	1863
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1630	1458	1863	1458	1630	1863
Link Speed (mph)	55		55			55
Link Distance (ft)	739		548			2339
Travel Time (s)	9.2		6.8			29.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	18	25	317	16	35	463
Shared Lane Traffic (%)						
Lane Group Flow (vph)	18	25	317	16	35	463
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.00	1.11	1.11	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Stop			Stop

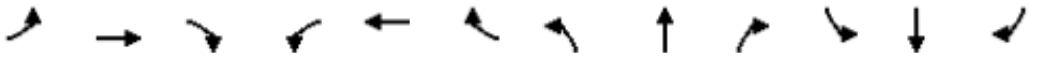
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	32.4%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	13.6
Intersection LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	23	292	15	32	426
Future Vol, veh/h	17	23	292	15	32	426
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	25	317	16	35	463
Number of Lanes	1	1	1	1	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay, s/veh	9.3	11.7	15.3
HCM LOS	A	B	C

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	0%	0%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	292	15	17	23	32	426
LT Vol	0	0	17	0	32	0
Through Vol	292	0	0	0	0	426
RT Vol	0	15	0	23	0	0
Lane Flow Rate	317	16	18	25	35	463
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.447	0.02	0.036	0.04	0.052	0.634
Departure Headway (Hd)	5.068	4.364	6.944	5.729	5.432	4.93
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	711	820	514	622	660	732
Service Time	2.797	2.093	4.706	3.491	3.16	2.657
HCM Lane V/C Ratio	0.446	0.02	0.035	0.04	0.053	0.633
HCM Control Delay, s/veh	11.9	7.2	10	8.7	8.5	15.8
HCM Lane LOS	B	A	A	A	A	C
HCM 95th-tile Q	2.3	0.1	0.1	0.1	0.2	4.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	84	2	123	83	10	3	2	76	8	5	2
Future Volume (vph)	4	84	2	123	83	10	3	2	76	8	5	2
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	100		50	100		50	100		50	100		50
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1360			1533			635			1348	
Travel Time (s)		16.9			19.0			7.9			16.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4	91	2	134	90	11	3	2	83	9	5	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	91	2	134	90	11	3	2	83	9	5	2
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.9%		ICU Level of Service A	
Analysis Period (min) 15			

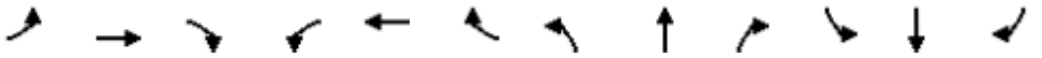
Intersection	
Int Delay, s/veh	7.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	84	2	123	83	10	3	2	76	8	5	2
Future Vol, veh/h	4	84	2	123	83	10	3	2	76	8	5	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	50	100	-	50	100	-	50	100	-	50
Veh in Median Storage, #	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	91	2	134	90	11	3	2	83	9	5	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	123	114	5	79	33	2	7	0	0	85	0	0
Stage 1	23	23	-	8	8	-	-	-	-	-	-	-
Stage 2	100	91	-	71	25	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	852	776	1078	910	860	1082	1614	-	-	1512	-	-
Stage 1	995	876	-	1013	889	-	-	-	-	-	-	-
Stage 2	906	820	-	939	874	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	770	770	1078	821	853	1082	1614	-	-	1512	-	-
Mov Cap-2 Maneuver	770	770	-	821	853	-	-	-	-	-	-	-
Stage 1	993	871	-	1011	887	-	-	-	-	-	-	-
Stage 2	804	818	-	834	869	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.2	9.9	0.3	3.9
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1614	-	-	770	770	1078	821	853	1082	1512	-	-
HCM Lane V/C Ratio	0.002	-	-	0.006	0.119	0.002	0.163	0.106	0.01	0.006	-	-
HCM Control Delay (s/veh)	7.2	-	-	9.7	10.3	8.3	10.2	9.7	8.4	7.4	-	-
HCM Lane LOS	A	-	-	A	B	A	B	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.4	0	0.6	0.4	0	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	156	71	36	71	124	38	206	52	265	251	10
Future Volume (vph)	14	156	71	36	71	124	38	206	52	265	251	10
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.960			0.927			0.976			0.997	
Flt Protected		0.997			0.992			0.994			0.975	
Satd. Flow (prot)	0	1783	0	0	1713	0	0	1807	0	0	1811	0
Flt Permitted		0.997			0.992			0.994			0.975	
Satd. Flow (perm)	0	1783	0	0	1713	0	0	1807	0	0	1811	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1796			2695			2949			2106	
Travel Time (s)		22.3			33.4			36.6			26.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	170	77	39	77	135	41	224	57	288	273	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	262	0	0	251	0	0	322	0	0	572	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

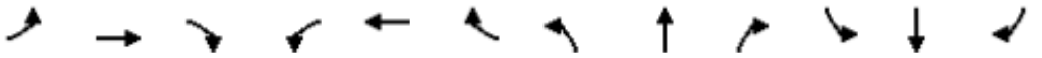
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 79.1%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	49
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	156	71	36	71	124	38	206	52	265	251	10
Future Vol, veh/h	14	156	71	36	71	124	38	206	52	265	251	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	170	77	39	77	135	41	224	57	288	273	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	19.7	18.7	22.6	90.5
HCM LOS	C	C	C	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	6%	16%	50%
Vol Thru, %	70%	65%	31%	48%
Vol Right, %	18%	29%	54%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	296	241	231	526
LT Vol	38	14	36	265
Through Vol	206	156	71	251
RT Vol	52	71	124	10
Lane Flow Rate	322	262	251	572
Geometry Grp	1	1	1	1
Degree of Util (X)	0.637	0.543	0.516	1.086
Departure Headway (Hd)	7.433	7.823	7.753	6.837
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	489	464	467	532
Service Time	5.433	5.823	5.753	4.905
HCM Lane V/C Ratio	0.658	0.565	0.537	1.075
HCM Control Delay, s/veh	22.6	19.7	18.7	90.5
HCM Lane LOS	C	C	C	F
HCM 95th-tile Q	4.4	3.2	2.9	17.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	250	123	18	178	35	67	45	13	23	43	59
Future Volume (vph)	48	250	123	18	178	35	67	45	13	23	43	59
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		50	0		140	0		50	0		0
Storage Lanes	0		1	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.936	
Flt Protected		0.992			0.995			0.971			0.991	
Satd. Flow (prot)	0	1848	1458	0	1853	1458	0	1809	1458	0	1728	0
Flt Permitted		0.992			0.995			0.971			0.991	
Satd. Flow (perm)	0	1848	1458	0	1853	1458	0	1809	1458	0	1728	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2695			2169			2270			2002	
Travel Time (s)		33.4			26.9			28.1			24.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	52	272	134	20	193	38	73	49	14	25	47	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	324	134	0	213	38	0	122	14	0	136	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	50.0%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	12.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	48	250	123	18	178	35	67	45	13	23	43	59
Future Vol, veh/h	48	250	123	18	178	35	67	45	13	23	43	59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	52	272	134	20	193	38	73	49	14	25	47	64
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay, s/veh	13.3	11.7	11.6	11.5
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	60%	0%	16%	0%	9%	0%	18%
Vol Thru, %	40%	0%	84%	0%	91%	0%	34%
Vol Right, %	0%	100%	0%	100%	0%	100%	47%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	112	13	298	123	196	35	125
LT Vol	67	0	48	0	18	0	23
Through Vol	45	0	250	0	178	0	43
RT Vol	0	13	0	123	0	35	59
Lane Flow Rate	122	14	324	134	213	38	136
Geometry Grp	5	5	5	5	5	5	4b
Degree of Util (X)	0.235	0.023	0.53	0.189	0.361	0.057	0.242
Departure Headway (Hd)	6.962	5.947	5.887	5.097	6.107	5.35	6.422
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	515	600	612	703	588	668	558
Service Time	4.719	3.703	3.625	2.834	3.852	3.094	4.476
HCM Lane V/C Ratio	0.237	0.023	0.529	0.191	0.362	0.057	0.244
HCM Control Delay, s/veh	11.9	8.8	15.1	9	12.3	8.4	11.5
HCM Lane LOS	B	A	C	A	B	A	B
HCM 95th-tile Q	0.9	0.1	3.1	0.7	1.6	0.2	0.9

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	77	17	0	82	8	0
Future Volume (vph)	77	17	0	82	8	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.976					
Flt Protected					0.950	
Satd. Flow (prot)	1818	0	0	1863	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	1818	0	0	1863	1770	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	739			580	300	
Travel Time (s)	9.2			7.2	3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	84	18	0	89	9	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	102	0	0	89	9	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 15.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	77	17	0	82	8	0
Future Vol, veh/h	77	17	0	82	8	0
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, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	84	18	0	89	9	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	102	0	182	93
Stage 1	-	-	-	-	93	-
Stage 2	-	-	-	-	89	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1490	-	807	964
Stage 1	-	-	-	-	931	-
Stage 2	-	-	-	-	934	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1490	-	807	964
Mov Cap-2 Maneuver	-	-	-	-	807	-
Stage 1	-	-	-	-	931	-
Stage 2	-	-	-	-	934	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	807	-	-	1490	-
HCM Lane V/C Ratio	0.011	-	-	-	-
HCM Control Delay (s/veh)	9.5	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	85	1	2	87	0	1
Future Volume (vph)	85	1	2	87	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999				0.865	
Flt Protected				0.999		
Satd. Flow (prot)	1861	0	0	1861	1611	0
Flt Permitted				0.999		
Satd. Flow (perm)	1861	0	0	1861	1611	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	580			1360	308	
Travel Time (s)	7.2			16.9	3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	92	1	2	95	0	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	93	0	0	97	1	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 16.2%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	5	230	6	0	433
Future Volume (vph)	0	5	230	6	0	433
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865	0.996			
Flt Protected						
Satd. Flow (prot)	0	1611	1855	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	1611	1855	0	0	1863
Link Speed (mph)	55		55			55
Link Distance (ft)	2684		2106			548
Travel Time (s)	33.3		26.1			6.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	5	250	7	0	471
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	5	257	0	0	471
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	5	230	6	0	433
Future Vol, veh/h	0	5	230	6	0	433
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	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	5	250	7	0	471

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	254	0	0	257	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	4.12	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	0	785	-	-	1308	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	785	-	-	1308	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	785	1308	-
HCM Lane V/C Ratio	-	-	0.007	-	-
HCM Control Delay (s/veh)	-	-	9.6	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	9	8	14	0	0	16
Future Volume (vph)	9	8	14	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.936				0.865	
Flt Protected	0.974			0.950		
Satd. Flow (prot)	1698	0	0	1770	1611	0
Flt Permitted	0.974			0.950		
Satd. Flow (perm)	1698	0	0	1770	1611	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2684			2002	635	
Travel Time (s)	33.3			24.8	7.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	9	15	0	0	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	19	0	0	15	17	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 17.4%		ICU Level of Service A	
Analysis Period (min) 15			

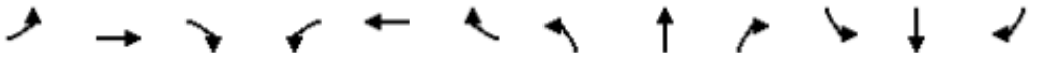
Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	8	14	0	0	16
Future Vol, veh/h	9	8	14	0	0	16
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	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	9	15	0	0	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	39	9	17	0	-	0
Stage 1	9	-	-	-	-	-
Stage 2	30	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	973	1073	1600	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	993	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	964	1073	1600	-	-	-
Mov Cap-2 Maneuver	964	-	-	-	-	-
Stage 1	1005	-	-	-	-	-
Stage 2	993	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.6	7.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1600	-	1012	-	-
HCM Lane V/C Ratio	0.01	-	0.018	-	-
HCM Control Delay (s/veh)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	72	5	224	92	502	0	0	723	163
Future Volume (vph)	0	0	0	72	5	224	92	502	0	0	723	163
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		350	200		0	80		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected					0.955		0.950					
Satd. Flow (prot)	0	0	0	0	1779	1458	1630	1863	0	0	1863	1458
Flt Permitted					0.955		0.309					
Satd. Flow (perm)	0	0	0	0	1779	1458	530	1863	0	0	1863	1458
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						243						177
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1153			2492			645			504	
Travel Time (s)		14.3			30.9			8.0			6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	78	5	243	100	546	0	0	786	177
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	83	243	100	546	0	0	786	177
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	1	1	1	1			1	1
Detector Template												
Leading Detector (ft)				50	50	50	50	50			50	50
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				50	50	50	50	50			50	50
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Turn Type				Perm	NA	Perm	Perm	NA			NA	Perm
Protected Phases					8			2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	2	2			6	6
Switch Phase												
Minimum Initial (s)				4.0	4.0	4.0	4.0	4.0			4.0	4.0
Minimum Split (s)				24.0	24.0	24.0	24.0	24.0			24.0	24.0
Total Split (s)				31.0	31.0	31.0	59.0	59.0			59.0	59.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)				34.4%	34.4%	34.4%	65.6%	65.6%			65.6%	65.6%
Maximum Green (s)				25.0	25.0	25.0	53.0	53.0			53.0	53.0
Yellow Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
All-Red Time (s)				1.0	1.0	1.0	1.0	1.0			1.0	1.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0	6.0	6.0	6.0			6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
Recall Mode				None	None	None	C-Max	C-Max			C-Max	C-Max
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	7.0
Flash Don't Walk (s)				11.0	11.0	11.0	11.0	11.0			11.0	11.0
Pedestrian Calls (#/hr)				0	0	0	0	0			0	0
Act Effct Green (s)					9.8	9.8	68.2	68.2			68.2	68.2
Actuated g/C Ratio					0.11	0.11	0.76	0.76			0.76	0.76
v/c Ratio					0.43	0.65	0.25	0.39			0.56	0.15
Control Delay (s/veh)					43.3	13.6	4.7	4.5			6.9	1.0
Queue Delay					0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)					43.3	13.6	4.7	4.5			6.9	1.0
LOS					D	B	A	A			A	A
Approach Delay (s/veh)					21.1			4.6			5.8	
Approach LOS					C			A			A	

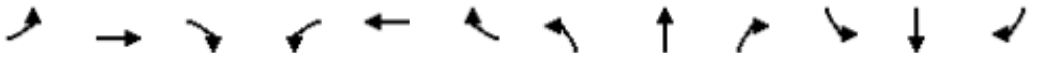
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay (s/veh): 8.0		Intersection LOS: A	
Intersection Capacity Utilization 68.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: Shirk St & SR 198 WB Ramps

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	72	5	224	92	502	0	0	723	163
Future Volume (veh/h)	0	0	0	72	5	224	92	502	0	0	723	163
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				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
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1750	1863	1716	1716	1863	0	0	1863	1716
Adj Flow Rate, veh/h				78	5	243	100	546	0	0	786	177
Adj No. of Lanes				0	1	1	1	1	0	0	1	1
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				322	21	281	313	1256	0	0	1256	983
Arrive On Green				0.19	0.19	0.19	1.00	1.00	0.00	0.00	0.67	0.67
Sat Flow, veh/h				1672	107	1458	535	1863	0	0	1863	1458
Grp Volume(v), veh/h				83	0	243	100	546	0	0	786	177
Grp Sat Flow(s),veh/h/ln				1779	0	1458	535	1863	0	0	1863	1458
Q Serve(g_s), s				3.6	0.0	14.5	8.2	0.0	0.0	0.0	21.4	4.1
Cycle Q Clear(g_c), s				3.6	0.0	14.5	29.6	0.0	0.0	0.0	21.4	4.1
Prop In Lane				0.94		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				342	0	281	313	1256	0	0	1256	983
V/C Ratio(X)				0.24	0.00	0.87	0.32	0.43	0.00	0.00	0.63	0.18
Avail Cap(c_a), veh/h				494	0	405	313	1256	0	0	1256	983
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.97	0.97	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				30.8	0.0	35.2	5.2	0.0	0.0	0.0	8.3	5.4
Incr Delay (d2), s/veh				0.4	0.0	12.7	2.6	1.1	0.0	0.0	2.4	0.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.8	0.0	6.9	1.4	0.4	0.0	0.0	11.7	1.7
LnGrp Delay(d), s/veh				31.1	0.0	47.9	7.8	1.1	0.0	0.0	10.6	5.8
LnGrp LOS				C		D	A	A			B	A
Approach Vol, veh/h					326			646			963	
Approach Delay, s/veh					43.7			2.1			9.7	
Approach LOS					D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		66.7				66.7		23.3
Change Period (Y+Rc), s		6.0				6.0		6.0
Max Green Setting (Gmax), s		53.0				53.0		25.0
Max Q Clear Time (g_c+I1), s		31.6				23.4		16.5
Green Ext Time (p_c), s		3.2				4.4		0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.9
HCM 2010 LOS	B



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	239	4	163	0	0	0	0	335	50	379	349	0
Future Volume (vph)	239	4	163	0	0	0	0	335	50	379	349	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		220	0		0	0		90	150		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Flt Permitted		0.953								0.533		
Satd. Flow (perm)	0	1775	1458	0	0	0	0	1863	1458	914	1863	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			177						54			
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1076			2120			2339			645	
Travel Time (s)		13.3			26.3			29.0			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	260	4	177	0	0	0	0	364	54	412	379	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	264	177	0	0	0	0	364	54	412	379	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1					1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50					50	50	50	50	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	50	50	50					50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Turn Type	Perm	NA	Perm					NA	Perm	Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4		4						2	6		
Detector Phase	4	4	4					2	2	6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Minimum Split (s)	24.0	24.0	24.0					24.0	24.0	24.0	24.0	
Total Split (s)	24.0	24.0	24.0					66.0	66.0	66.0	66.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	26.7%	26.7%	26.7%					73.3%	73.3%	73.3%	73.3%	
Maximum Green (s)	18.0	18.0	18.0					60.0	60.0	60.0	60.0	
Yellow Time (s)	5.0	5.0	5.0					5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0	6.0					6.0	6.0	6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Recall Mode	None	None	None					C-Max	C-Max	C-Max	C-Max	
Walk Time (s)	7.0	7.0	7.0					7.0	7.0	7.0	7.0	
Flash Don't Walk (s)	11.0	11.0	11.0					11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0					0	0	0	0	
Act Effct Green (s)		16.6	16.6					61.4	61.4	61.4	61.4	
Actuated g/C Ratio		0.18	0.18					0.68	0.68	0.68	0.68	
v/c Ratio		0.81	0.43					0.29	0.05	0.66	0.30	
Control Delay (s/veh)		54.9	8.6					6.0	1.9	12.2	3.9	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay (s/veh)		54.9	8.6					6.0	1.9	12.2	3.9	
LOS		D	A					A	A	B	A	
Approach Delay (s/veh)		36.3						5.4			8.2	
Approach LOS		D						A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay (s/veh): 15.0		Intersection LOS: B	
Intersection Capacity Utilization 68.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Shirk St & SR 138 EB Ramps

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	239	4	163	0	0	0	0	335	50	379	349	0
Future Volume (veh/h)	239	4	163	0	0	0	0	335	50	379	349	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	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
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1750	1863	1716				0	1863	1716	1716	1863	0
Adj Flow Rate, veh/h	260	4	177				0	364	54	412	379	0
Adj No. of Lanes	0	1	1				0	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	302	5	252				0	1293	1012	631	1293	0
Arrive On Green	0.17	0.17	0.17				0.00	0.69	0.69	1.00	1.00	0.00
Sat Flow, veh/h	1748	27	1458				0	1863	1458	888	1863	0
Grp Volume(v), veh/h	264	0	177				0	364	54	412	379	0
Grp Sat Flow(s),veh/h/ln	1775	0	1458				0	1863	1458	888	1863	0
Q Serve(g_s), s	13.0	0.0	10.3				0.0	6.7	1.1	13.5	0.0	0.0
Cycle Q Clear(g_c), s	13.0	0.0	10.3				0.0	6.7	1.1	20.2	0.0	0.0
Prop In Lane	0.98		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	306	0	252				0	1293	1012	631	1293	0
V/C Ratio(X)	0.86	0.00	0.70				0.00	0.28	0.05	0.65	0.29	0.00
Avail Cap(c_a), veh/h	355	0	292				0	1293	1012	631	1293	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.81	0.81	0.00
Uniform Delay (d), s/veh	36.2	0.0	35.1				0.0	5.2	4.4	1.1	0.0	0.0
Incr Delay (d2), s/veh	17.1	0.0	6.2				0.0	0.5	0.1	4.2	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	0.0	4.6				0.0	3.6	0.4	3.6	0.2	0.0
LnGrp Delay(d), s/veh	53.3	0.0	41.3				0.0	5.8	4.5	5.3	0.5	0.0
LnGrp LOS	D		D					A	A	A	A	
Approach Vol, veh/h		441						418			791	
Approach Delay, s/veh		48.5						5.6			3.0	
Approach LOS		D						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		68.5		21.5		68.5		
Change Period (Y+Rc), s		6.0		6.0		6.0		
Max Green Setting (Gmax), s		60.0		18.0		60.0		
Max Q Clear Time (g_c+I1), s		8.7		15.0		22.2		
Green Ext Time (p_c), s		1.5		0.5		4.7		

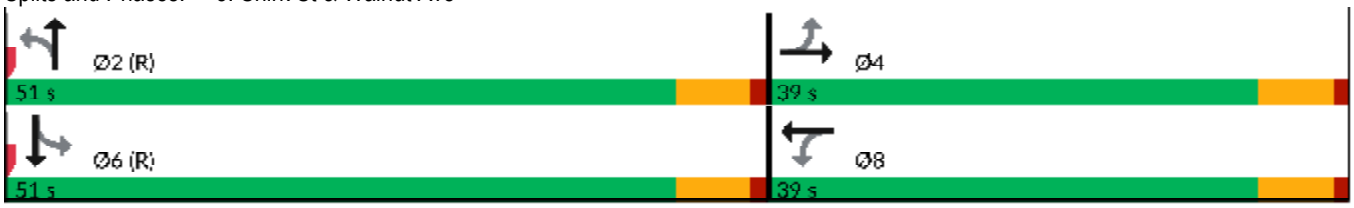
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.8
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	156	71	36	71	124	38	206	52	265	251	10
Future Volume (vph)	14	156	71	36	71	124	38	206	52	265	251	10
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.960			0.927			0.976			0.997	
Flt Protected		0.997			0.992			0.994			0.975	
Satd. Flow (prot)	0	1783	0	0	1713	0	0	1807	0	0	1811	0
Flt Permitted		0.965			0.798			0.893			0.694	
Satd. Flow (perm)	0	1726	0	0	1378	0	0	1624	0	0	1289	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26			74			17			2	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1796			2695			2949			2654	
Travel Time (s)		22.3			33.4			36.6			32.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	170	77	39	77	135	41	224	57	288	273	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	262	0	0	251	0	0	322	0	0	572	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	39.0	39.0		39.0	39.0		51.0	51.0		51.0	51.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%		56.7%	56.7%		56.7%	56.7%	
Maximum Green (s)	33.0	33.0		33.0	33.0		45.0	45.0		45.0	45.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		17.8			17.8			60.2			60.2	
Actuated g/C Ratio		0.20			0.20			0.67			0.67	
v/c Ratio		0.72			0.76			0.30			0.66	
Control Delay (s/veh)		41.4			38.0			7.5			16.5	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		41.4			38.0			7.5			16.5	
LOS		D			D			A			B	
Approach Delay (s/veh)		41.4			38.0			7.5			16.5	
Approach LOS		D			D			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 22.9		Intersection LOS: C	
Intersection Capacity Utilization 84.1%		ICU Level of Service E	
Analysis Period (min) 15			

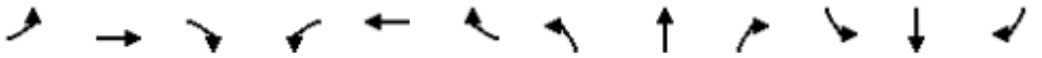
Splits and Phases: 5: Shirk St & Walnut Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	156	71	36	71	124	38	206	52	265	251	10
Future Volume (veh/h)	14	156	71	36	71	124	38	206	52	265	251	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1750	1863	1750	1750	1863	1750	1750	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	15	170	77	39	77	135	41	224	57	288	273	11
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	51	217	94	77	104	157	160	848	207	531	470	18
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	51	1205	522	171	578	872	167	1236	302	687	685	27
Grp Volume(v), veh/h	262	0	0	251	0	0	322	0	0	572	0	0
Grp Sat Flow(s),veh/h/ln	1777	0	0	1620	0	0	1705	0	0	1398	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	12.0	0.0	0.0
Cycle Q Clear(g_c), s	12.7	0.0	0.0	13.4	0.0	0.0	6.1	0.0	0.0	18.2	0.0	0.0
Prop In Lane	0.06		0.29	0.16		0.54	0.13		0.18	0.50		0.02
Lane Grp Cap(c), veh/h	363	0	0	339	0	0	1215	0	0	1020	0	0
V/C Ratio(X)	0.72	0.00	0.00	0.74	0.00	0.00	0.26	0.00	0.00	0.56	0.00	0.00
Avail Cap(c_a), veh/h	682	0	0	629	0	0	1215	0	0	1020	0	0
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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	35.5	0.0	0.0	35.6	0.0	0.0	5.4	0.0	0.0	7.1	0.0	0.0
Incr Delay (d2), s/veh	2.7	0.0	0.0	3.2	0.0	0.0	0.5	0.0	0.0	2.2	0.0	0.0
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	6.5	0.0	0.0	6.3	0.0	0.0	3.2	0.0	0.0	7.8	0.0	0.0
LnGrp Delay(d), s/veh	38.2	0.0	0.0	38.8	0.0	0.0	5.9	0.0	0.0	9.3	0.0	0.0
LnGrp LOS	D			D			A			A		
Approach Vol, veh/h		262			251			322			572	
Approach Delay, s/veh		38.2			38.8			5.9			9.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		67.8		22.2		67.8		22.2
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		45.0		33.0		45.0		33.0
Max Q Clear Time (g_c+I1), s		8.1		14.7		20.2		15.4
Green Ext Time (p_c), s		1.2		0.8		2.7		0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.2
HCM 2010 LOS	B



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	73	6	244	103	616	0	0	928	187
Future Volume (vph)	0	0	0	73	6	244	103	616	0	0	928	187
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		350	200		0	80		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected					0.956		0.950					
Satd. Flow (prot)	0	0	0	0	1781	1458	1630	1863	0	0	1863	1458
Flt Permitted					0.956		0.950					
Satd. Flow (perm)	0	0	0	0	1781	1458	1630	1863	0	0	1863	1458
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1153			2492			645			504	
Travel Time (s)		14.3			30.9			8.0			6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	79	7	265	112	670	0	0	1009	203
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	86	265	112	670	0	0	1009	203
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

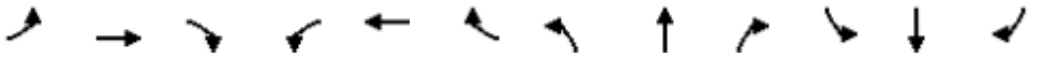
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 72.5%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	238.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	73	6	244	103	616	0	0	928	187
Future Vol, veh/h	0	0	0	73	6	244	103	616	0	0	928	187
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	79	7	265	112	670	0	0	1009	203
Number of Lanes	0	0	0	0	1	1	1	1	0	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay, s/veh	18.3	144	362.5
HCM LOS	C	F	F

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	92%	0%	0%	0%
Vol Thru, %	0%	100%	8%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	103	616	79	244	928	187
LT Vol	103	0	73	0	0	0
Through Vol	0	616	6	0	928	0
RT Vol	0	0	0	244	0	187
Lane Flow Rate	112	670	86	265	1009	203
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.23	1.281	0.196	0.521	1.908	0.345
Departure Headway (Hd)	8.291	7.775	9.456	8.234	7.17	6.451
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	436	475	382	440	514	561
Service Time	5.991	5.475	7.156	5.934	4.87	4.151
HCM Lane V/C Ratio	0.257	1.411	0.225	0.602	1.963	0.362
HCM Control Delay, s/veh	13.5	165.8	14.4	19.5	433	12.5
HCM Lane LOS	B	F	B	C	F	B
HCM 95th-tile Q	0.9	25.1	0.7	2.9	62.7	1.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	251	5	170	0	0	0	0	436	52	422	413	0
Future Volume (vph)	251	5	170	0	0	0	0	436	52	422	413	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		220	0		0	0		90	150		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1076			2120			2339			645	
Travel Time (s)		13.3			26.3			29.0			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	273	5	185	0	0	0	0	474	57	459	449	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	278	185	0	0	0	0	474	57	459	449	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

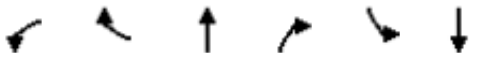
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	52.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	251	5	170	0	0	0	0	436	52	422	413	0
Future Vol, veh/h	251	5	170	0	0	0	0	436	52	422	413	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	273	5	185	0	0	0	0	474	57	459	449	0
Number of Lanes	0	1	1	0	0	0	0	1	1	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	21.6	71.3	56.6
HCM LOS	C	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	98%	0%	100%	0%
Vol Thru, %	100%	0%	2%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	436	52	256	170	422	413
LT Vol	0	0	251	0	422	0
Through Vol	436	0	5	0	0	413
RT Vol	0	52	0	170	0	0
Lane Flow Rate	474	57	278	185	459	449
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	1.032	0.112	0.656	0.373	0.985	0.9
Departure Headway (Hd)	7.843	7.121	8.599	7.372	7.878	7.363
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	464	506	423	492	463	494
Service Time	5.543	4.821	6.299	5.072	5.578	5.063
HCM Lane V/C Ratio	1.022	0.113	0.657	0.376	0.991	0.909
HCM Control Delay, s/veh	78.5	10.7	26.3	14.4	66.4	46.6
HCM Lane LOS	F	B	D	B	F	E
HCM 95th-tile Q	14.3	0.4	4.6	1.7	12.6	10.1



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	15	20	290	12	18	426
Future Volume (vph)	15	20	290	12	18	426
Ideal Flow (vphpl)	1750	1750	1900	1750	1750	1900
Storage Length (ft)	100	50		50	100	
Storage Lanes	1	0		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1630	1458	1863	1458	1630	1863
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1630	1458	1863	1458	1630	1863
Link Speed (mph)	55		55			55
Link Distance (ft)	2679		2654			2339
Travel Time (s)	33.2		32.9			29.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	16	22	315	13	20	463
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	22	315	13	20	463
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.00	1.11	1.11	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	32.4%	ICU Level of Service	A
Analysis Period (min)	15		

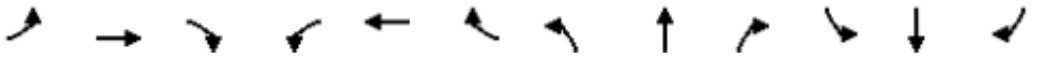
Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	20	290	12	18	426
Future Vol, veh/h	15	20	290	12	18	426
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	50	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	22	315	13	20	463

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	818	315	0	0	328	0
Stage 1	315	-	-	-	-	-
Stage 2	503	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	346	725	-	-	1232	-
Stage 1	740	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	340	725	-	-	1232	-
Mov Cap-2 Maneuver	340	-	-	-	-	-
Stage 1	740	-	-	-	-	-
Stage 2	597	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	12.7	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	340	725	1232	-
HCM Lane V/C Ratio	-	-	0.048	0.03	0.016	-
HCM Control Delay (s/veh)	-	-	16.1	10.1	8	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	106	2	125	110	10	3	3	73	8	6	2
Future Volume (vph)	4	106	2	125	110	10	3	3	73	8	6	2
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	100		50	100		50	100		50	100		50
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2679			1533			2637			1348	
Travel Time (s)		33.2			19.0			32.7			16.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4	115	2	136	120	11	3	3	79	9	7	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	115	2	136	120	11	3	3	79	9	7	2
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.0%		ICU Level of Service A	
Analysis Period (min) 15			

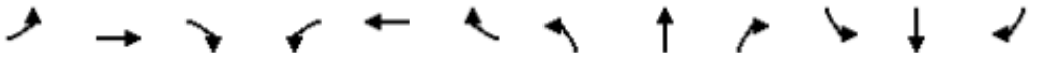
Intersection	
Int Delay, s/veh	8.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	106	2	125	110	10	3	3	73	8	6	2
Future Vol, veh/h	4	106	2	125	110	10	3	3	73	8	6	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	50	100	-	50	100	-	50	100	-	50
Veh in Median Storage, #	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	115	2	136	120	11	3	3	79	9	7	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	139	113	7	94	36	3	9	0	0	82	0	0
Stage 1	25	25	-	9	9	-	-	-	-	-	-	-
Stage 2	114	88	-	85	27	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	831	777	1075	889	856	1081	1611	-	-	1515	-	-
Stage 1	993	874	-	1012	888	-	-	-	-	-	-	-
Stage 2	891	822	-	923	873	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	730	771	1075	781	849	1081	1611	-	-	1515	-	-
Mov Cap-2 Maneuver	730	771	-	781	849	-	-	-	-	-	-	-
Stage 1	991	869	-	1010	886	-	-	-	-	-	-	-
Stage 2	762	820	-	794	868	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.4	10.2	0.3	3.7
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1611	-	-	730	771	1075	781	849	1081	1515	-	-
HCM Lane V/C Ratio	0.002	-	-	0.006	0.149	0.002	0.174	0.141	0.01	0.006	-	-
HCM Control Delay (s/veh)	7.2	-	-	10	10.5	8.4	10.6	9.9	8.4	7.4	-	-
HCM Lane LOS	A	-	-	B	B	A	B	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.5	0	0.6	0.5	0	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	188	78	37	73	125	44	259	59	297	313	12
Future Volume (vph)	16	188	78	37	73	125	44	259	59	297	313	12
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.962			0.928			0.978			0.997	
Flt Protected		0.997			0.992			0.994			0.977	
Satd. Flow (prot)	0	1787	0	0	1715	0	0	1811	0	0	1814	0
Flt Permitted		0.997			0.992			0.994			0.977	
Satd. Flow (perm)	0	1787	0	0	1715	0	0	1811	0	0	1814	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1796			2695			2949			2654	
Travel Time (s)		22.3			33.4			36.6			32.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	17	204	85	40	79	136	48	282	64	323	340	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	306	0	0	255	0	0	394	0	0	676	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

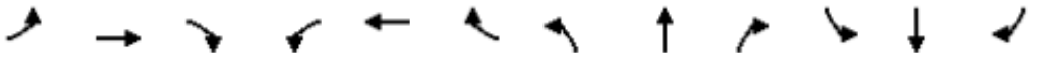
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 88.5%		ICU Level of Service E	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	114.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	188	78	37	73	125	44	259	59	297	313	12
Future Vol, veh/h	16	188	78	37	73	125	44	259	59	297	313	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	204	85	40	79	136	48	282	64	323	340	13
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	29	23.9	41.1	229.4
HCM LOS	D	C	E	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	12%	6%	16%	48%
Vol Thru, %	72%	67%	31%	50%
Vol Right, %	16%	28%	53%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	362	282	235	622
LT Vol	44	16	37	297
Through Vol	259	188	73	313
RT Vol	59	78	125	12
Lane Flow Rate	393	307	255	676
Geometry Grp	1	1	1	1
Degree of Util (X)	0.827	0.676	0.571	1.436
Departure Headway (Hd)	8.544	9.078	9.248	7.644
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	429	402	393	480
Service Time	6.544	7.078	7.248	5.644
HCM Lane V/C Ratio	0.916	0.764	0.649	1.408
HCM Control Delay, s/veh	41.1	29	23.9	229.4
HCM Lane LOS	E	D	C	F
HCM 95th-tile Q	7.7	4.8	3.4	33.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	253	126	22	250	42	72	51	14	21	46	64
Future Volume (vph)	49	253	126	22	250	42	72	51	14	21	46	64
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		50	0		140	0		50	0		0
Storage Lanes	0		1	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.934	
Flt Protected		0.992			0.996			0.972			0.992	
Satd. Flow (prot)	0	1848	1458	0	1855	1458	0	1811	1458	0	1726	0
Flt Permitted		0.992			0.996			0.972			0.992	
Satd. Flow (perm)	0	1848	1458	0	1855	1458	0	1811	1458	0	1726	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2695			2169			2270			2637	
Travel Time (s)		33.4			26.9			28.1			32.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	53	275	137	24	272	46	78	55	15	23	50	70
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	328	137	0	296	46	0	133	15	0	143	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

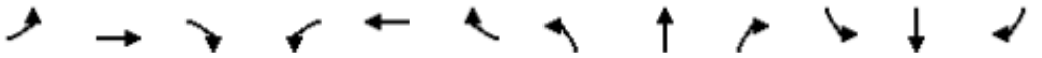
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 54.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	14
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	253	126	22	250	42	72	51	14	21	46	64
Future Vol, veh/h	49	253	126	22	250	42	72	51	14	21	46	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	53	275	137	24	272	46	78	55	15	23	50	70
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay, s/veh	14.5	14.6	12.4	12.3
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	59%	0%	16%	0%	8%	0%	16%
Vol Thru, %	41%	0%	84%	0%	92%	0%	35%
Vol Right, %	0%	100%	0%	100%	0%	100%	49%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	123	14	302	126	272	42	131
LT Vol	72	0	49	0	22	0	21
Through Vol	51	0	253	0	250	0	46
RT Vol	0	14	0	126	0	42	64
Lane Flow Rate	134	15	328	137	296	46	142
Geometry Grp	5	5	5	5	5	5	4b
Degree of Util (X)	0.271	0.027	0.561	0.204	0.514	0.07	0.268
Departure Headway (Hd)	7.293	6.281	6.15	5.357	6.259	5.506	6.77
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	491	566	584	666	574	646	527
Service Time	5.076	4.063	3.916	3.123	4.029	3.276	4.856
HCM Lane V/C Ratio	0.273	0.027	0.562	0.206	0.516	0.071	0.269
HCM Control Delay, s/veh	12.8	9.2	16.6	9.5	15.5	8.7	12.3
HCM Lane LOS	B	A	C	A	C	A	B
HCM 95th-tile Q	1.1	0.1	3.5	0.8	2.9	0.2	1.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	86	6	244	103	619	0	0	940	187
Future Volume (vph)	0	0	0	86	6	244	103	619	0	0	940	187
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		350	200		0	80		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.975	
Flt Protected					0.956		0.950					
Satd. Flow (prot)	0	0	0	0	1781	1458	1630	1863	0	1716	1816	0
Flt Permitted					0.956		0.950					
Satd. Flow (perm)	0	0	0	0	1781	1458	1630	1863	0	1716	1816	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1153			2492			645			504	
Travel Time (s)		14.3			30.9			8.0			6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	93	7	265	112	673	0	0	1022	203
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	100	265	112	673	0	0	1225	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

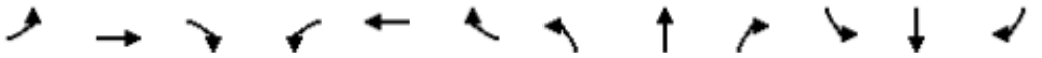
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	354.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	86	6	244	103	619	0	0	940	187
Future Vol, veh/h	0	0	0	86	6	244	103	619	0	0	940	187
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	93	7	265	112	673	0	0	1022	203
Number of Lanes	0	0	0	0	1	1	1	1	0	1	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay, s/veh	18.8	128.1	600.2
HCM LOS	C	F	F

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	93%	0%	0%	0%
Vol Thru, %	0%	100%	7%	0%	100%	83%
Vol Right, %	0%	0%	0%	100%	0%	17%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	103	619	92	244	0	1127
LT Vol	103	0	86	0	0	0
Through Vol	0	619	6	0	0	940
RT Vol	0	0	0	244	0	187
Lane Flow Rate	112	673	100	265	0	1225
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.22	1.231	0.226	0.513	0	2.285
Departure Headway (Hd)	8.523	8.001	9.9	8.659	7.146	7.027
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	424	458	365	419	0	527
Service Time	6.223	5.701	7.6	6.359	4.846	4.727
HCM Lane V/C Ratio	0.264	1.469	0.274	0.632	0	2.324
HCM Control Delay, s/veh	13.6	147.1	15.5	20.1	9.8	600.2
HCM Lane LOS	B	F	C	C	N	F
HCM 95th-tile Q	0.8	22.3	0.9	2.8	0	87.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	251	5	170	0	0	0	0	439	62	422	438	0
Future Volume (vph)	251	5	170	0	0	0	0	439	62	422	438	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		220	0		0	0		90	150		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1076			2120			2339			645	
Travel Time (s)		13.3			26.3			29.0			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	273	5	185	0	0	0	0	477	67	459	476	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	278	185	0	0	0	0	477	67	459	476	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	73.6%	ICU Level of Service	D
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	56.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	251	5	170	0	0	0	0	439	62	422	438	0
Future Vol, veh/h	251	5	170	0	0	0	0	439	62	422	438	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	273	5	185	0	0	0	0	477	67	459	476	0
Number of Lanes	0	1	1	0	0	0	0	1	1	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	21.8	73.9	62.9
HCM LOS	C	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	98%	0%	100%	0%
Vol Thru, %	100%	0%	2%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	439	62	256	170	422	438
LT Vol	0	0	251	0	422	0
Through Vol	439	0	5	0	0	438
RT Vol	0	62	0	170	0	0
Lane Flow Rate	477	67	278	185	459	476
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	1.046	0.134	0.66	0.375	0.99	0.959
Departure Headway (Hd)	7.894	7.173	8.656	7.429	7.915	7.4
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	463	503	420	488	463	495
Service Time	5.594	4.873	6.356	5.129	5.615	5.1
HCM Lane V/C Ratio	1.03	0.133	0.662	0.379	0.991	0.962
HCM Control Delay, s/veh	82.8	11	26.6	14.5	67.8	58.1
HCM Lane LOS	F	B	D	B	F	F
HCM 95th-tile Q	14.7	0.5	4.6	1.7	12.7	12

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	19	28	295	20	43	426
Future Volume (vph)	19	28	295	20	43	426
Ideal Flow (vphpl)	1750	1750	1900	1750	1750	1900
Storage Length (ft)	100	50		50	100	
Storage Lanes	1	0		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1630	1458	1863	1458	1630	1863
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1630	1458	1863	1458	1630	1863
Link Speed (mph)	55		55			55
Link Distance (ft)	739		548			2339
Travel Time (s)	9.2		6.8			29.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	21	30	321	22	47	463
Shared Lane Traffic (%)						
Lane Group Flow (vph)	21	30	321	22	47	463
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.00	1.11	1.11	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Stop			Stop

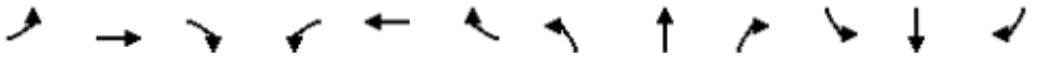
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	32.4%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	13.7
Intersection LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	19	28	295	20	43	426
Future Vol, veh/h	19	28	295	20	43	426
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	30	321	22	47	463
Number of Lanes	1	1	1	1	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay, s/veh	9.3	11.8	15.4
HCM LOS	A	B	C

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	0%	0%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	295	20	19	28	43	426
LT Vol	0	0	19	0	43	0
Through Vol	295	0	0	0	0	426
RT Vol	0	20	0	28	0	0
Lane Flow Rate	321	22	21	30	47	463
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.456	0.027	0.04	0.049	0.071	0.639
Departure Headway (Hd)	5.114	4.41	6.983	5.768	5.468	4.966
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	705	810	511	617	655	727
Service Time	2.849	2.144	4.753	3.537	3.2	2.698
HCM Lane V/C Ratio	0.455	0.027	0.041	0.049	0.072	0.637
HCM Control Delay, s/veh	12.1	7.3	10	8.8	8.6	16.1
HCM Lane LOS	B	A	A	A	A	C
HCM 95th-tile Q	2.4	0.1	0.1	0.2	0.2	4.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	114	3	164	120	10	5	3	95	8	6	2
Future Volume (vph)	4	114	3	164	120	10	5	3	95	8	6	2
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	100		50	100		50	100		50	100		50
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1360			1533			635			1348	
Travel Time (s)		16.9			19.0			7.9			16.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4	124	3	178	130	11	5	3	103	9	7	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	124	3	178	130	11	5	3	103	9	7	2
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.3%		ICU Level of Service A	
Analysis Period (min) 15			

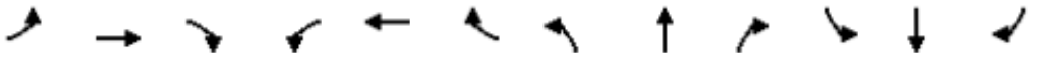
Intersection	
Int Delay, s/veh	8.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	114	3	164	120	10	5	3	95	8	6	2
Future Vol, veh/h	4	114	3	164	120	10	5	3	95	8	6	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	50	100	-	50	100	-	50	100	-	50
Veh in Median Storage, #	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	124	3	178	130	11	5	3	103	9	7	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	160	141	7	103	40	3	9	0	0	106	0	0
Stage 1	25	25	-	13	13	-	-	-	-	-	-	-
Stage 2	135	116	-	90	27	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	806	750	1075	877	852	1081	1611	-	-	1485	-	-
Stage 1	993	874	-	1007	885	-	-	-	-	-	-	-
Stage 2	868	800	-	917	873	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	699	743	1075	757	844	1081	1611	-	-	1485	-	-
Mov Cap-2 Maneuver	699	743	-	757	844	-	-	-	-	-	-	-
Stage 1	990	869	-	1004	882	-	-	-	-	-	-	-
Stage 2	730	798	-	779	868	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.7	10.6	0.4	3.7
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1611	-	-	699	743	1075	757	844	1081	1485	-	-
HCM Lane V/C Ratio	0.003	-	-	0.006	0.167	0.003	0.235	0.155	0.01	0.006	-	-
HCM Control Delay (s/veh)	7.2	-	-	10.2	10.8	8.4	11.2	10	8.4	7.4	-	-
HCM Lane LOS	A	-	-	B	B	A	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.6	0	0.9	0.5	0	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	188	78	37	73	131	44	273	59	301	321	12
Future Volume (vph)	16	188	78	37	73	131	44	273	59	301	321	12
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.962			0.927			0.979			0.997	
Flt Protected		0.997			0.992			0.994			0.977	
Satd. Flow (prot)	0	1787	0	0	1713	0	0	1813	0	0	1814	0
Flt Permitted		0.997			0.992			0.994			0.977	
Satd. Flow (perm)	0	1787	0	0	1713	0	0	1813	0	0	1814	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1796			2695			2949			2106	
Travel Time (s)		22.3			33.4			36.6			26.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	17	204	85	40	79	142	48	297	64	327	349	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	306	0	0	261	0	0	409	0	0	689	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

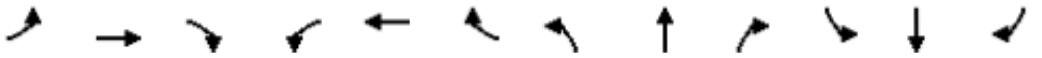
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 90.3%		ICU Level of Service E	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	126
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	188	78	37	73	131	44	273	59	301	321	12
Future Vol, veh/h	16	188	78	37	73	131	44	273	59	301	321	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	204	85	40	79	142	48	297	64	327	349	13
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	30.4	25.3	47.6	253.3
HCM LOS	D	D	E	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	12%	6%	15%	47%
Vol Thru, %	73%	67%	30%	51%
Vol Right, %	16%	28%	54%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	376	282	241	634
LT Vol	44	16	37	301
Through Vol	273	188	73	321
RT Vol	59	78	131	12
Lane Flow Rate	409	307	262	689
Geometry Grp	1	1	1	1
Degree of Util (X)	0.868	0.686	0.592	1.491
Departure Headway (Hd)	8.739	9.339	9.483	7.79
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	417	389	382	475
Service Time	6.739	7.339	7.483	5.79
HCM Lane V/C Ratio	0.981	0.789	0.686	1.451
HCM Control Delay, s/veh	47.6	30.4	25.3	253.3
HCM Lane LOS	E	D	D	F
HCM 95th-tile Q	8.7	4.9	3.7	35.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	257	126	22	256	61	72	69	14	34	55	64
Future Volume (vph)	49	257	126	22	256	61	72	69	14	34	55	64
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		50	0		140	0		50	0		0
Storage Lanes	0		1	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.943	
Flt Protected		0.992			0.996			0.975			0.989	
Satd. Flow (prot)	0	1848	1458	0	1855	1458	0	1816	1458	0	1737	0
Flt Permitted		0.992			0.996			0.975			0.989	
Satd. Flow (perm)	0	1848	1458	0	1855	1458	0	1816	1458	0	1737	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2695			2169			2270			2002	
Travel Time (s)		33.4			26.9			28.1			24.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	53	279	137	24	278	66	78	75	15	37	60	70
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	332	137	0	302	66	0	153	15	0	167	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 56.3%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	15.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	257	126	22	256	61	72	69	14	34	55	64
Future Vol, veh/h	49	257	126	22	256	61	72	69	14	34	55	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	53	279	137	24	278	66	78	75	15	37	60	70
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay, s/veh	16.1	15.9	13.5	13.7
HCM LOS	C	C	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	51%	0%	16%	0%	8%	0%	22%
Vol Thru, %	49%	0%	84%	0%	92%	0%	36%
Vol Right, %	0%	100%	0%	100%	0%	100%	42%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	141	14	306	126	278	61	153
LT Vol	72	0	49	0	22	0	34
Through Vol	69	0	257	0	256	0	55
RT Vol	0	14	0	126	0	61	64
Lane Flow Rate	153	15	333	137	302	66	166
Geometry Grp	5	5	5	5	5	5	4b
Degree of Util (X)	0.322	0.028	0.602	0.218	0.555	0.108	0.329
Departure Headway (Hd)	7.564	6.587	6.519	5.724	6.612	5.857	7.13
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	475	543	555	630	547	614	504
Service Time	5.308	4.33	4.231	3.436	4.325	3.57	5.175
HCM Lane V/C Ratio	0.322	0.028	0.6	0.217	0.552	0.107	0.329
HCM Control Delay, s/veh	13.9	9.5	18.6	10	17.3	9.3	13.7
HCM Lane LOS	B	A	C	A	C	A	B
HCM 95th-tile Q	1.4	0.1	4	0.8	3.4	0.4	1.4

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	103	32	10	103	12	8
Future Volume (vph)	103	32	10	103	12	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.968				0.945	
Flt Protected				0.996	0.971	
Satd. Flow (prot)	1803	0	0	1855	1709	0
Flt Permitted				0.996	0.971	
Satd. Flow (perm)	1803	0	0	1855	1709	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	739			580	300	
Travel Time (s)	9.2			7.2	3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	112	35	11	112	13	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	147	0	0	123	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 23.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	103	32	10	103	12	8
Future Vol, veh/h	103	32	10	103	12	8
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, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	112	35	11	112	13	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	147	0	264	130
Stage 1	-	-	-	-	130	-
Stage 2	-	-	-	-	134	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1435	-	725	920
Stage 1	-	-	-	-	896	-
Stage 2	-	-	-	-	892	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1435	-	719	920
Mov Cap-2 Maneuver	-	-	-	-	719	-
Stage 1	-	-	-	-	896	-
Stage 2	-	-	-	-	885	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.7	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	788	-	-	1435	-
HCM Lane V/C Ratio	0.028	-	-	0.008	-
HCM Control Delay (s/veh)	9.7	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	108	1	2	110	0	1
Future Volume (vph)	108	1	2	110	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999				0.865	
Flt Protected				0.999		
Satd. Flow (prot)	1861	0	0	1861	1611	0
Flt Permitted				0.999		
Satd. Flow (perm)	1861	0	0	1861	1611	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	580			1360	308	
Travel Time (s)	7.2			16.9	3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	117	1	2	120	0	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	118	0	0	122	1	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 17.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	108	1	2	110	0	1
Future Vol, veh/h	108	1	2	110	0	1
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, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	117	1	2	120	0	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	118	0	242	118
Stage 1	-	-	-	-	118	-
Stage 2	-	-	-	-	124	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1470	-	746	934
Stage 1	-	-	-	-	907	-
Stage 2	-	-	-	-	902	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1470	-	745	934
Mov Cap-2 Maneuver	-	-	-	-	745	-
Stage 1	-	-	-	-	907	-
Stage 2	-	-	-	-	901	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.1	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	934	-	-	1470	-
HCM Lane V/C Ratio	0.001	-	-	0.001	-
HCM Control Delay (s/veh)	8.9	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	13	277	20	0	456
Future Volume (vph)	0	13	277	20	0	456
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865	0.991			
Flt Protected						
Satd. Flow (prot)	0	1611	1846	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	1611	1846	0	0	1863
Link Speed (mph)	55		55			55
Link Distance (ft)	2684		2106			548
Travel Time (s)	33.3		26.1			6.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	14	301	22	0	496
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	14	323	0	0	496
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	13	277	20	0	456
Future Vol, veh/h	0	13	277	20	0	456
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	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	14	301	22	0	496

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	312	0	0	323	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	4.12	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	0	728	-	-	1237	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	728	-	-	1237	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	10	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	728	1237	-
HCM Lane V/C Ratio	-	-	0.019	-	-
HCM Control Delay (s/veh)	-	-	10	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	23	21	35	2	1	41
Future Volume (vph)	23	21	35	2	1	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.935				0.868	
Flt Protected	0.975			0.955		
Satd. Flow (prot)	1698	0	0	1779	1617	0
Flt Permitted	0.975			0.955		
Satd. Flow (perm)	1698	0	0	1779	1617	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2684			2002	635	
Travel Time (s)	33.3			24.8	7.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	23	38	2	1	45
Shared Lane Traffic (%)						
Lane Group Flow (vph)	48	0	0	40	46	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 18.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	21	35	2	1	41
Future Vol, veh/h	23	21	35	2	1	41
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	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	23	38	2	1	45

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	102	24	46	0	-	0
Stage 1	24	-	-	-	-	-
Stage 2	78	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	896	1052	1562	-	-	-
Stage 1	999	-	-	-	-	-
Stage 2	945	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	874	1052	1562	-	-	-
Mov Cap-2 Maneuver	874	-	-	-	-	-
Stage 1	975	-	-	-	-	-
Stage 2	945	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9	7	0
HCM LOS	A		

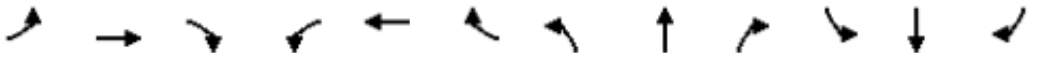
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1562	-	951	-	-
HCM Lane V/C Ratio	0.024	-	0.05	-	-
HCM Control Delay (s/veh)	7.4	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Scenario Information

Scenario 1
Description:
Data Date: Undefined Data Time: Undefined
Timing Plan ID: Default
Alternative: Baseline
Number of Signalized Intersections: 0
Most Popular Cycle Length: 0

Network Totals

	Scenario 1
Number of Intersections	10
Most Popular Cycle (s)	0
Alternative	Baseline
Timing Plan ID	Default
Data Time	Undefined
Control Delay / Veh (s/v)	116
Queue Delay / Veh (s/v)	0
Total Delay / Veh (s/v)	116
Total Delay (hr)	300
Stops / Veh	0.85
Stops (#)	7948
Average Speed (mph)	7
Total Travel Time (hr)	348
Distance Traveled (mi)	2601
Fuel Consumed (gal)	455
Fuel Economy (mpg)	5.7
CO Emissions (kg)	31.78
NOx Emissions (kg)	6.18
VOC Emissions (kg)	7.37
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	0
Performance Index	322.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	86	6	244	103	619	0	0	940	187
Future Volume (vph)	0	0	0	86	6	244	103	619	0	0	940	187
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		350	200		0	80		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected					0.956		0.950					
Satd. Flow (prot)	0	0	0	0	1781	1458	1630	1863	0	0	1863	1458
Flt Permitted					0.956		0.190					
Satd. Flow (perm)	0	0	0	0	1781	1458	326	1863	0	0	1863	1458
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						246						203
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1153			2492			645			504	
Travel Time (s)		14.3			30.9			8.0			6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	93	7	265	112	673	0	0	1022	203
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	100	265	112	673	0	0	1022	203
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	1	1	1	1			1	1
Detector Template												
Leading Detector (ft)				50	50	50	50	50			50	50
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				50	50	50	50	50			50	50
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Turn Type				Perm	NA	Perm	Perm	NA			NA	Perm
Protected Phases					8			2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	2	2			6	6
Switch Phase												
Minimum Initial (s)				4.0	4.0	4.0	4.0	4.0			4.0	4.0
Minimum Split (s)				24.0	24.0	24.0	24.0	24.0			24.0	24.0
Total Split (s)				31.0	31.0	31.0	59.0	59.0			59.0	59.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)				34.4%	34.4%	34.4%	65.6%	65.6%			65.6%	65.6%
Maximum Green (s)				25.0	25.0	25.0	53.0	53.0			53.0	53.0
Yellow Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
All-Red Time (s)				1.0	1.0	1.0	1.0	1.0			1.0	1.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0	6.0	6.0	6.0			6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
Recall Mode				None	None	None	C-Max	C-Max			C-Max	C-Max
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	7.0
Flash Don't Walk (s)				11.0	11.0	11.0	11.0	11.0			11.0	11.0
Pedestrian Calls (#/hr)				0	0	0	0	0			0	0
Act Effct Green (s)					10.8	10.8	67.2	67.2			67.2	67.2
Actuated g/C Ratio					0.12	0.12	0.75	0.75			0.75	0.75
v/c Ratio					0.47	0.68	0.46	0.48			0.73	0.18
Control Delay (s/veh)					43.1	15.5	11.8	5.1			11.5	1.1
Queue Delay					0.0	0.0	0.0	0.2			0.0	0.0
Total Delay (s/veh)					43.1	15.5	11.8	5.3			11.5	1.1
LOS					D	B	B	A			B	A
Approach Delay (s/veh)					23.1			6.2			9.7	
Approach LOS					C			A			A	

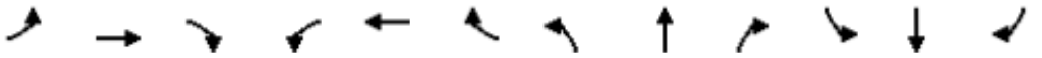
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 10.6		Intersection LOS: B	
Intersection Capacity Utilization 77.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: Shirk St & SR 198 WB Ramps

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	86	6	244	103	619	0	0	940	187
Future Volume (veh/h)	0	0	0	86	6	244	103	619	0	0	940	187
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				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
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1750	1863	1716	1716	1863	0	0	1863	1716
Adj Flow Rate, veh/h				93	7	265	112	673	0	0	1022	203
Adj No. of Lanes				0	1	1	1	1	0	0	1	1
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				343	26	302	182	1228	0	0	1228	961
Arrive On Green				0.21	0.21	0.21	1.00	1.00	0.00	0.00	0.66	0.66
Sat Flow, veh/h				1655	125	1458	418	1863	0	0	1863	1458
Grp Volume(v), veh/h				100	0	265	112	673	0	0	1022	203
Grp Sat Flow(s),veh/h/ln				1780	0	1458	418	1863	0	0	1863	1458
Q Serve(g_s), s				4.2	0.0	15.8	22.1	0.0	0.0	0.0	37.3	5.0
Cycle Q Clear(g_c), s				4.2	0.0	15.8	59.3	0.0	0.0	0.0	37.3	5.0
Prop In Lane				0.93		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				369	0	302	182	1228	0	0	1228	961
V/C Ratio(X)				0.27	0.00	0.88	0.61	0.55	0.00	0.00	0.83	0.21
Avail Cap(c_a), veh/h				494	0	405	182	1228	0	0	1228	961
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.93	0.93	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				30.0	0.0	34.5	19.6	0.0	0.0	0.0	11.6	6.1
Incr Delay (d2), s/veh				0.4	0.0	15.2	13.6	1.6	0.0	0.0	6.7	0.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.1	0.0	7.7	3.4	0.6	0.0	0.0	21.0	2.1
LnGrp Delay(d), s/veh				30.3	0.0	49.7	33.2	1.6	0.0	0.0	18.3	6.6
LnGrp LOS				C		D	C	A			B	A
Approach Vol, veh/h					365			785			1225	
Approach Delay, s/veh					44.4			6.1			16.3	
Approach LOS					D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		65.3				65.3		24.7
Change Period (Y+Rc), s		6.0				6.0		6.0
Max Green Setting (Gmax), s		53.0				53.0		25.0
Max Q Clear Time (g_c+I1), s		61.3				39.3		17.8
Green Ext Time (p_c), s		0.0				5.1		0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.3
HCM 2010 LOS	B



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	251	5	170	0	0	0	0	439	62	422	438	0
Future Volume (vph)	251	5	170	0	0	0	0	439	62	422	438	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		220	0		0	0		90	150		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1775	1458	0	0	0	0	1863	1458	1630	1863	0
Flt Permitted		0.953								0.455		
Satd. Flow (perm)	0	1775	1458	0	0	0	0	1863	1458	781	1863	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185						67			
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1076			2120			2339			645	
Travel Time (s)		13.3			26.3			29.0			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	273	5	185	0	0	0	0	477	67	459	476	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	278	185	0	0	0	0	477	67	459	476	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1					1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50					50	50	50	50	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	50	50	50					50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Turn Type	Perm	NA	Perm					NA	Perm	Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4		4						2	6		
Detector Phase	4	4	4					2	2	6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Minimum Split (s)	24.0	24.0	24.0					24.0	24.0	24.0	24.0	
Total Split (s)	24.0	24.0	24.0					66.0	66.0	66.0	66.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	26.7%	26.7%	26.7%					73.3%	73.3%	73.3%	73.3%	
Maximum Green (s)	18.0	18.0	18.0					60.0	60.0	60.0	60.0	
Yellow Time (s)	5.0	5.0	5.0					5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0	6.0					6.0	6.0	6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Recall Mode	None	None	None					C-Max	C-Max	C-Max	C-Max	
Walk Time (s)	7.0	7.0	7.0					7.0	7.0	7.0	7.0	
Flash Don't Walk (s)	11.0	11.0	11.0					11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0					0	0	0	0	
Act Effct Green (s)		16.9	16.9					61.1	61.1	61.1	61.1	
Actuated g/C Ratio		0.19	0.19					0.68	0.68	0.68	0.68	
v/c Ratio		0.84	0.44					0.38	0.07	0.87	0.38	
Control Delay (s/veh)		57.5	8.5					9.6	3.2	23.4	3.5	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay (s/veh)		57.5	8.5					9.6	3.2	23.4	3.5	
LOS		E	A					A	A	C	A	
Approach Delay (s/veh)		37.9						8.8			13.3	
Approach LOS		D						A			B	

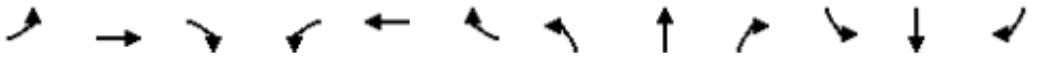
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay (s/veh): 17.9		Intersection LOS: B	
Intersection Capacity Utilization 77.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 2: Shirk St & SR 138 EB Ramps

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	5	170	0	0	0	0	439	62	422	438	0
Future Volume (veh/h)	251	5	170	0	0	0	0	439	62	422	438	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	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
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1750	1863	1716				0	1863	1716	1716	1863	0
Adj Flow Rate, veh/h	273	5	185				0	477	67	459	476	0
Adj No. of Lanes	0	1	1				0	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	313	6	262				0	1280	1002	538	1280	0
Arrive On Green	0.18	0.18	0.18				0.00	0.69	0.69	1.00	1.00	0.00
Sat Flow, veh/h	1744	32	1458				0	1863	1458	791	1863	0
Grp Volume(v), veh/h	278	0	185				0	477	67	459	476	0
Grp Sat Flow(s),veh/h/ln	1776	0	1458				0	1863	1458	791	1863	0
Q Serve(g_s), s	13.7	0.0	10.7				0.0	9.7	1.4	52.2	0.0	0.0
Cycle Q Clear(g_c), s	13.7	0.0	10.7				0.0	9.7	1.4	61.8	0.0	0.0
Prop In Lane	0.98		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	319	0	262				0	1280	1002	538	1280	0
V/C Ratio(X)	0.87	0.00	0.71				0.00	0.37	0.07	0.85	0.37	0.00
Avail Cap(c_a), veh/h	355	0	292				0	1280	1002	538	1280	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.60	0.60	0.00
Uniform Delay (d), s/veh	35.9	0.0	34.7				0.0	5.9	4.6	4.9	0.0	0.0
Incr Delay (d2), s/veh	19.1	0.0	6.7				0.0	0.8	0.1	10.1	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	0.0	4.8				0.0	5.2	0.6	12.0	0.2	0.0
LnGrp Delay(d), s/veh	55.0	0.0	41.4				0.0	6.8	4.7	15.0	0.5	0.0
LnGrp LOS	E		D					A	A	B	A	
Approach Vol, veh/h		463						544			935	
Approach Delay, s/veh		49.6						6.5			7.6	
Approach LOS		D						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		67.8		22.2		67.8		
Change Period (Y+Rc), s		6.0		6.0		6.0		
Max Green Setting (Gmax), s		60.0		18.0		60.0		
Max Q Clear Time (g_c+I1), s		11.7		15.7		63.8		
Green Ext Time (p_c), s		2.1		0.4		0.0		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.3
HCM 2010 LOS	B

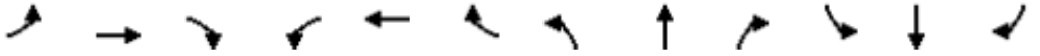


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	188	78	37	73	131	44	273	59	301	321	12
Future Volume (vph)	16	188	78	37	73	131	44	273	59	301	321	12
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.962			0.927			0.979			0.997	
Flt Protected		0.997			0.992			0.994			0.977	
Satd. Flow (prot)	0	1787	0	0	1713	0	0	1813	0	0	1814	0
Flt Permitted		0.958			0.734			0.877			0.665	
Satd. Flow (perm)	0	1717	0	0	1267	0	0	1599	0	0	1235	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			61			22			2	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1796			2695			2949			2654	
Travel Time (s)		22.3			33.4			36.6			32.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	17	204	85	40	79	142	48	297	64	327	349	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	306	0	0	261	0	0	409	0	0	689	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	25.0	25.0		25.0	25.0		65.0	65.0		65.0	65.0	
Total Split (%)	27.8%	27.8%		27.8%	27.8%		72.2%	72.2%		72.2%	72.2%	
Maximum Green (s)	19.0	19.0		19.0	19.0		59.0	59.0		59.0	59.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		17.7			17.7			60.3			60.3	
Actuated g/C Ratio		0.20			0.20			0.67			0.67	
v/c Ratio		0.86			0.88			0.38			0.83	
Control Delay (s/veh)		56.9			56.2			7.7			30.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		56.9			56.2			7.7			30.2	
LOS		E			E			A			C	
Approach Delay (s/veh)		56.9			56.2			7.7			30.2	
Approach LOS		E			E			A			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay (s/veh): 33.6		Intersection LOS: C	
Intersection Capacity Utilization 95.3%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 5: Shirk St & Walnut Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	188	78	37	73	131	44	273	59	301	321	12
Future Volume (veh/h)	16	188	78	37	73	131	44	273	59	301	321	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1750	1863	1750	1750	1863	1750	1750	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	17	204	85	40	79	142	48	297	64	327	349	13
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	52	237	95	77	106	164	144	866	179	478	456	17
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.67	0.67	0.67	0.67	0.67	0.67
Sat Flow, veh/h	50	1233	494	160	554	853	148	1283	265	621	675	25
Grp Volume(v), veh/h	306	0	0	261	0	0	409	0	0	689	0	0
Grp Sat Flow(s),veh/h/ln	1777	0	0	1567	0	0	1696	0	0	1322	0	0
Q Serve(g_s), s	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.8	0.0	0.0
Cycle Q Clear(g_c), s	15.0	0.0	0.0	14.5	0.0	0.0	8.5	0.0	0.0	32.3	0.0	0.0
Prop In Lane	0.06		0.28	0.15		0.54	0.12		0.16	0.47		0.02
Lane Grp Cap(c), veh/h	383	0	0	347	0	0	1189	0	0	951	0	0
V/C Ratio(X)	0.80	0.00	0.00	0.75	0.00	0.00	0.34	0.00	0.00	0.72	0.00	0.00
Avail Cap(c_a), veh/h	416	0	0	377	0	0	1189	0	0	951	0	0
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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	35.5	0.0	0.0	35.0	0.0	0.0	6.1	0.0	0.0	10.1	0.0	0.0
Incr Delay (d2), s/veh	9.8	0.0	0.0	7.7	0.0	0.0	0.8	0.0	0.0	4.8	0.0	0.0
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	8.4	0.0	0.0	7.0	0.0	0.0	4.5	0.0	0.0	12.8	0.0	0.0
LnGrp Delay(d), s/veh	45.3	0.0	0.0	42.7	0.0	0.0	6.9	0.0	0.0	14.9	0.0	0.0
LnGrp LOS	D			D			A			B		
Approach Vol, veh/h		306			261			409			689	
Approach Delay, s/veh		45.3			42.7			6.9			14.9	
Approach LOS		D			D			A			B	

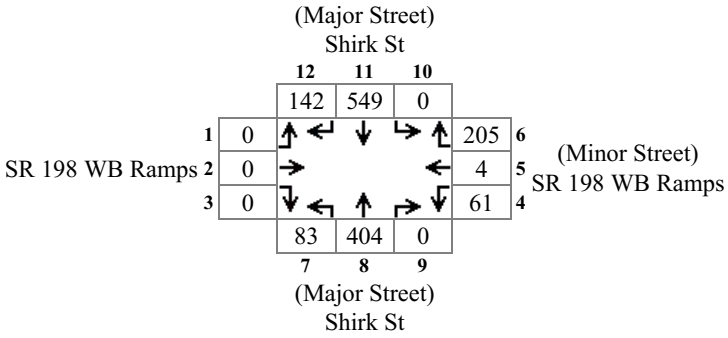
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		66.7		23.3		66.7		23.3
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		59.0		19.0		59.0		19.0
Max Q Clear Time (g_c+I1), s		10.5		17.0		34.3		16.5
Green Ext Time (p_c), s		1.7		0.2		3.6		0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.9
HCM 2010 LOS	C

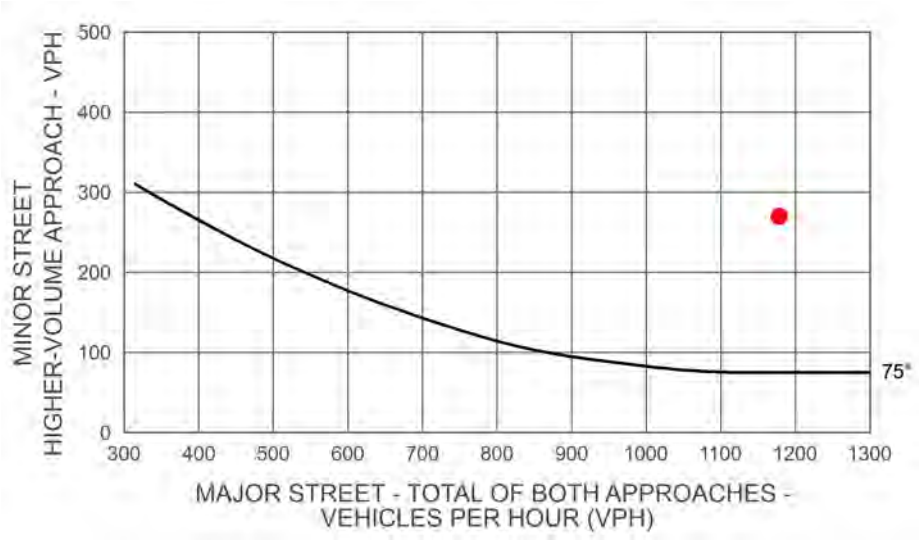
Intersection 1
Shirk St & SR 198 WB Ramps

Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Existing
Intersection #: 1

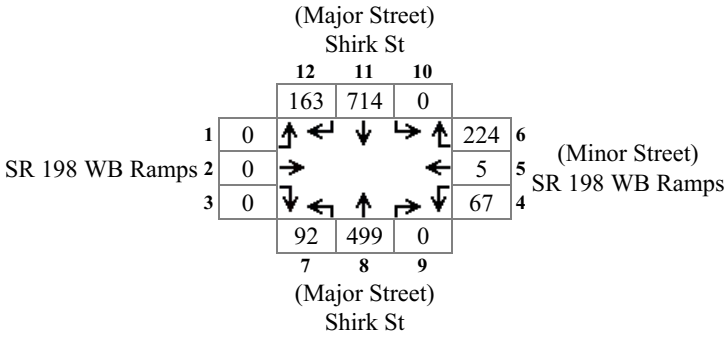


Major Total: 1178
Minor High Volume: 270

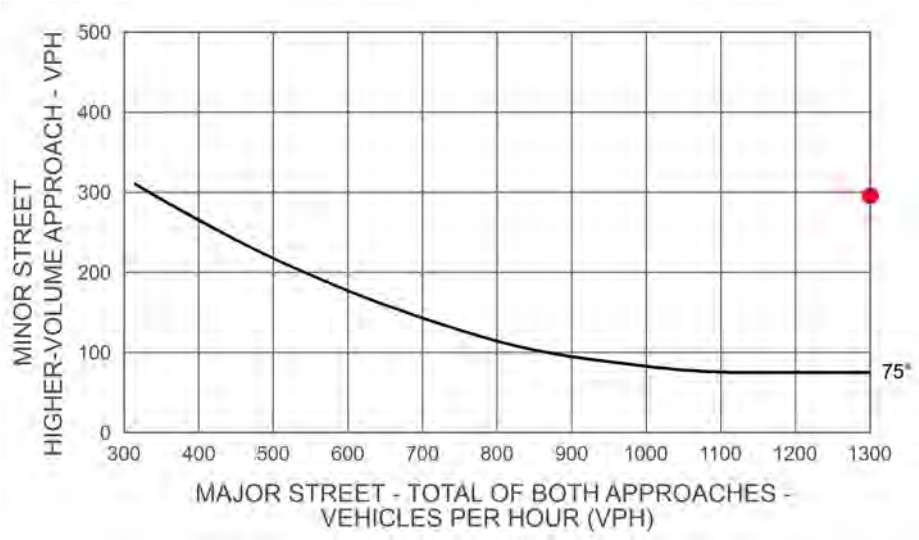


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future
Intersection #: 1

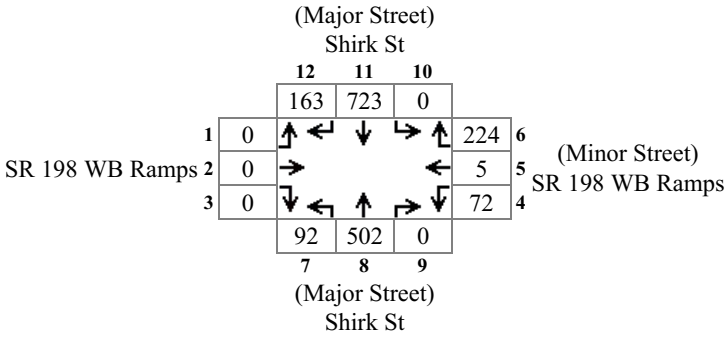


Major Total: 1468
Minor High Volume: 296

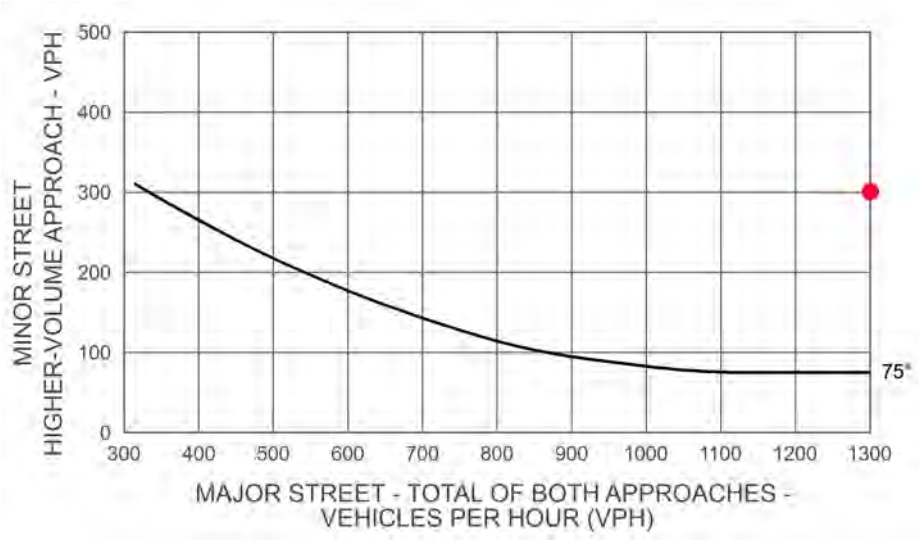


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future+Project
Intersection #: 1

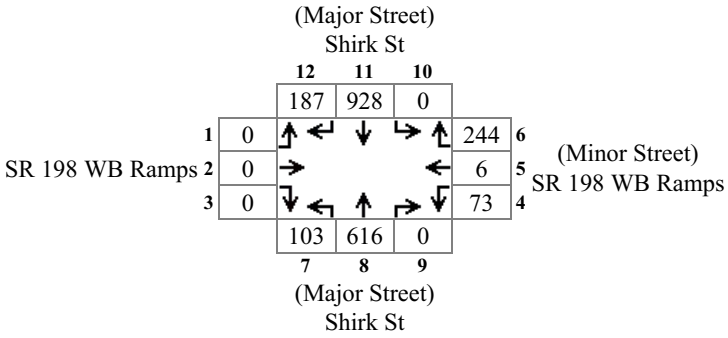


Major Total: 1480
Minor High Volume: 301

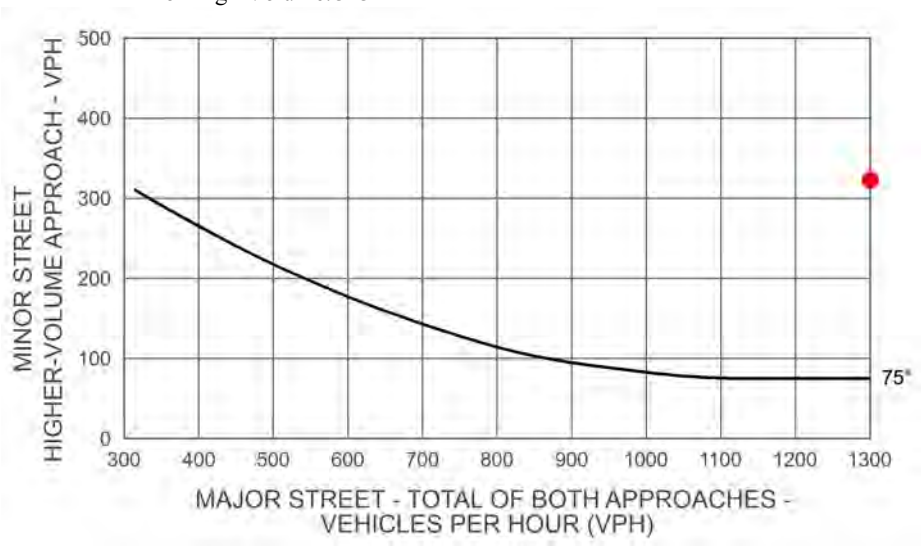


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future
Intersection #: 1

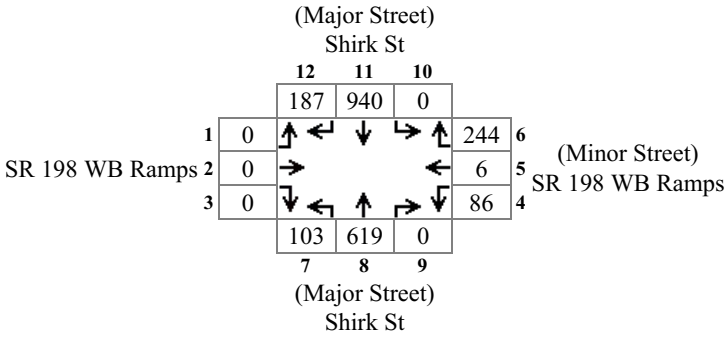


Major Total: 1834
Minor High Volume: 323

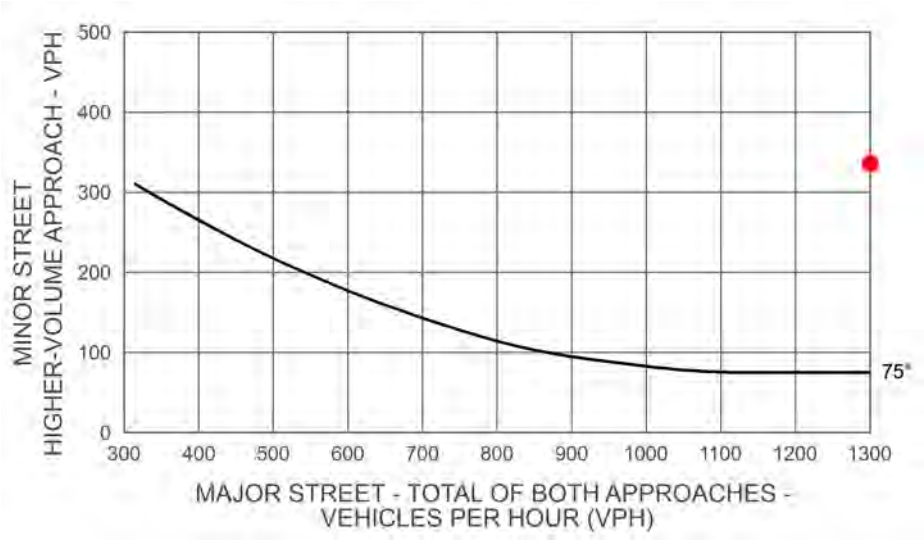


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future+Project (Future)
Intersection #: 1

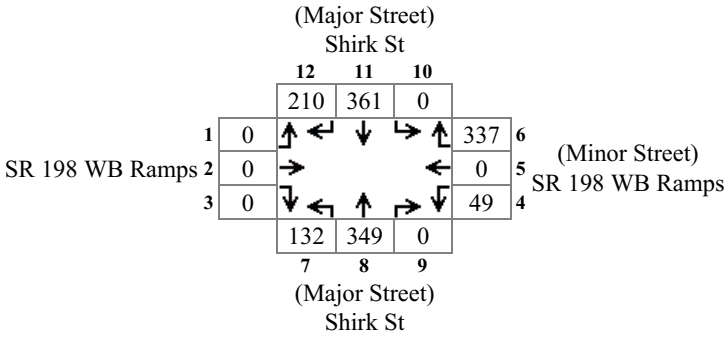


Major Total: 1849
Minor High Volume: 336

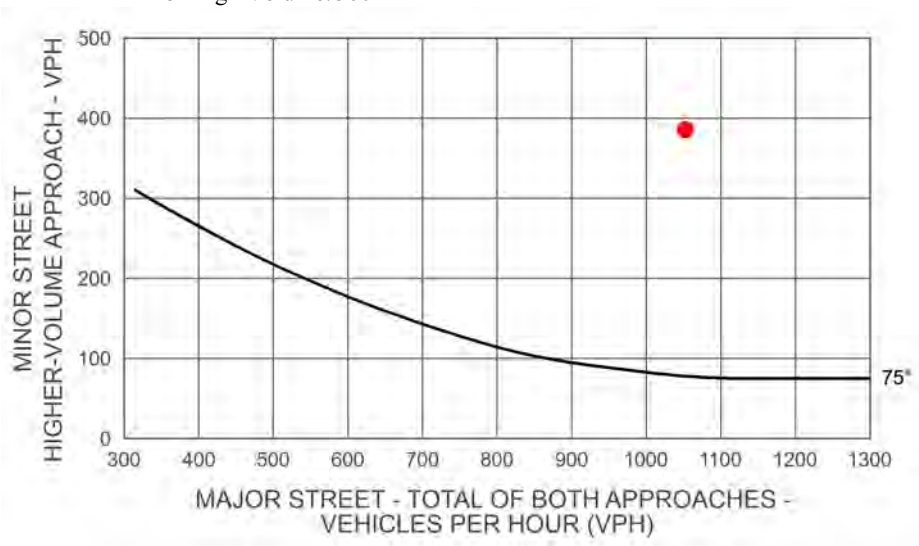


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Existing
Intersection #: 1

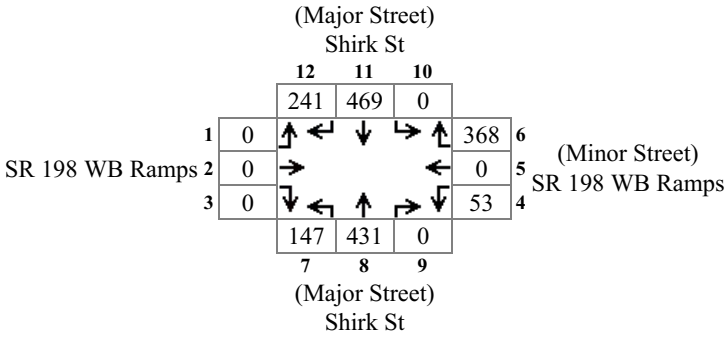


Major Total: 1052
Minor High Volume: 386

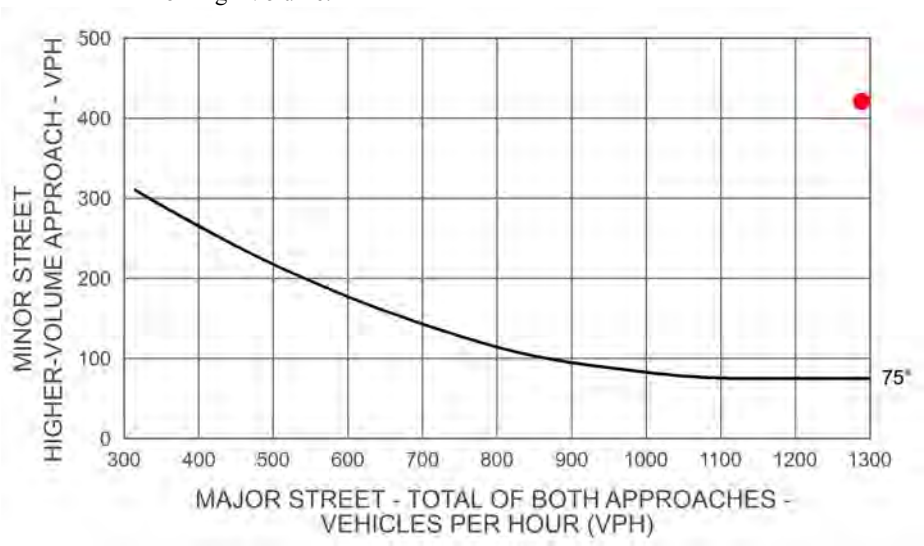


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Future
Intersection #: 1

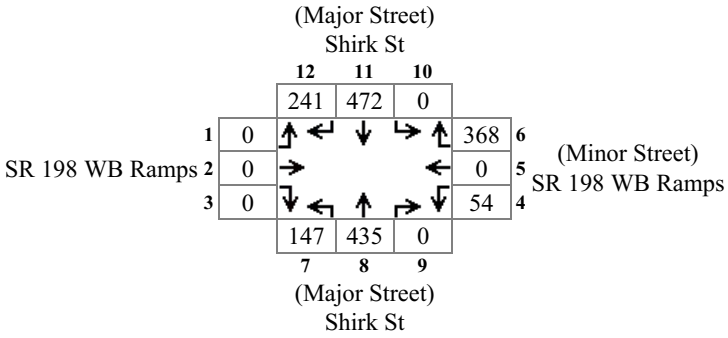


Major Total: 1288
Minor High Volume: 421

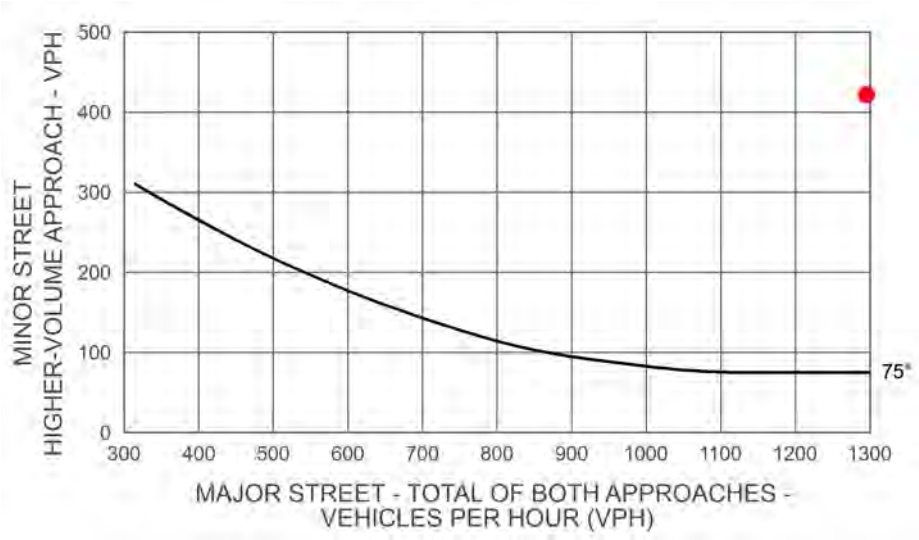


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Future+Project
Intersection #: 1

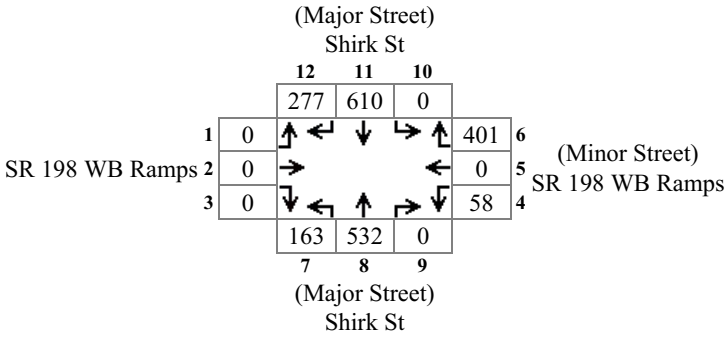


Major Total: 1295
Minor High Volume: 422

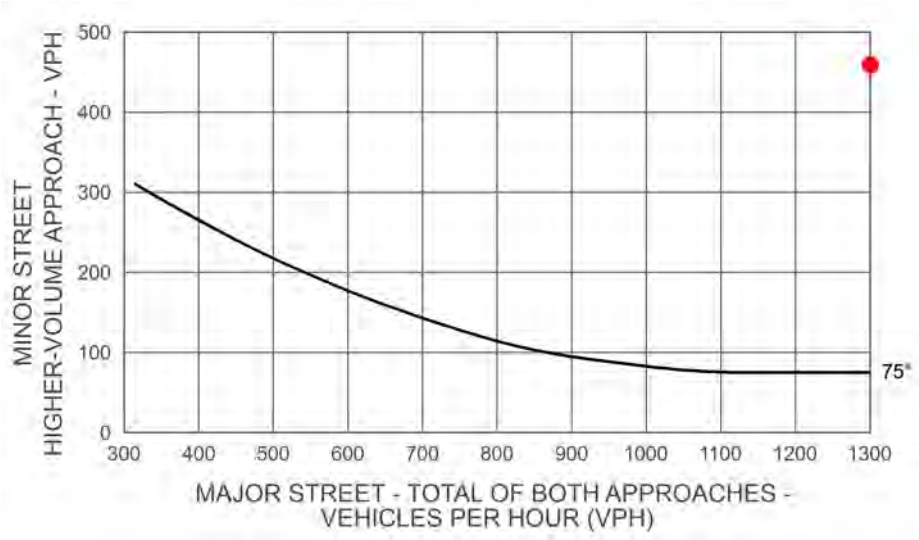


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Future
Intersection #: 1

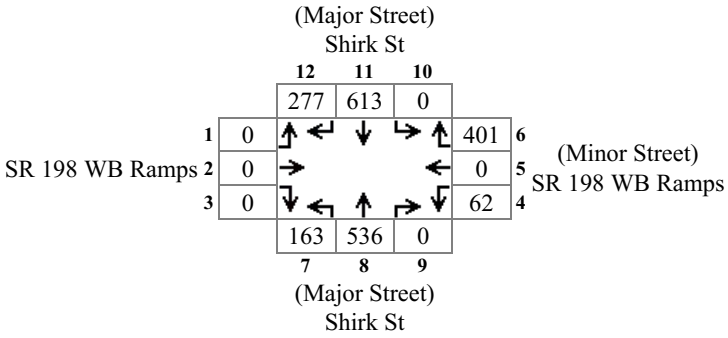


Major Total: 1582
Minor High Volume: 459

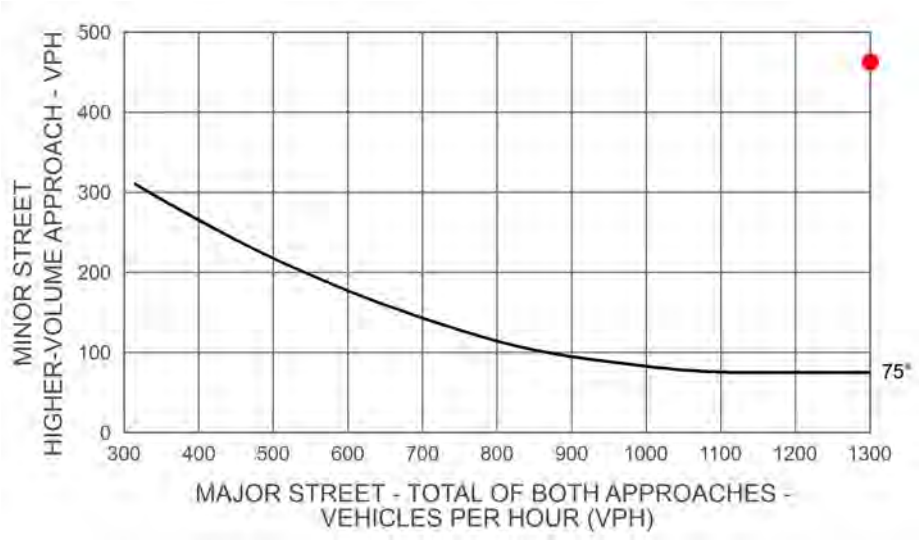


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Future+Project (Future)
Intersection #: 1



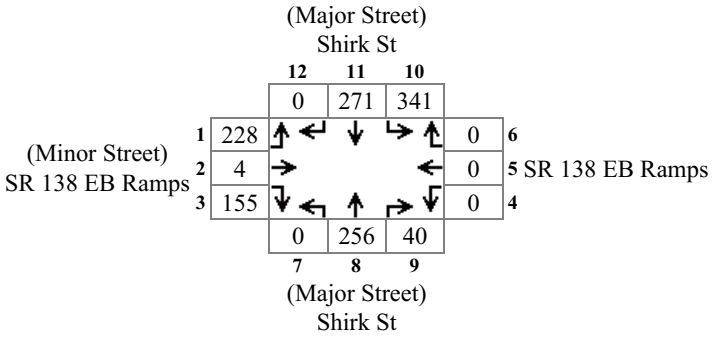
Major Total: 1589
Minor High Volume: 463



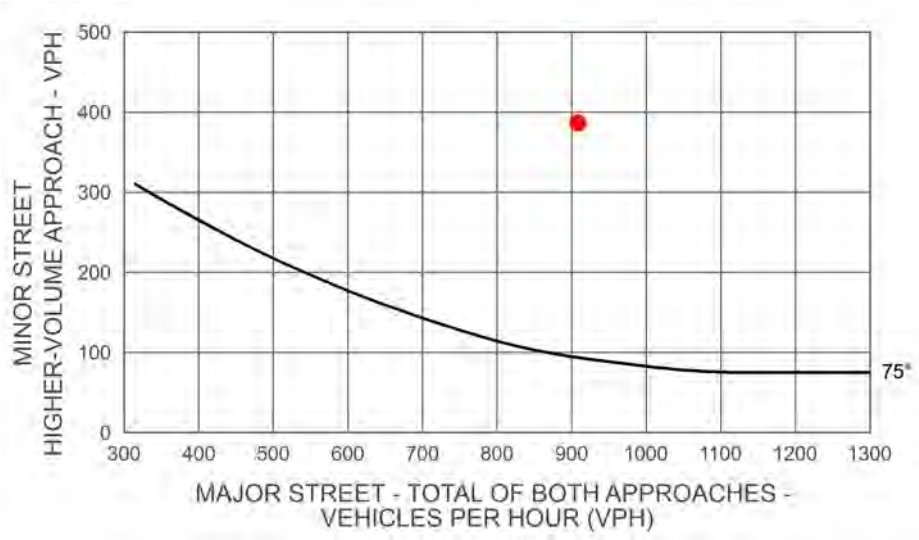
Intersection 2
Shirk St & SR 138 EB Ramps

Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Existing
Intersection #: 2

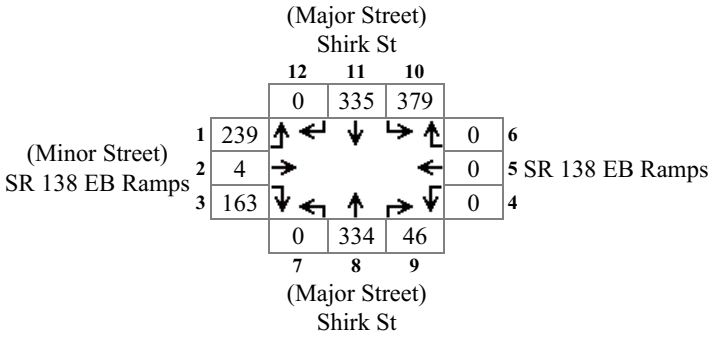


Major Total: 908
Minor High Volume: 387

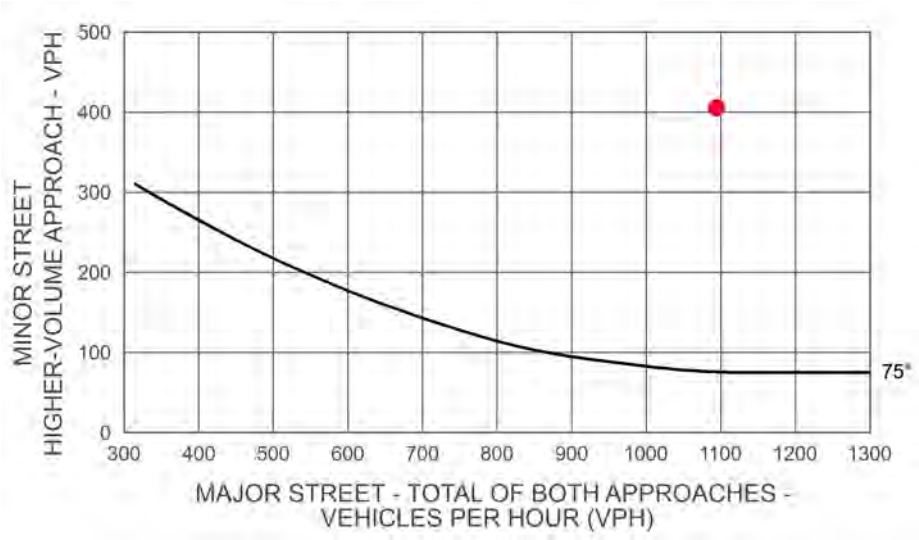


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future
Intersection #: 2

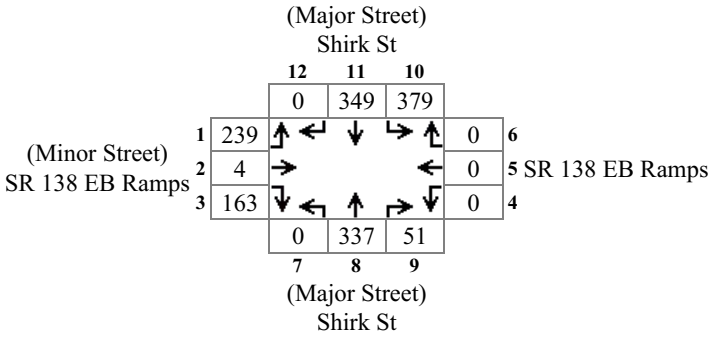


Major Total: 1094
Minor High Volume: 406

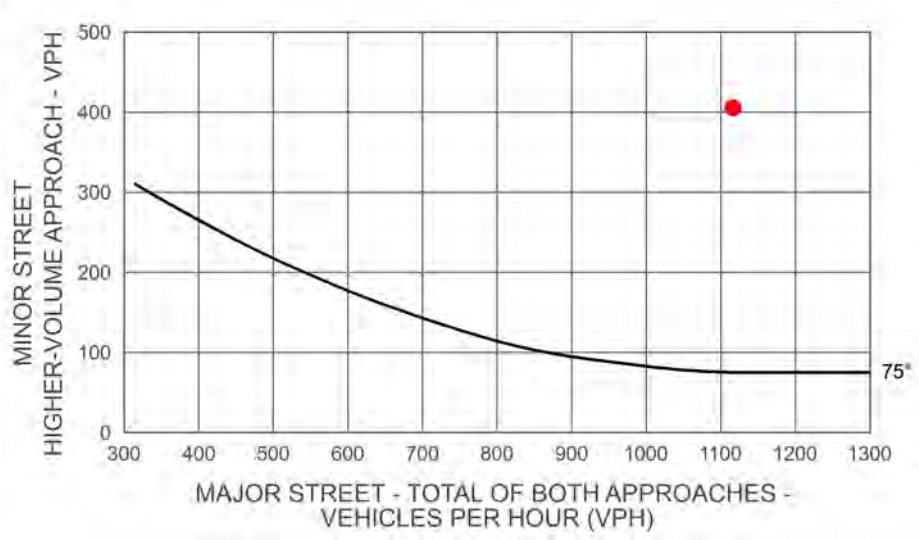


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future+Project
Intersection #: 2

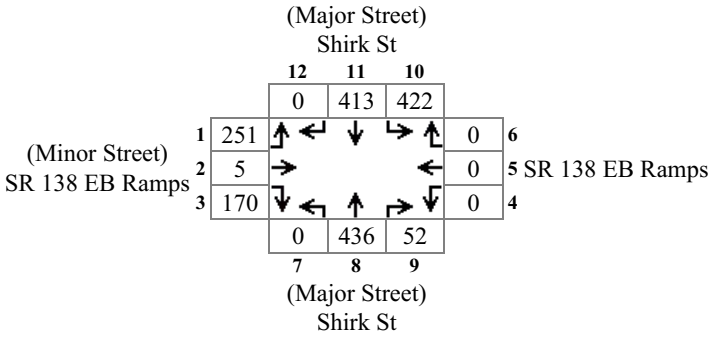


Major Total: 1116
Minor High Volume: 406

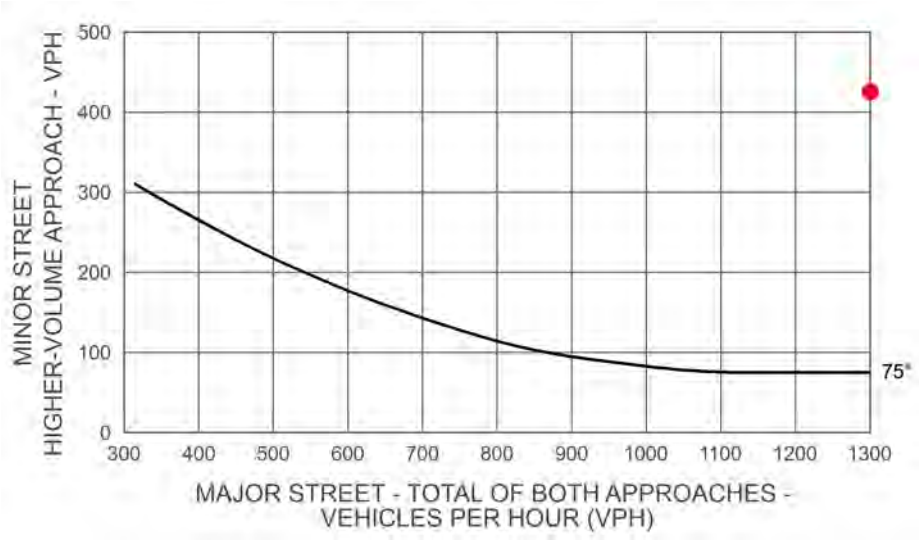


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future
Intersection #: 2

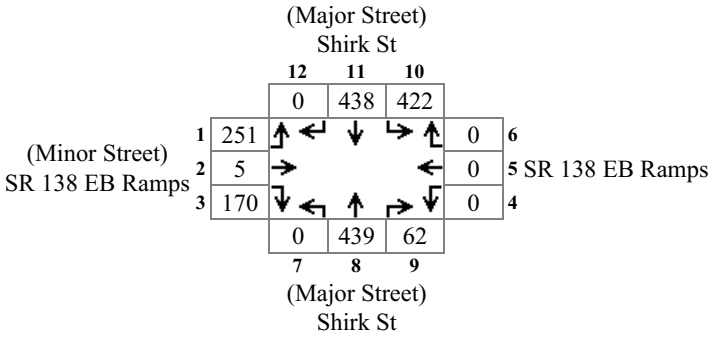


Major Total: 1323
Minor High Volume: 426

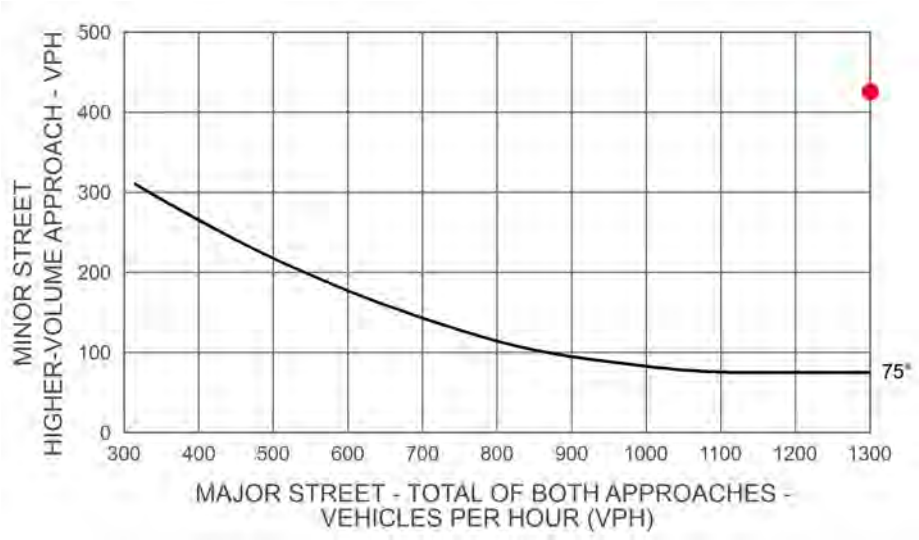


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future+Project (Future)
Intersection #: 2

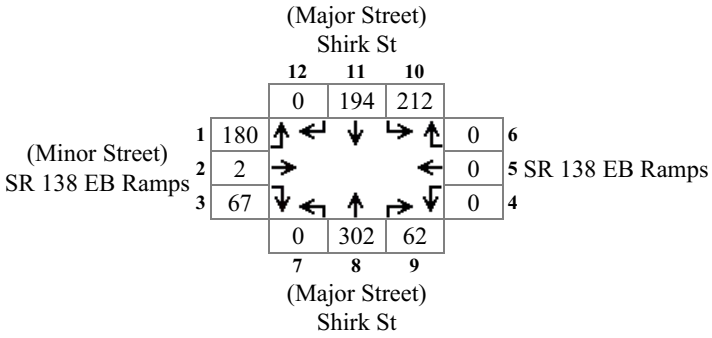


Major Total: 1361
Minor High Volume: 426

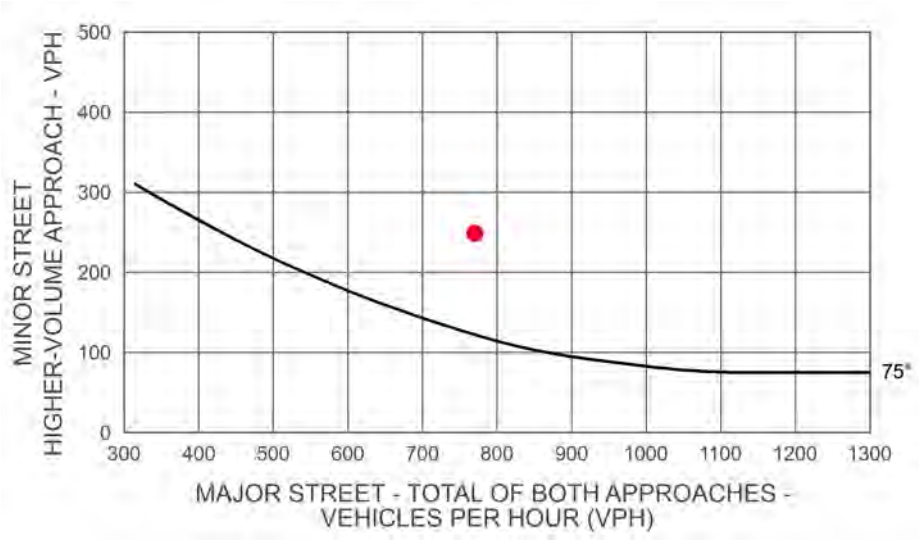


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Existing
Intersection #: 2

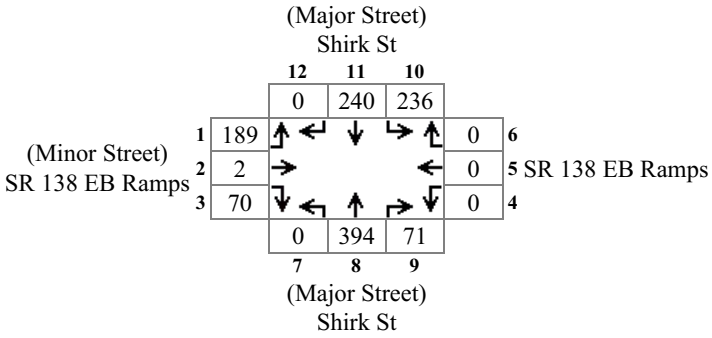


Major Total: 770
Minor High Volume: 249

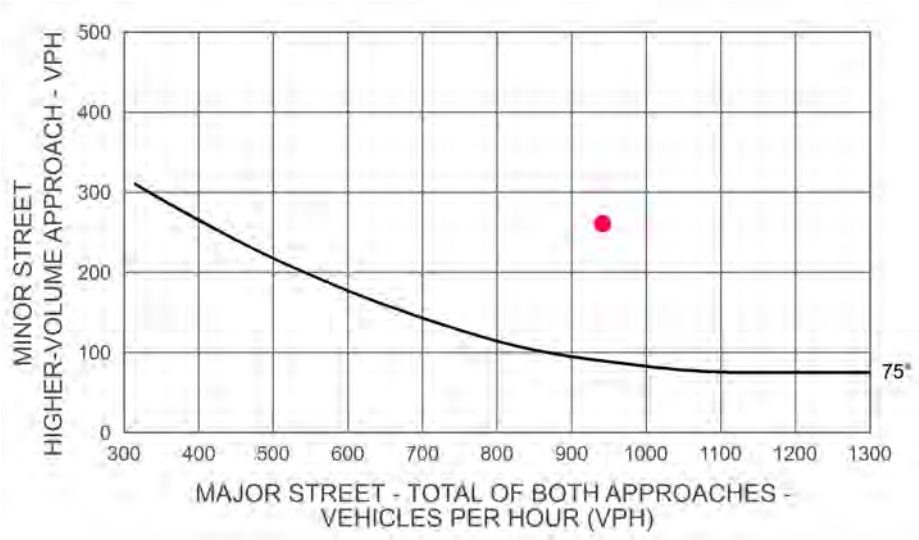


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Future
Intersection #: 2

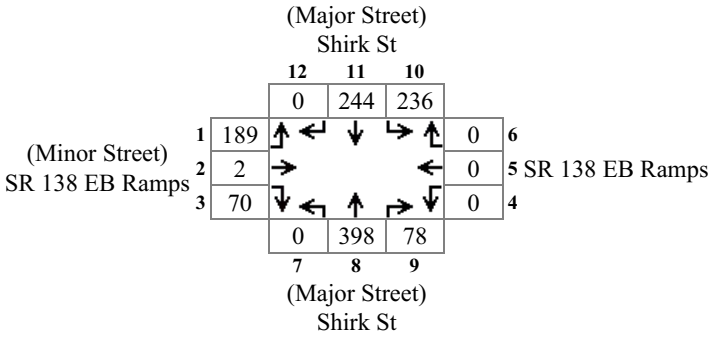


Major Total: 941
Minor High Volume: 261

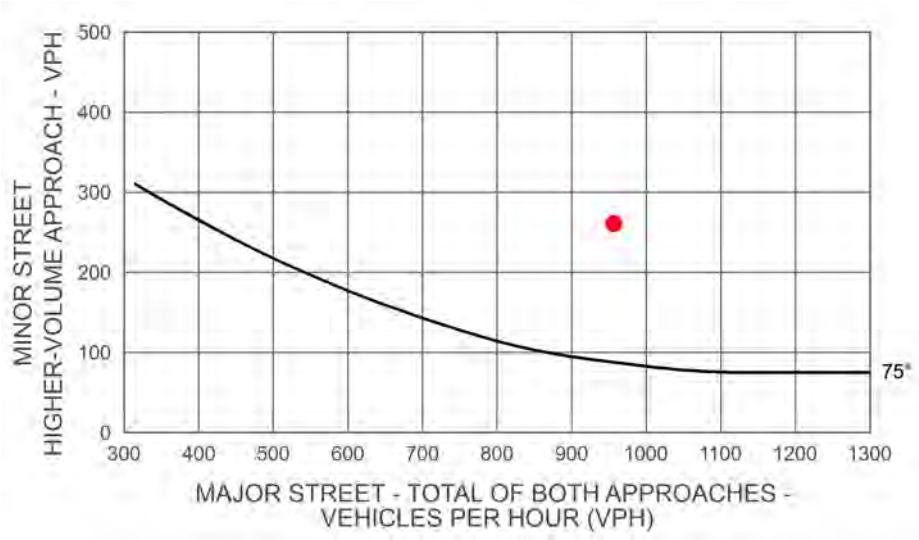


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Future+Project
Intersection #: 2

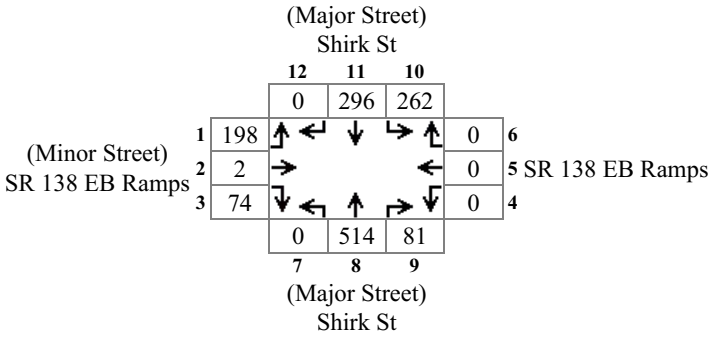


Major Total: 956
Minor High Volume: 261

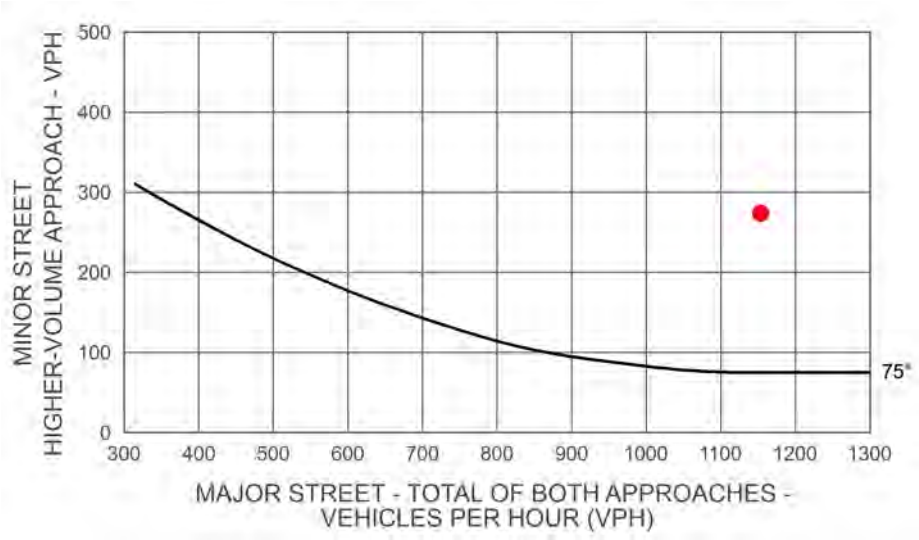


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Future
Intersection #: 2

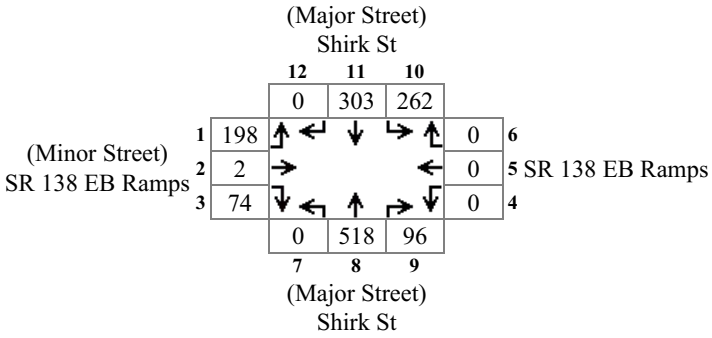


Major Total: 1153
Minor High Volume: 274

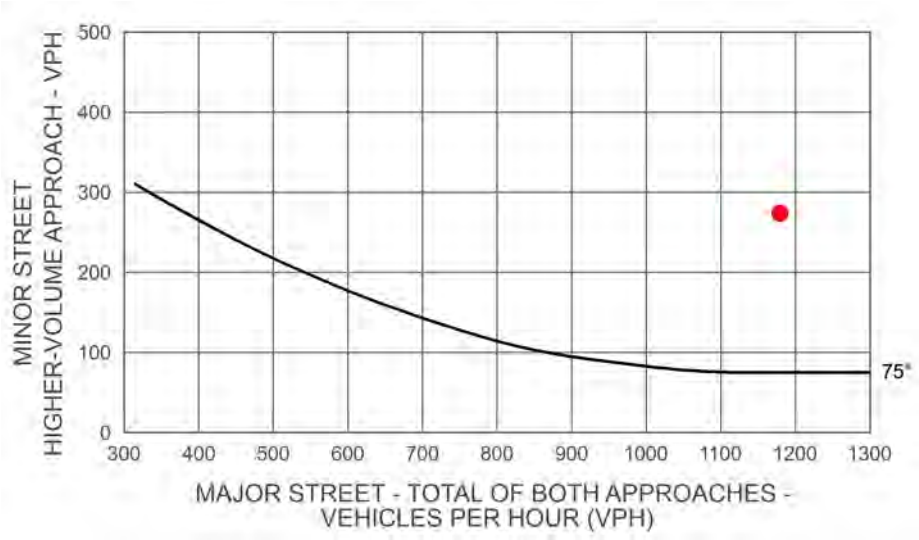


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Future+Project (Future)
Intersection #: 2



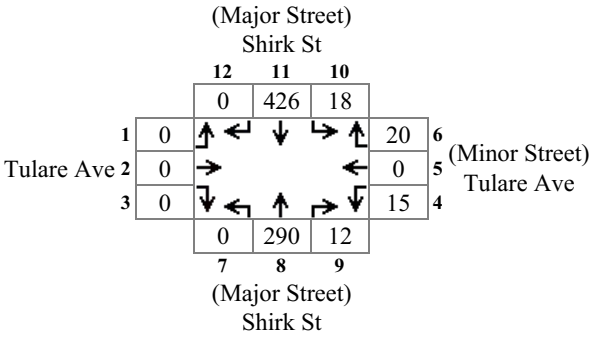
Major Total: 1179
Minor High Volume: 274



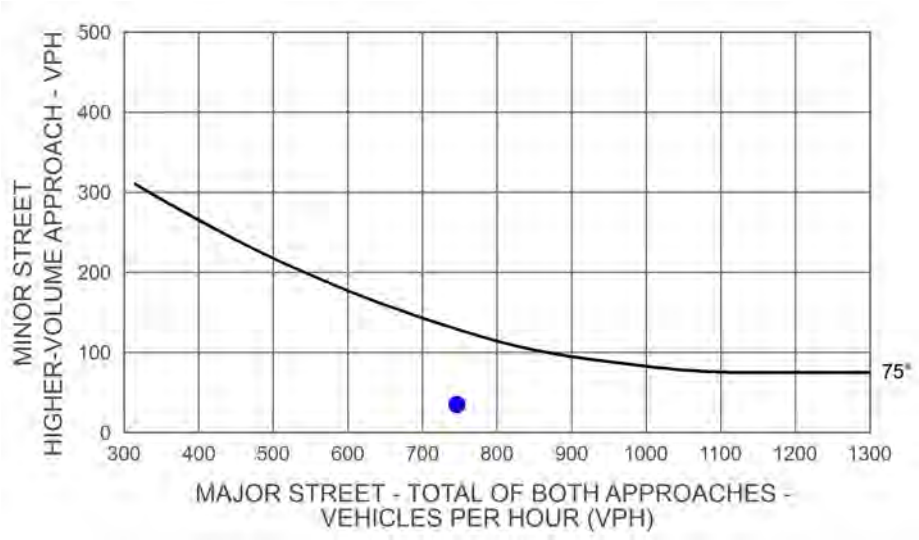
Intersection 3
Shirk St & Tulare Ave

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future
Intersection #: 3

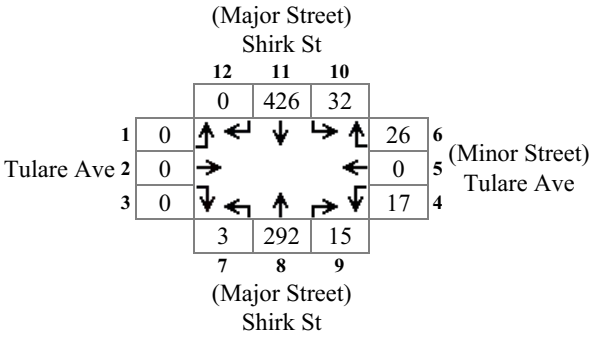


Major Total: 746
Minor High Volume: 35

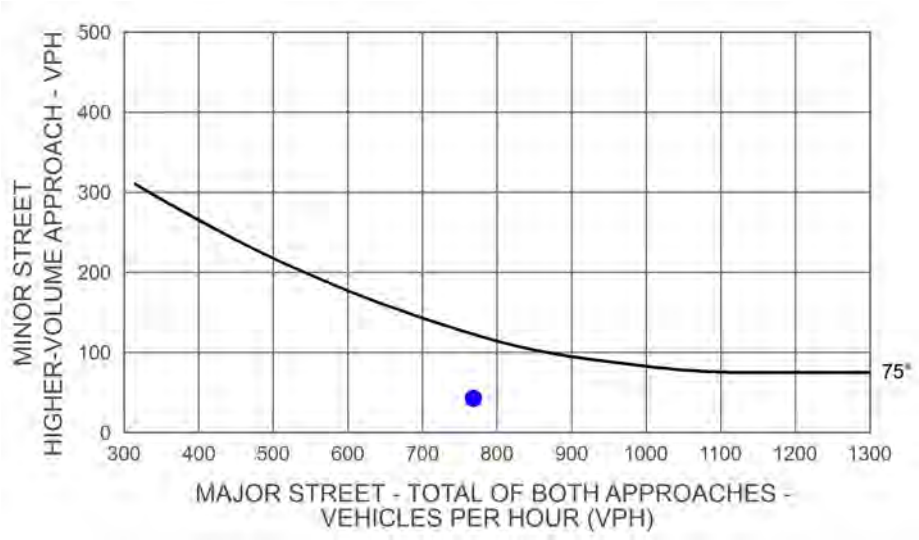


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future+Project
Intersection #: 3

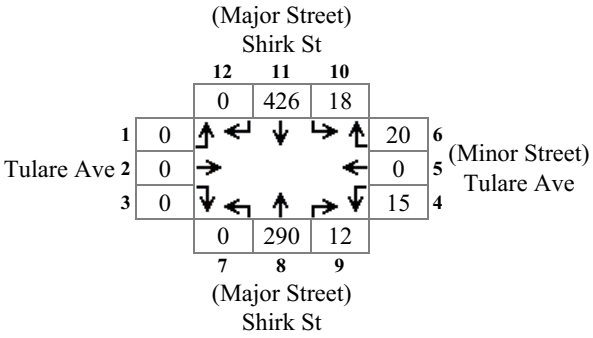


Major Total: 768
Minor High Volume: 43

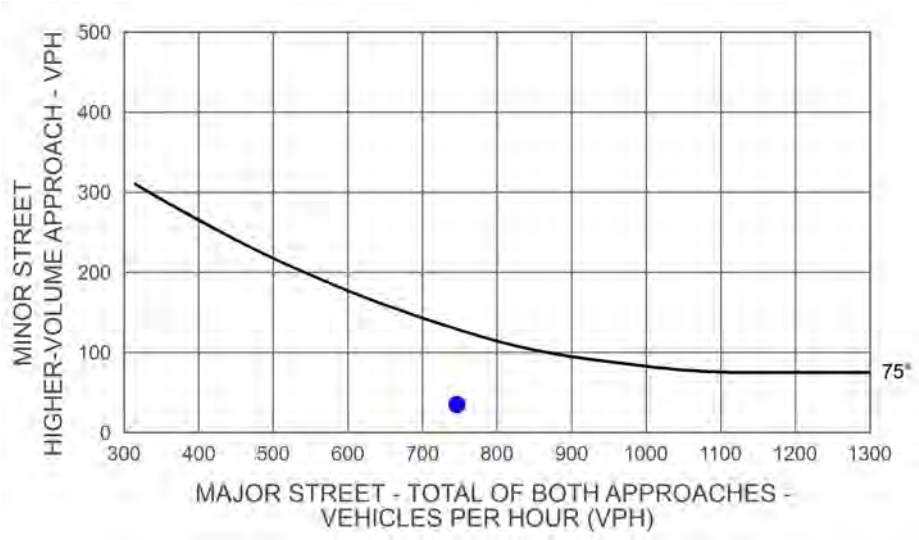


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future
Intersection #: 3

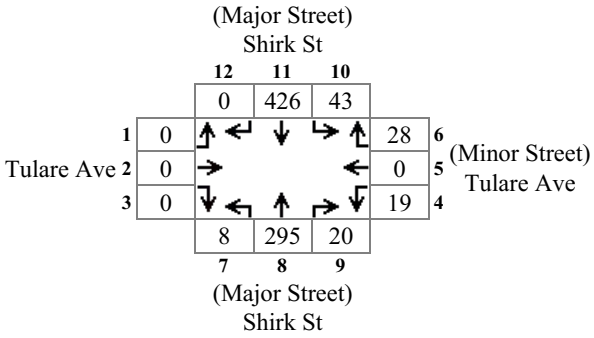


Major Total: 746
Minor High Volume: 35

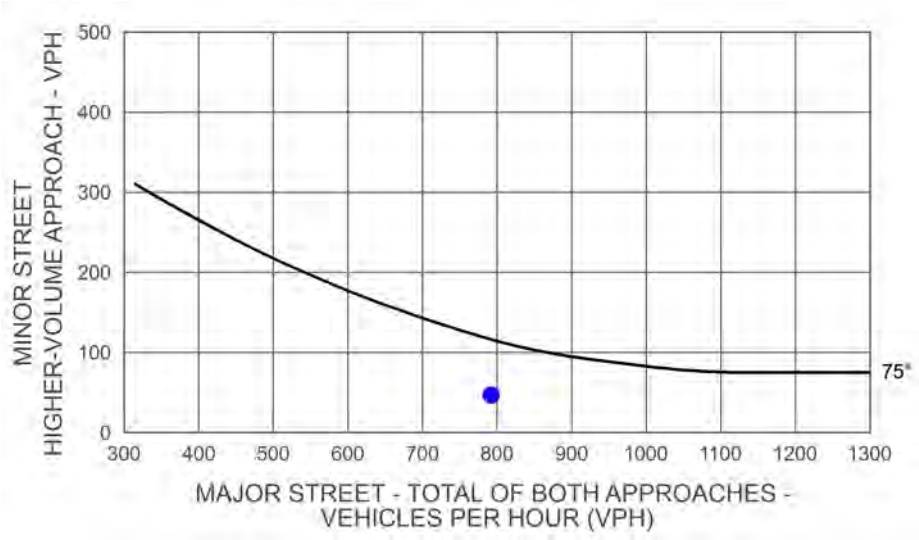


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future+Project (Future)
Intersection #: 3

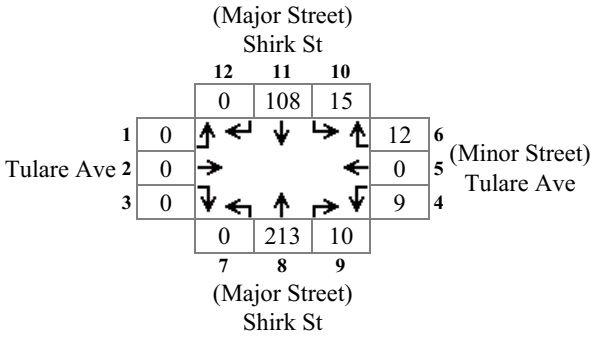


Major Total: 792
Minor High Volume: 47

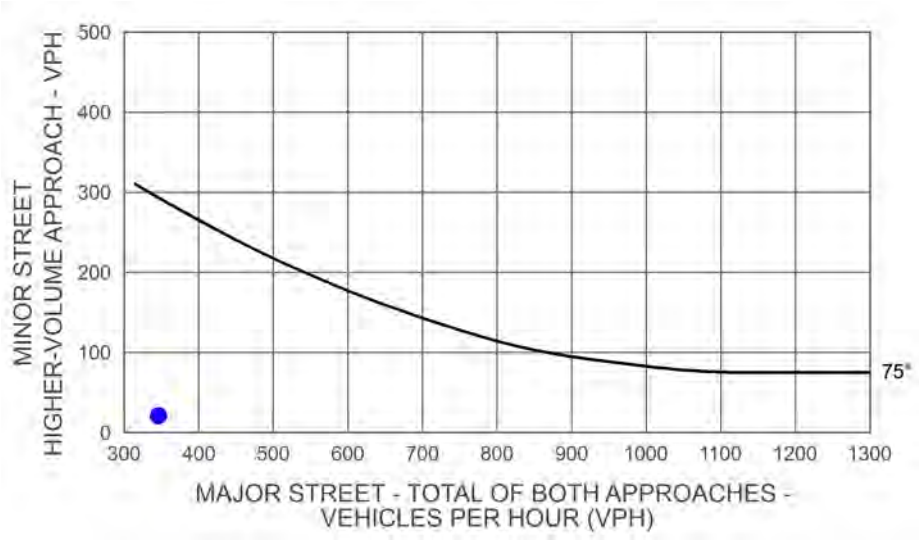


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future
Intersection #: 3

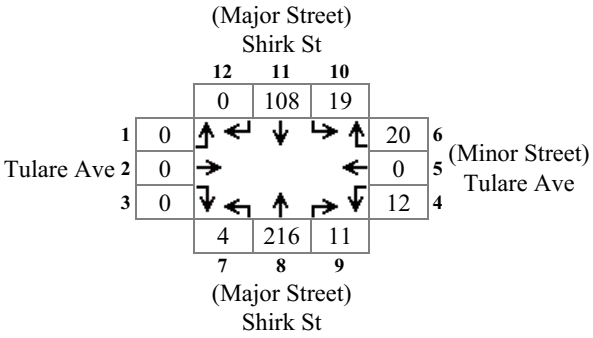


Major Total: 346
Minor High Volume: 21

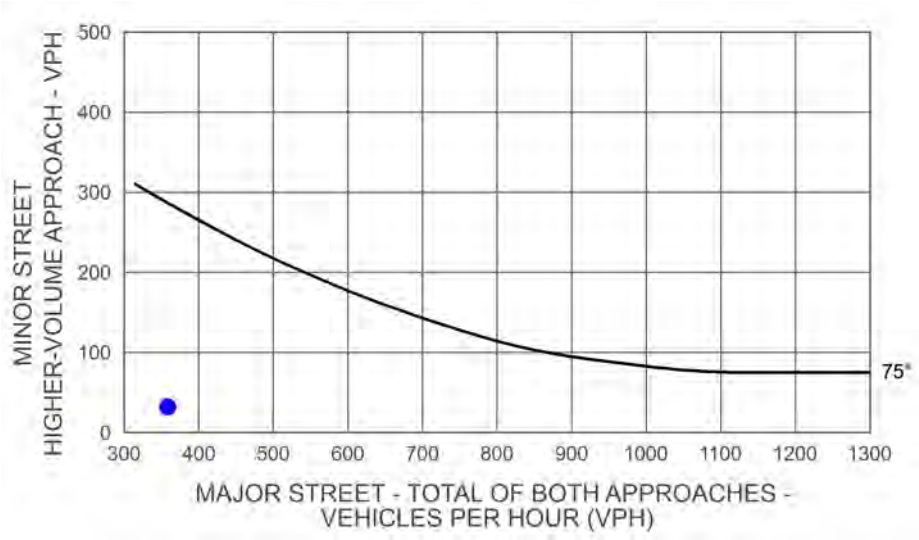


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future+Project
Intersection #: 3

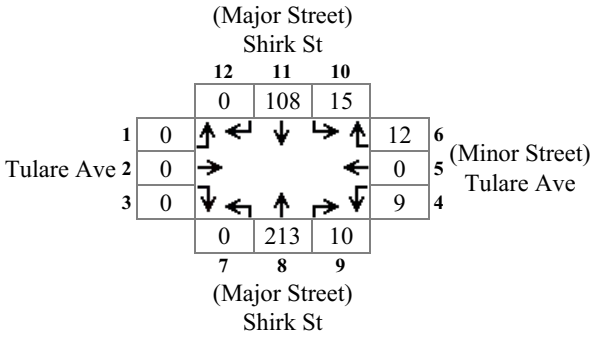


Major Total: 358
Minor High Volume: 32

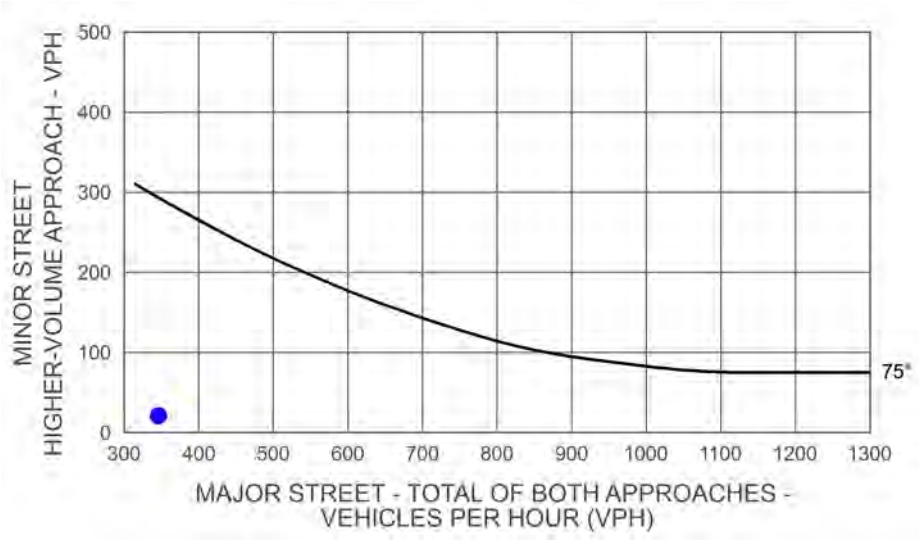


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future
Intersection #: 3

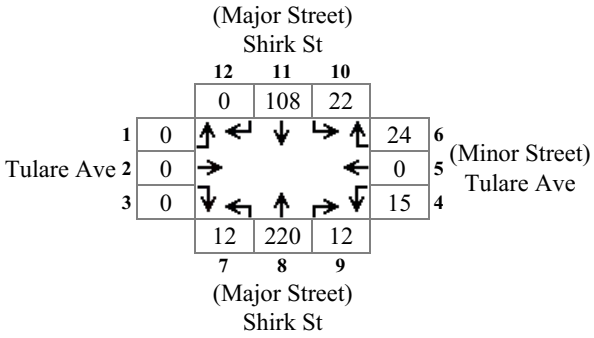


Major Total: 346
Minor High Volume: 21

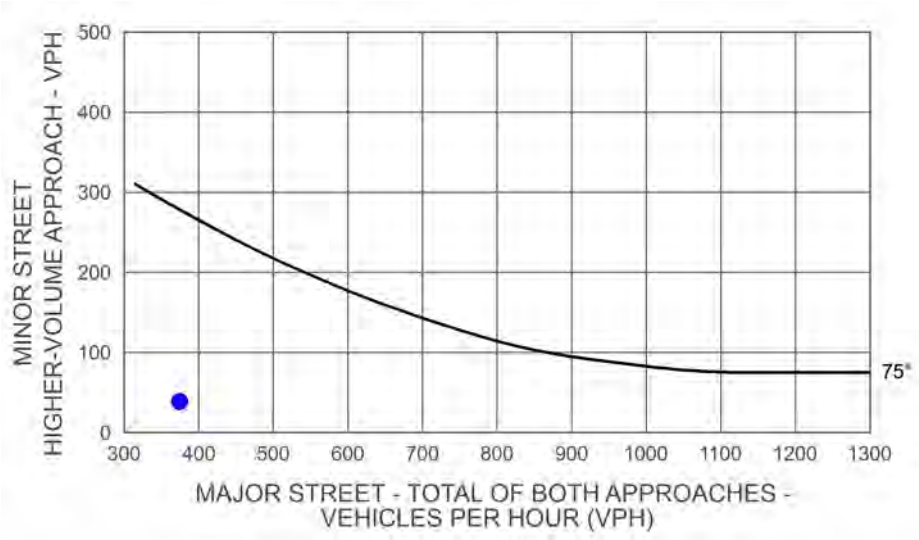


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future+Project (Future)
Intersection #: 3



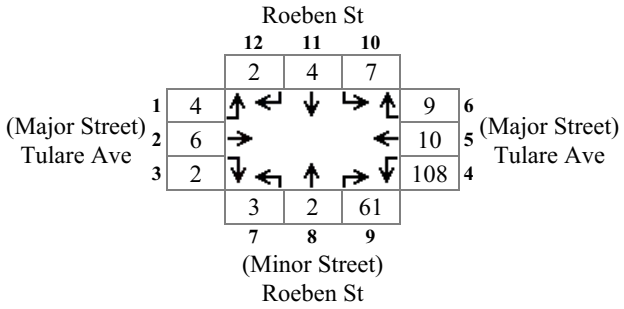
Major Total: 374
Minor High Volume: 39



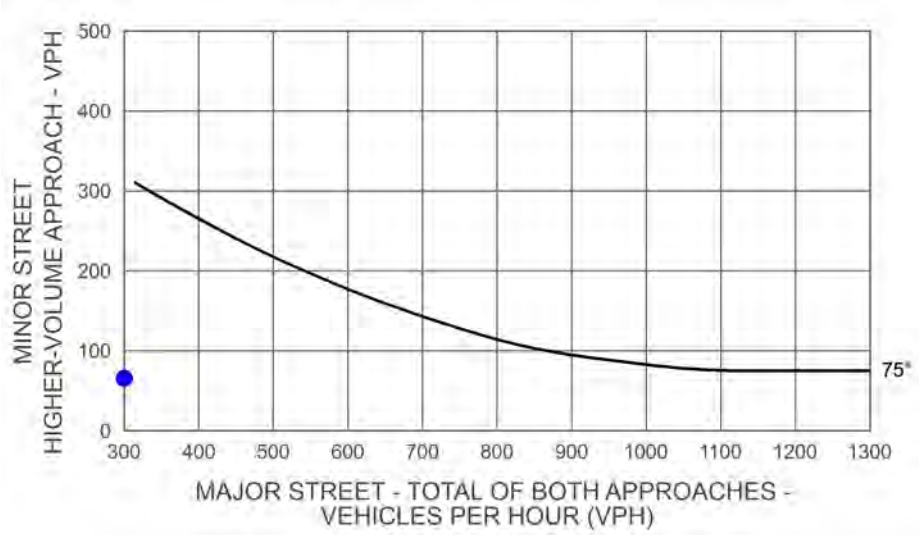
Intersection 4
Roeben St & Tulare Ave

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing
Intersection #: 4

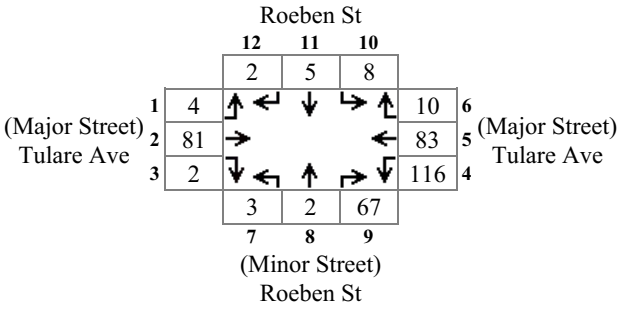


Major Total: 139
Minor High Volume: 66

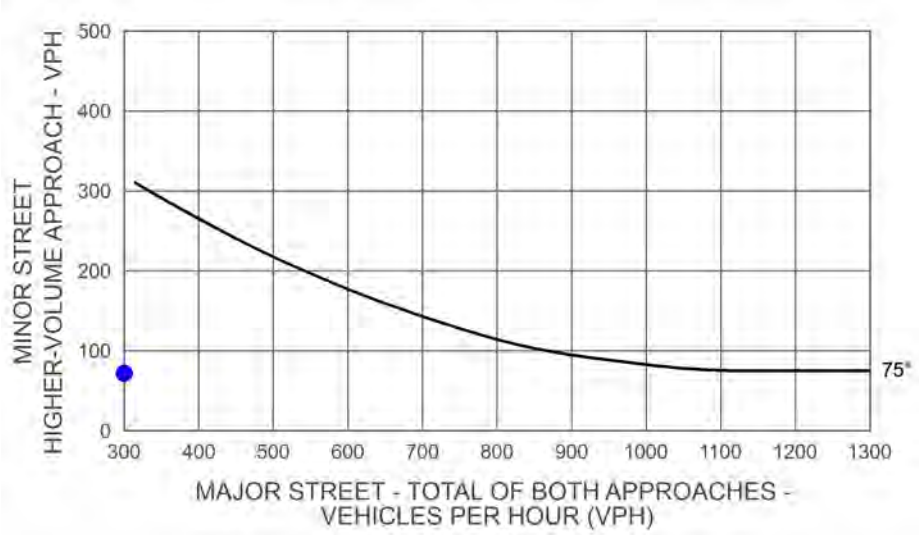


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future
Intersection #: 4

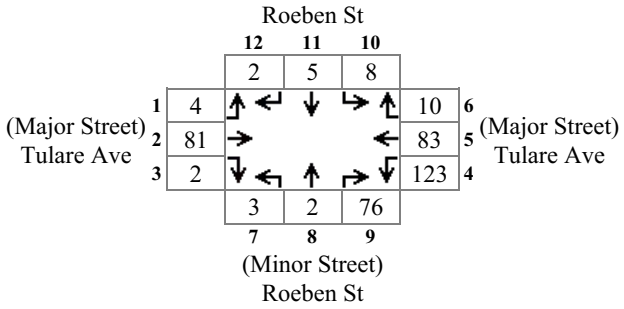


Major Total: 296
Minor High Volume: 72

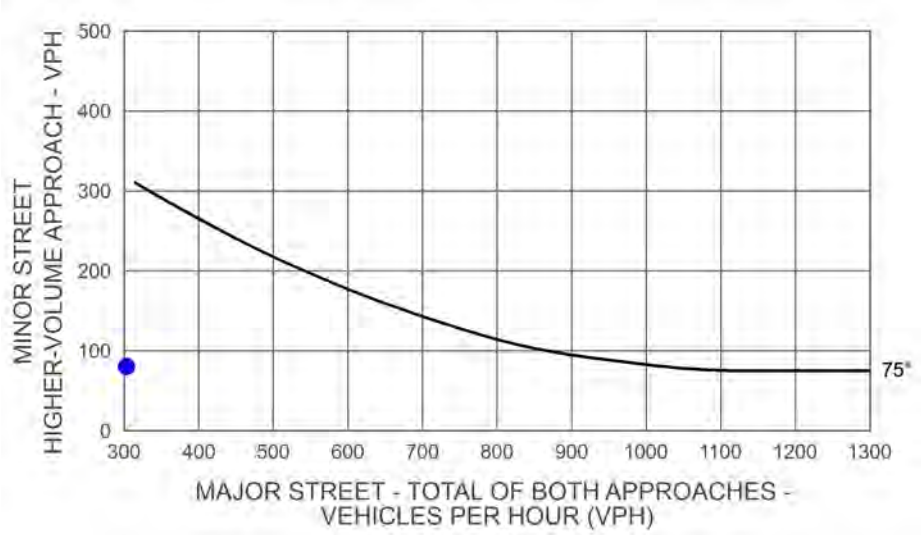


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future+Project
Intersection #: 4

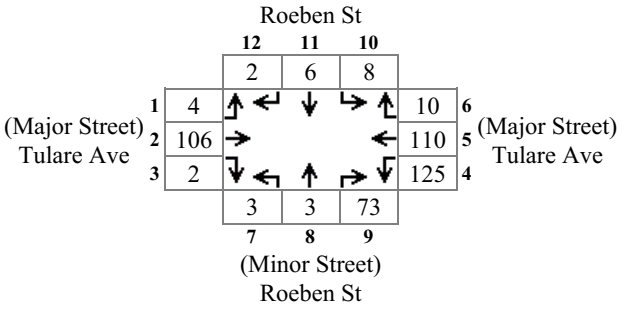


Major Total: 303
Minor High Volume: 81

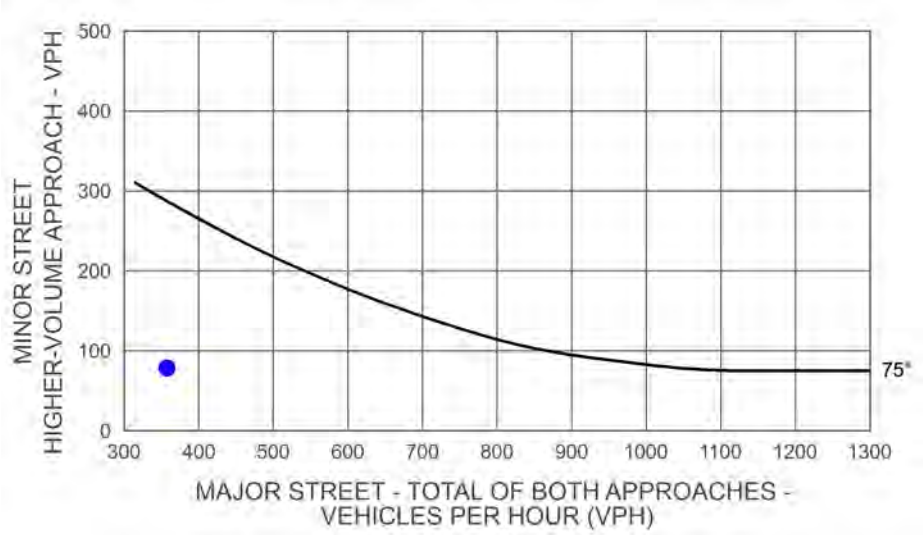


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future
Intersection #: 4

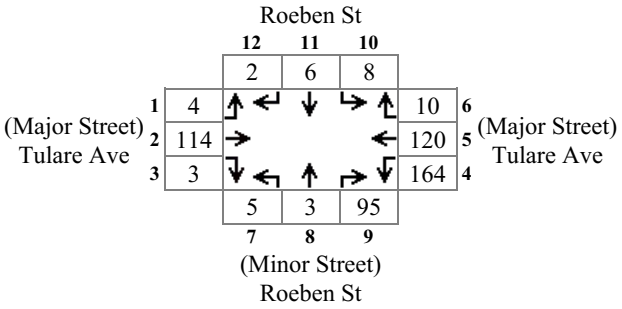


Major Total: 357
Minor High Volume: 79

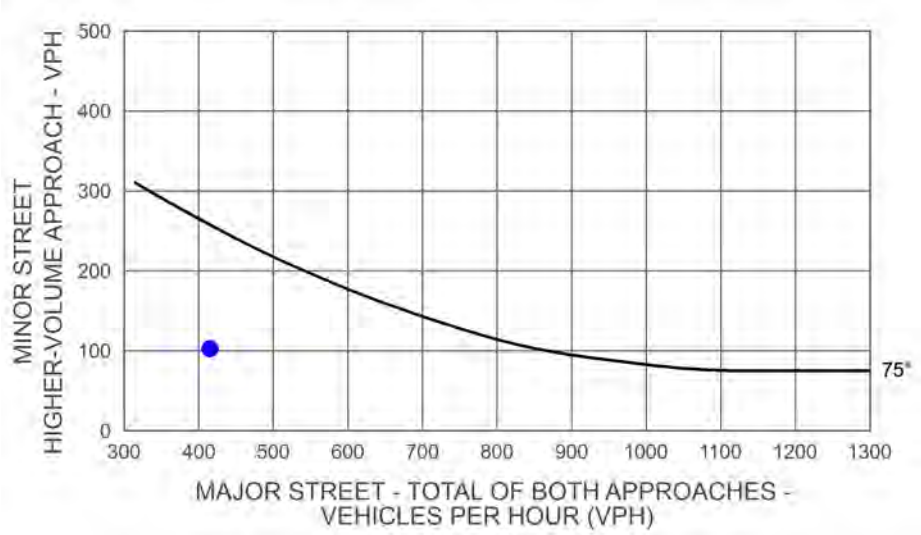


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future+Project (Future)
Intersection #: 4

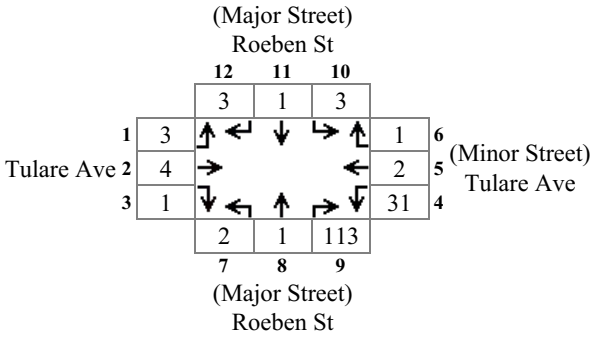


Major Total: 415
Minor High Volume: 103

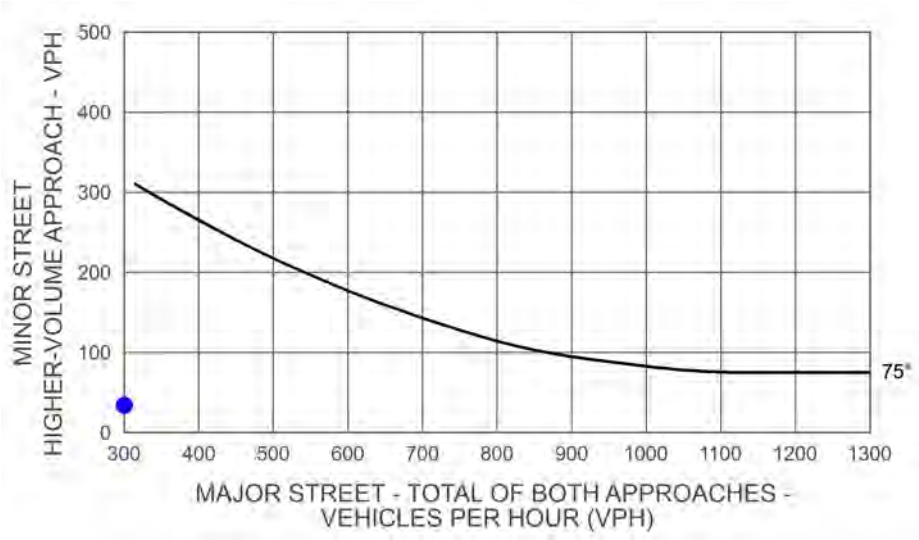


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing
Intersection #: 4

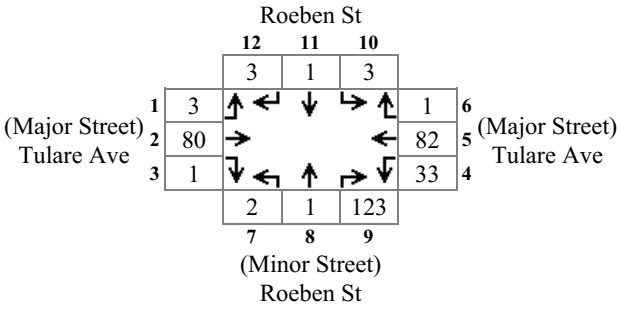


Major Total: 123
Minor High Volume: 34

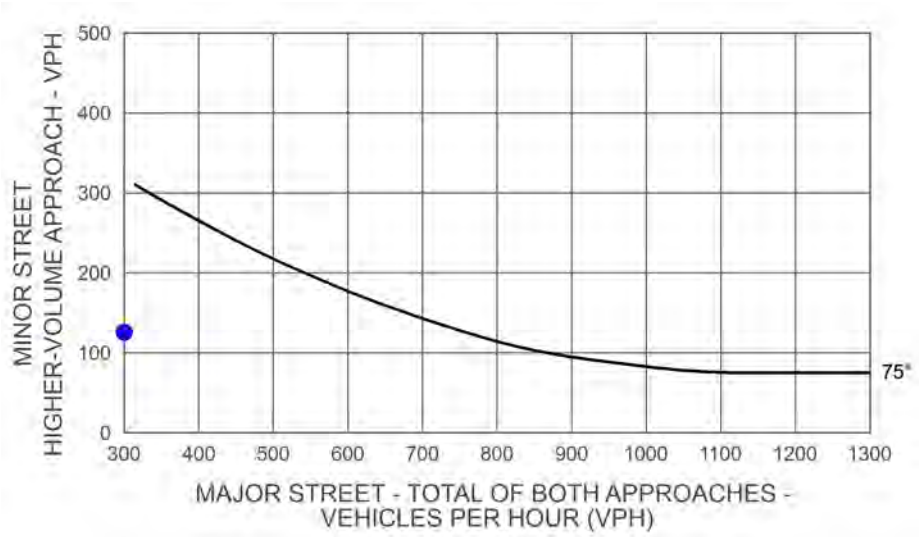


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future
Intersection #: 4

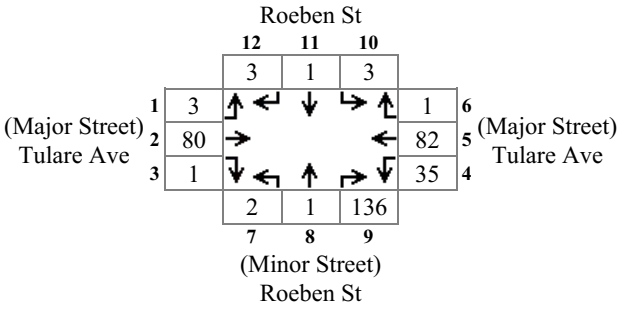


Major Total: 200
Minor High Volume: 126

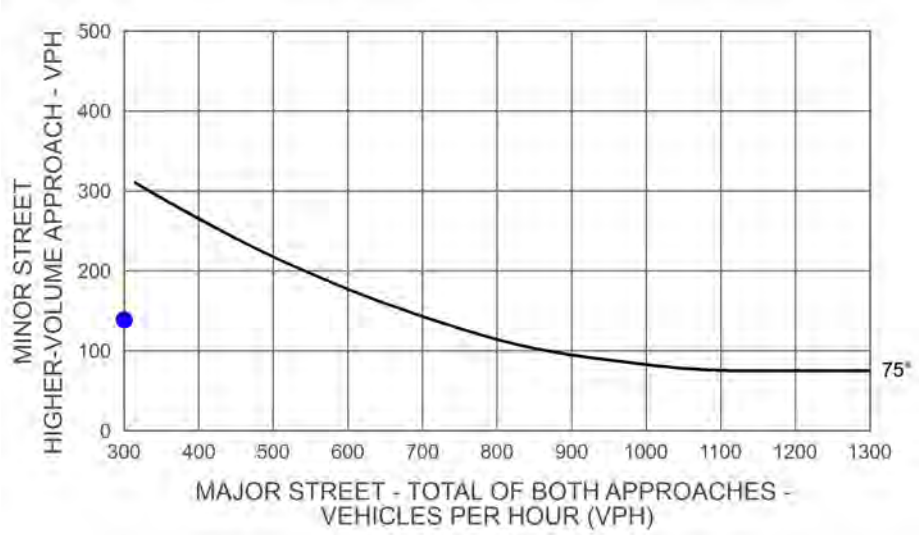


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future+Project
Intersection #: 4

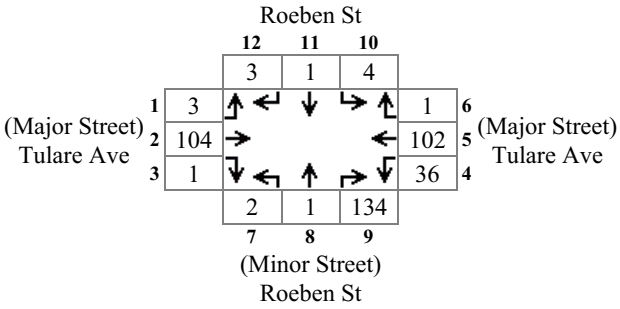


Major Total: 202
Minor High Volume: 139

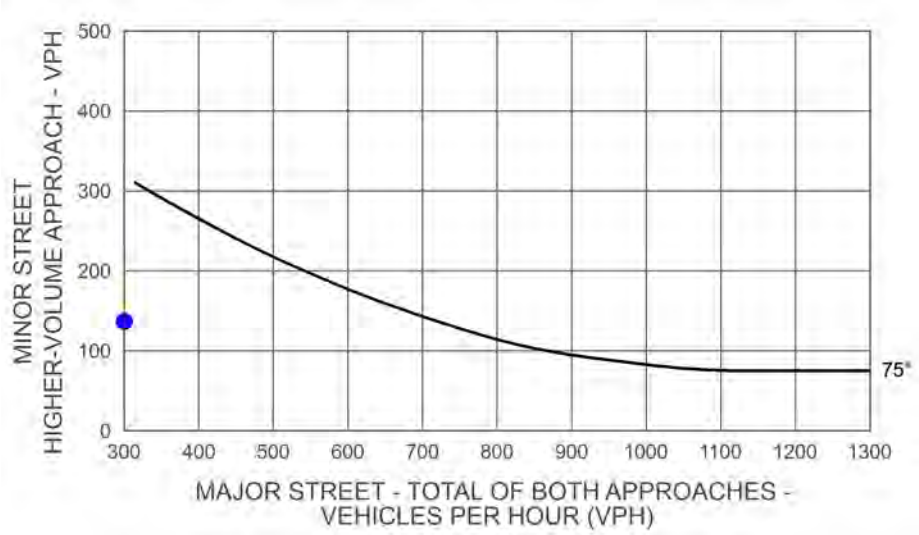


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future
Intersection #: 4

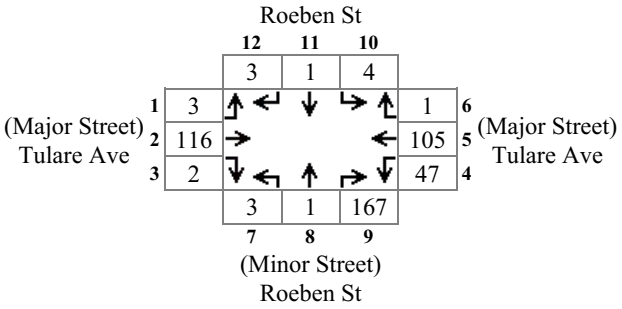


Major Total: 247
Minor High Volume: 137

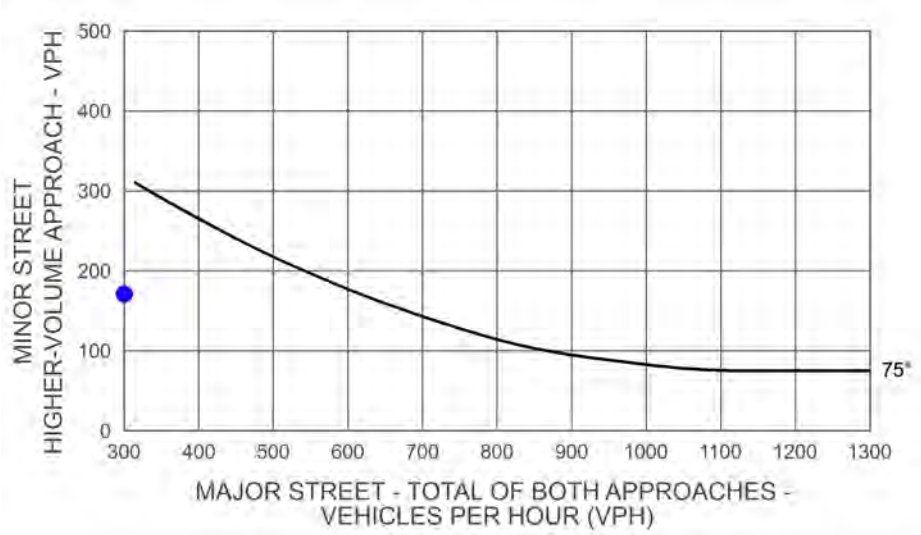


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future+Project (Future)
Intersection #: 4



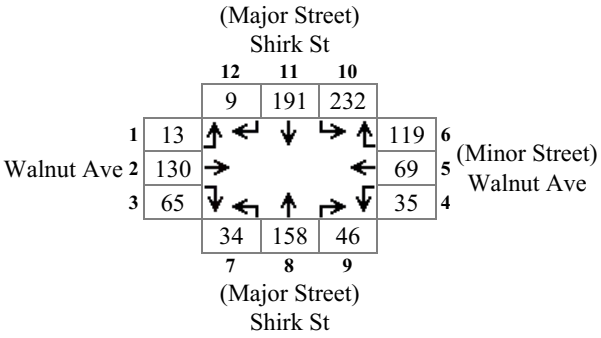
Major Total: 274
Minor High Volume: 171



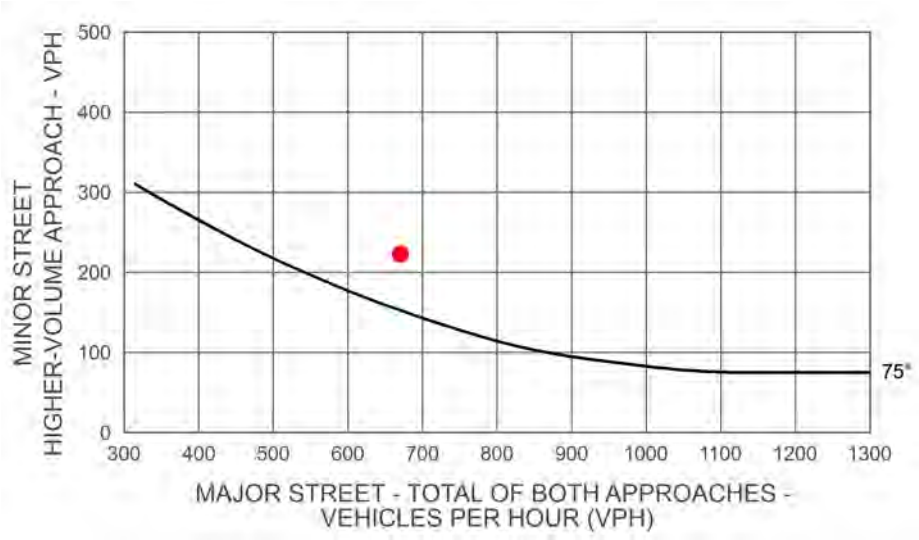
Intersection 5
Shirk St & Walnut Ave

Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Existing
Intersection #: 5

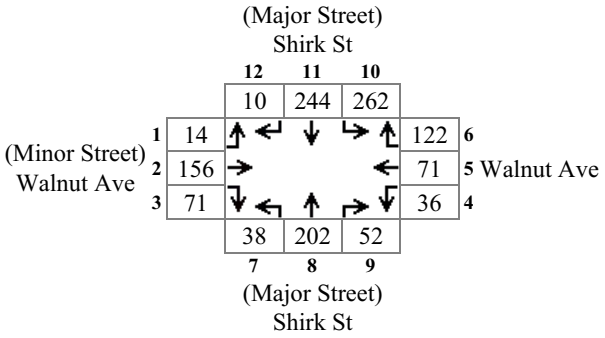


Major Total: 670
Minor High Volume: 223

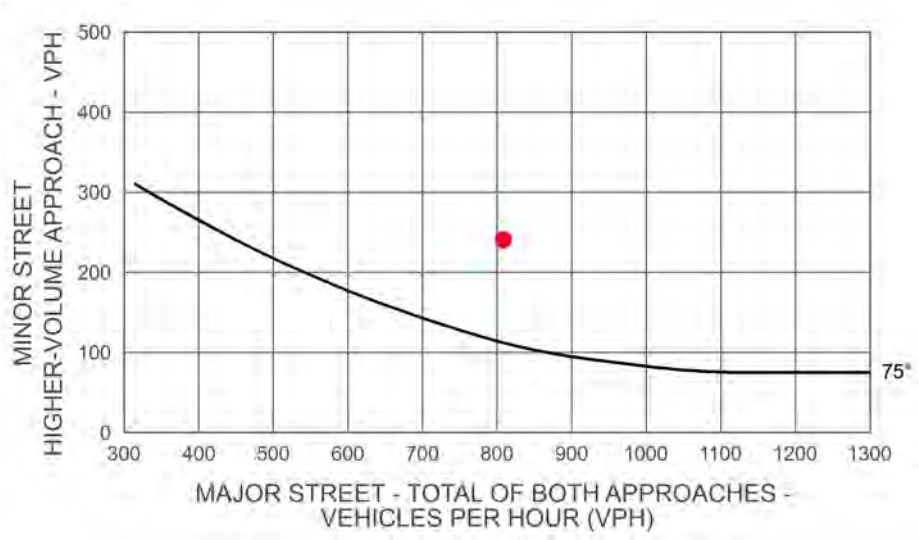


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future
Intersection #: 5

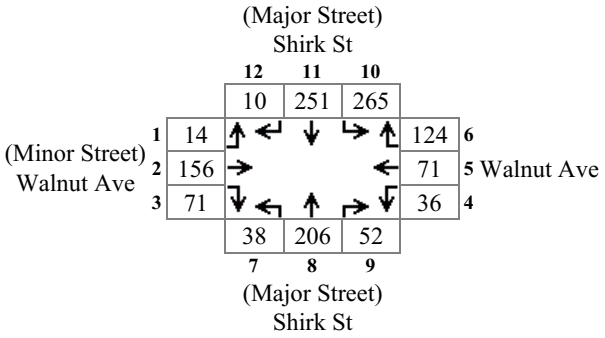


Major Total: 808
Minor High Volume: 241

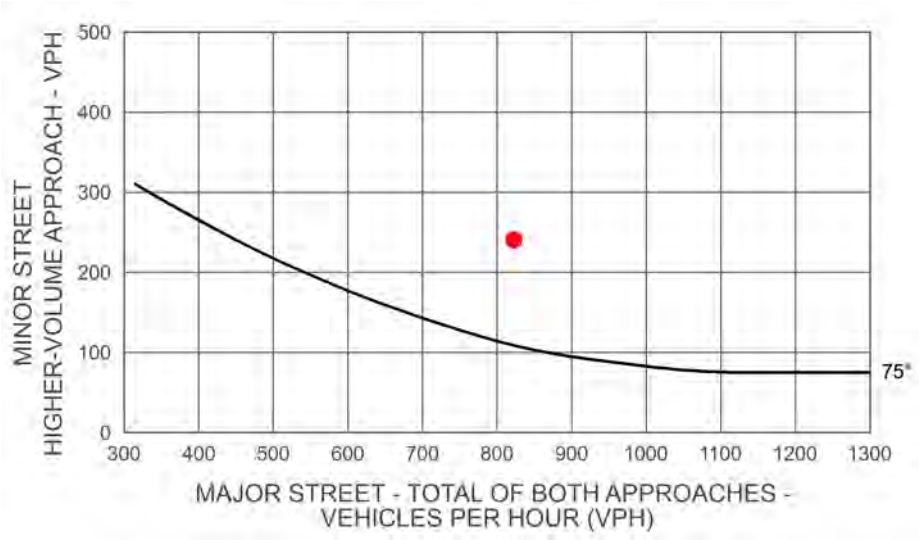


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future+Project
Intersection #: 5

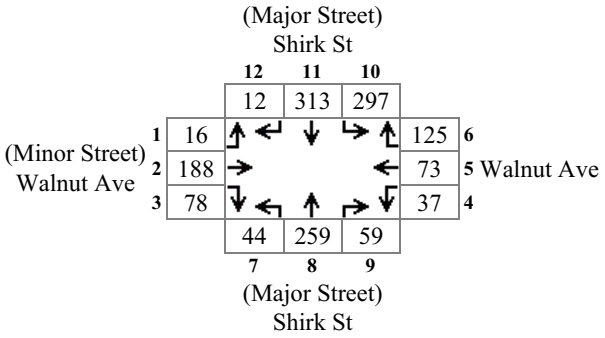


Major Total: 822
Minor High Volume: 241

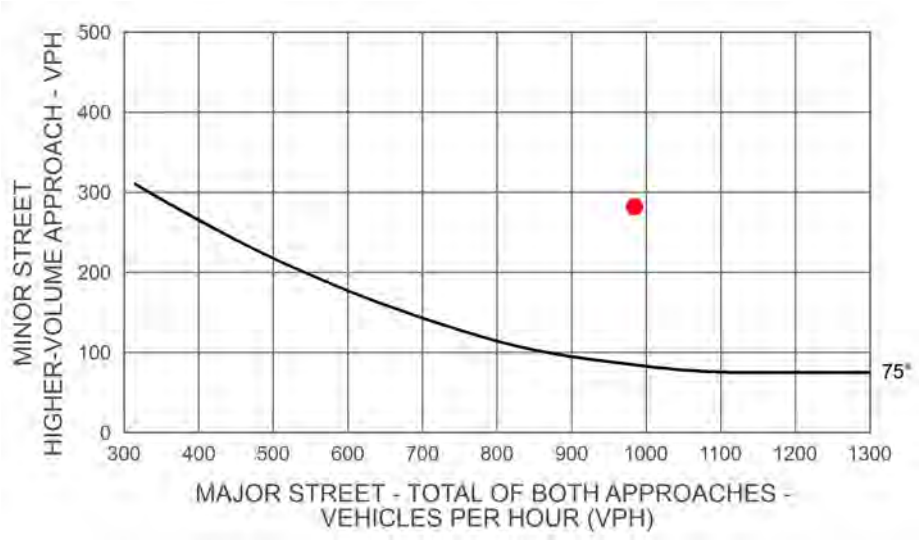


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future
Intersection #: 5

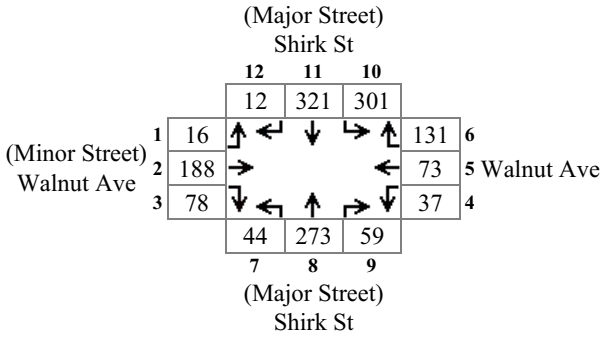


Major Total: 984
Minor High Volume: 282

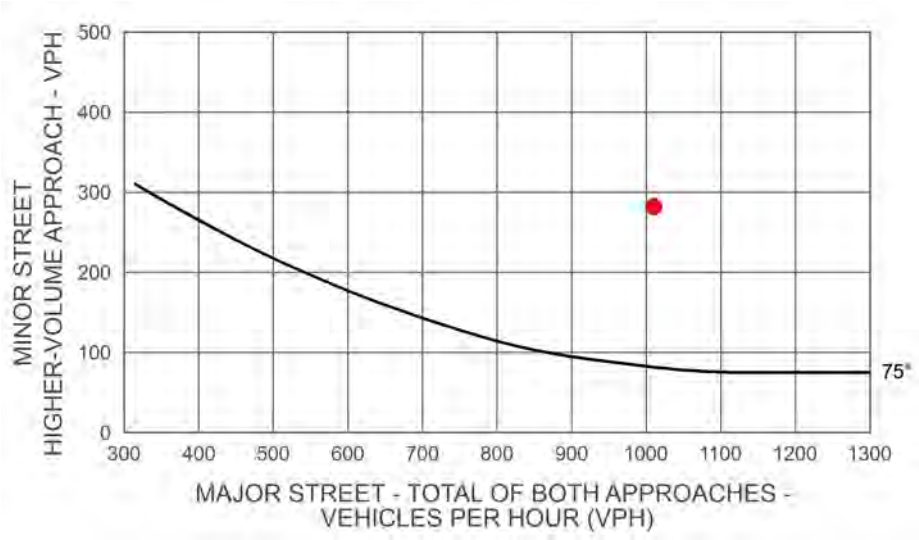


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future+Project (Future)
Intersection #: 5

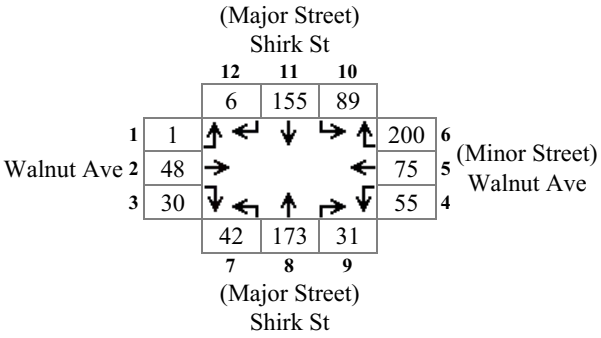


Major Total: 1010
Minor High Volume: 282

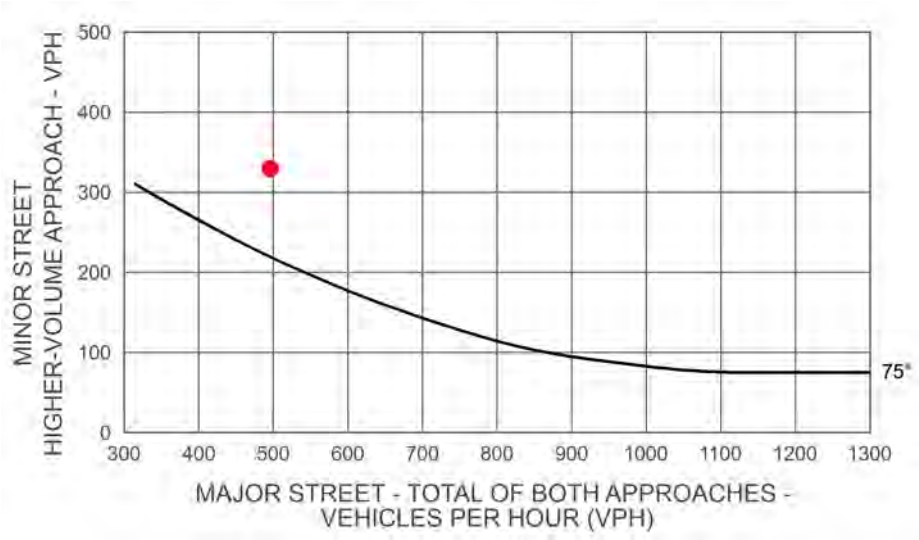


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Existing
Intersection #: 5

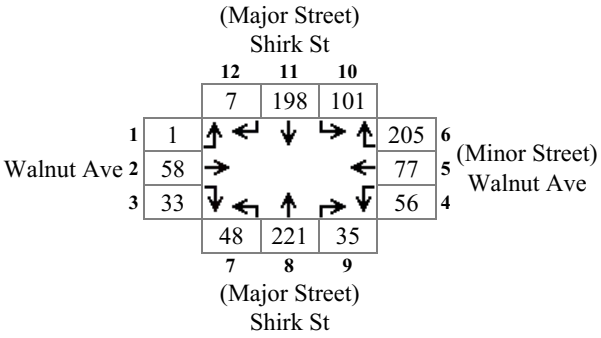


Major Total: 496
Minor High Volume: 330

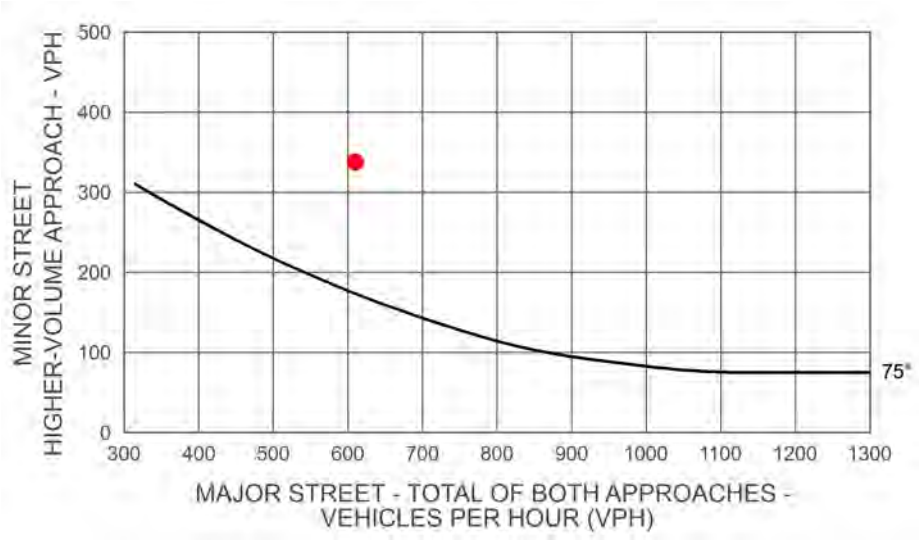


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Future
Intersection #: 5

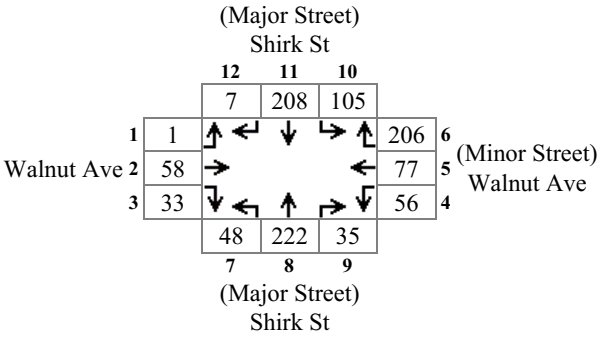


Major Total: 610
Minor High Volume: 338

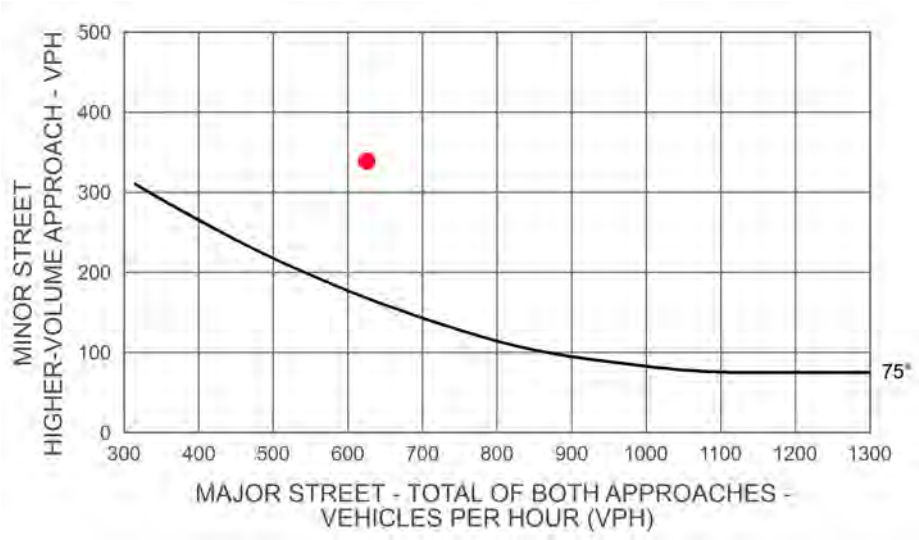


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Future+Project
Intersection #: 5

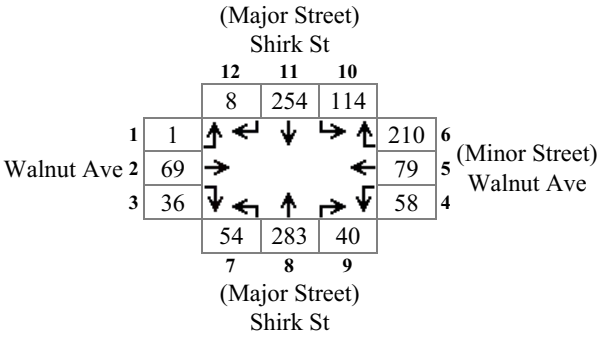


Major Total: 625
Minor High Volume: 339

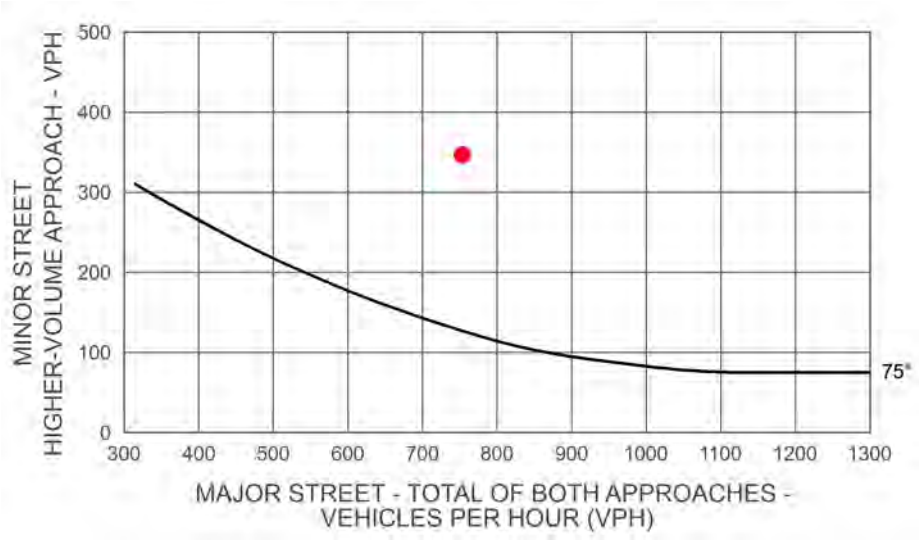


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Future
Intersection #: 5

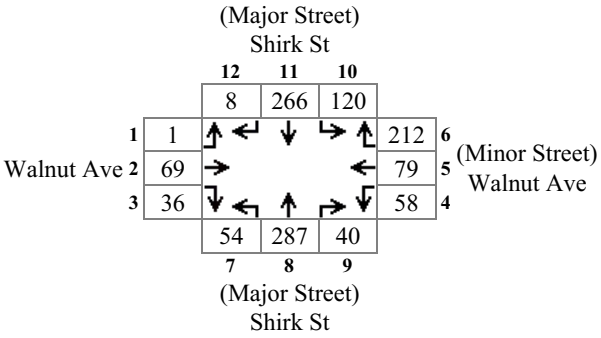


Major Total: 753
Minor High Volume: 347

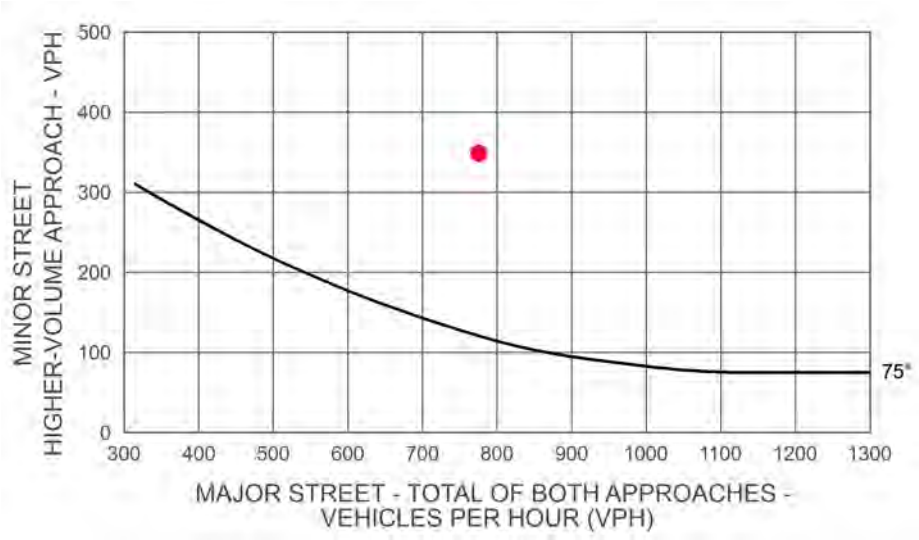


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Future+Project (Future)
Intersection #: 5



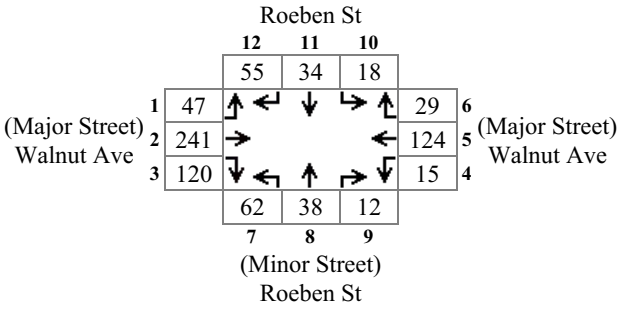
Major Total: 775
Minor High Volume: 349



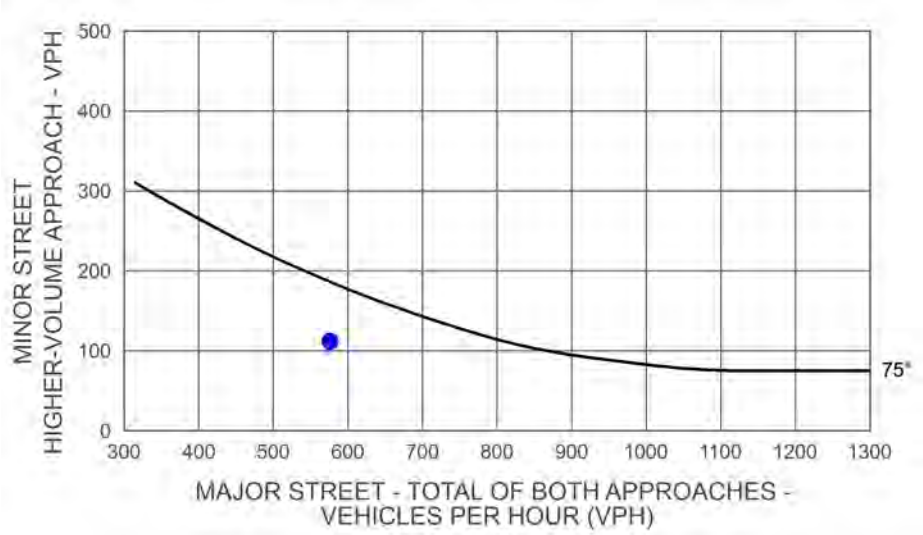
Intersection 6
Roeben St & Walnut Ave

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing
Intersection #: 6

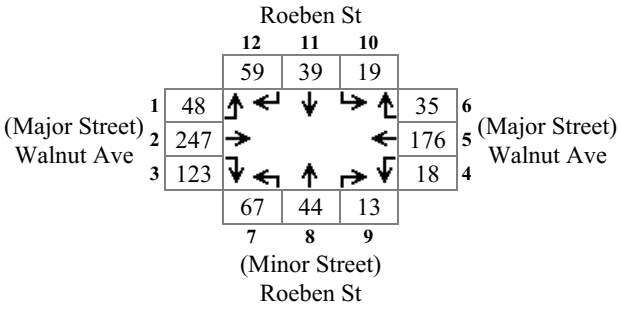


Major Total: 576
Minor High Volume: 112

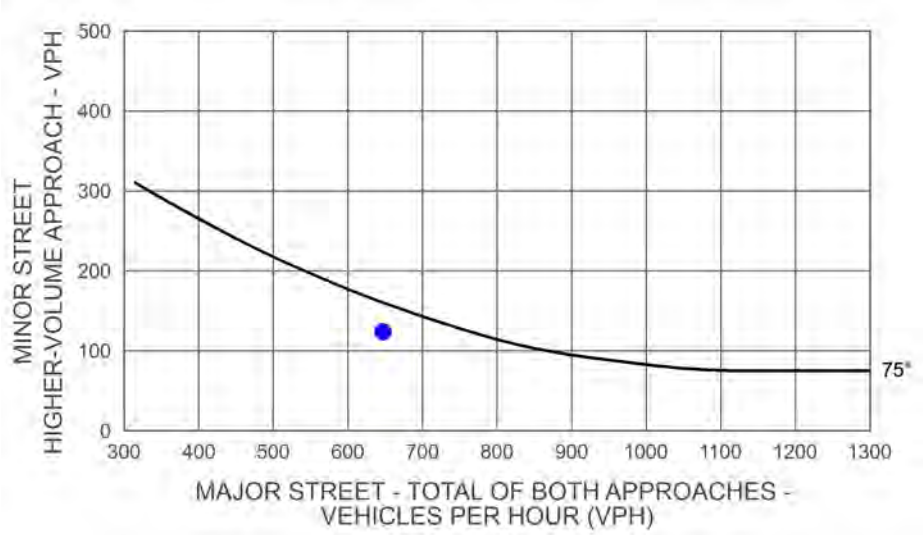


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future
Intersection #: 6

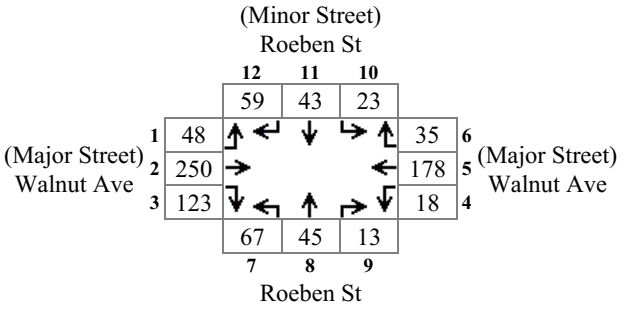


Major Total: 647
Minor High Volume: 124

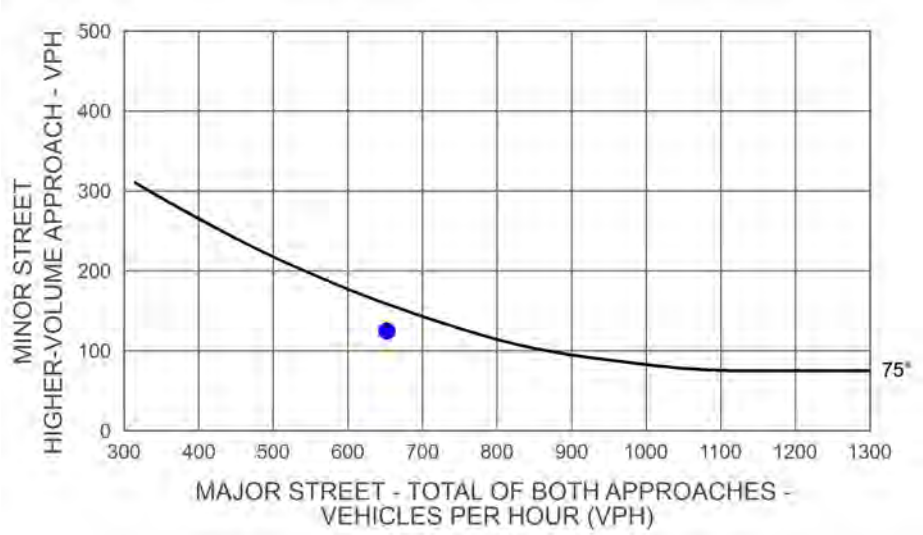


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future+Project
Intersection #: 6

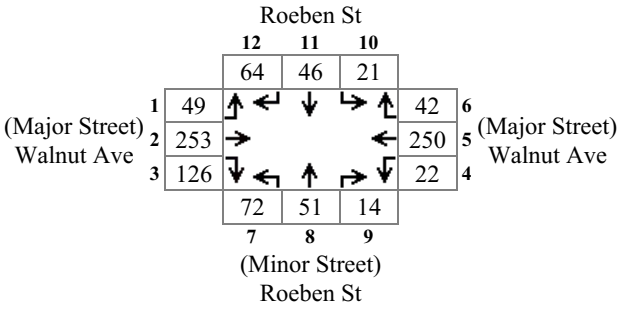


Major Total: 652
Minor High Volume: 125

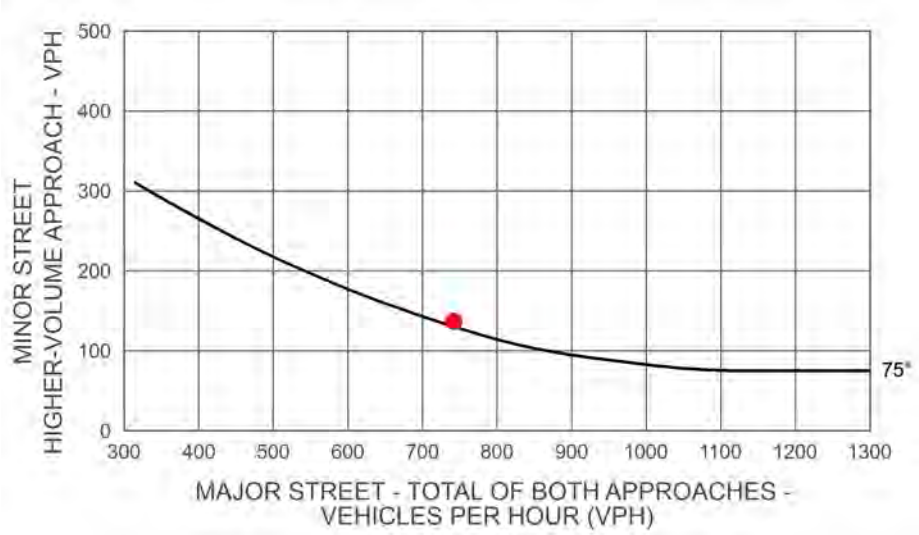


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future
Intersection #: 6

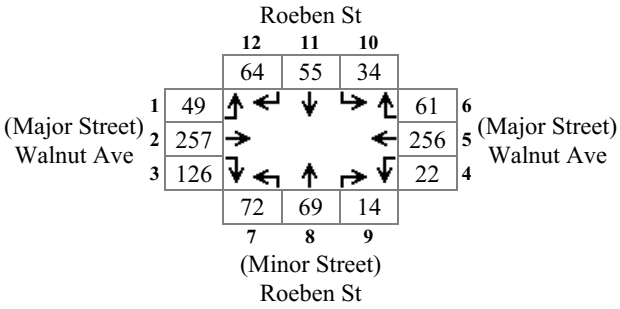


Major Total: 742
Minor High Volume: 137

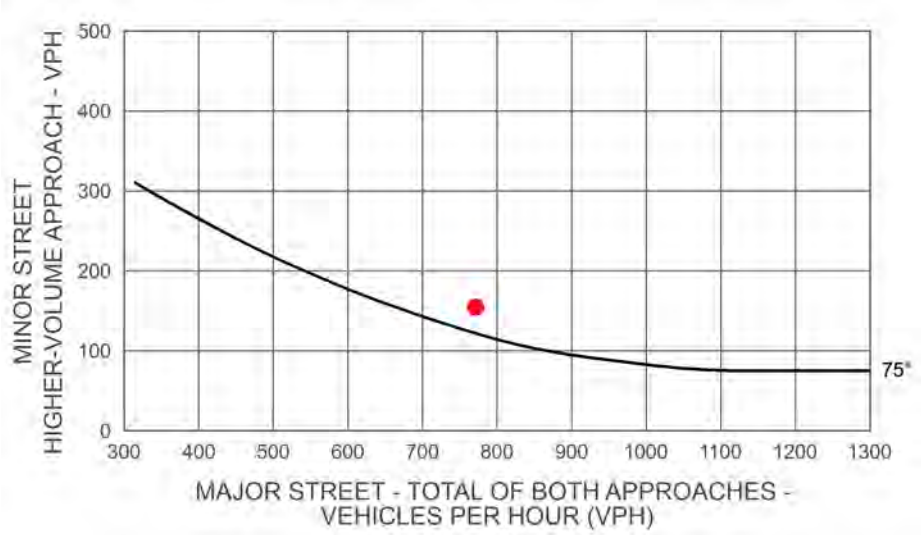


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future+Project (Future)
Intersection #: 6

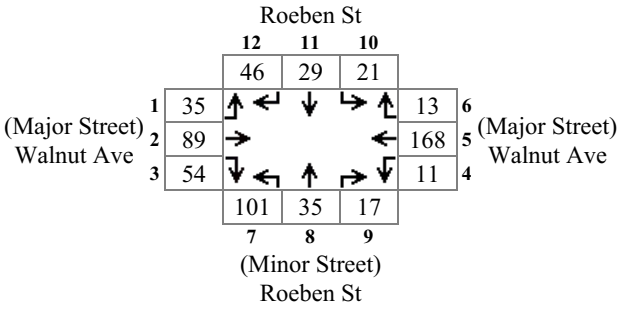


Major Total: 771
Minor High Volume: 155

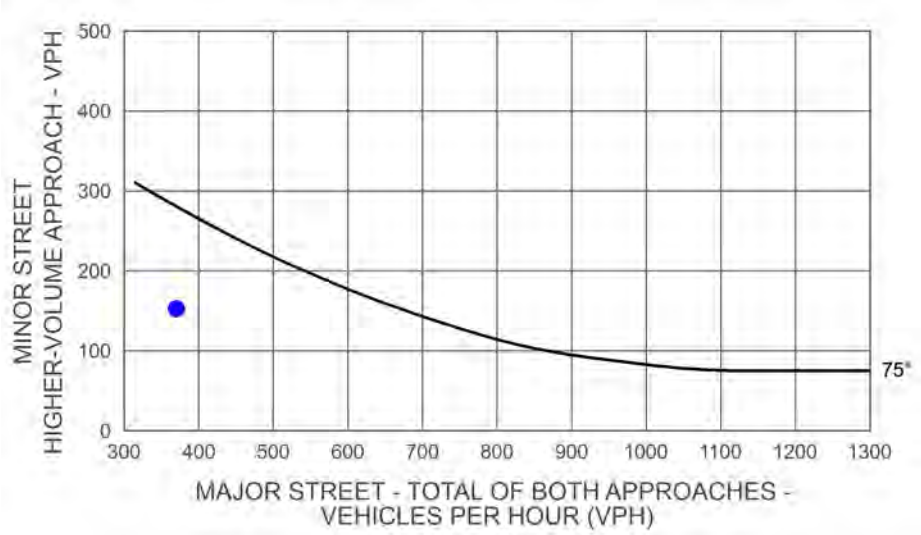


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing
Intersection #: 6

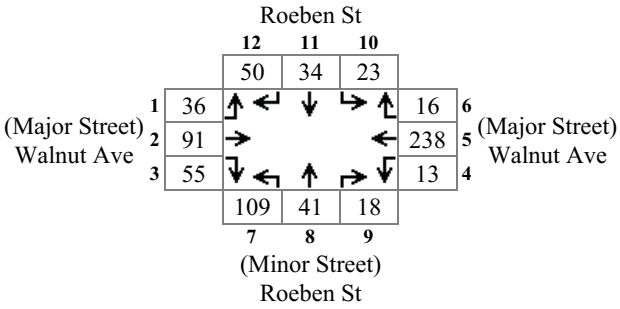


Major Total: 370
Minor High Volume: 153

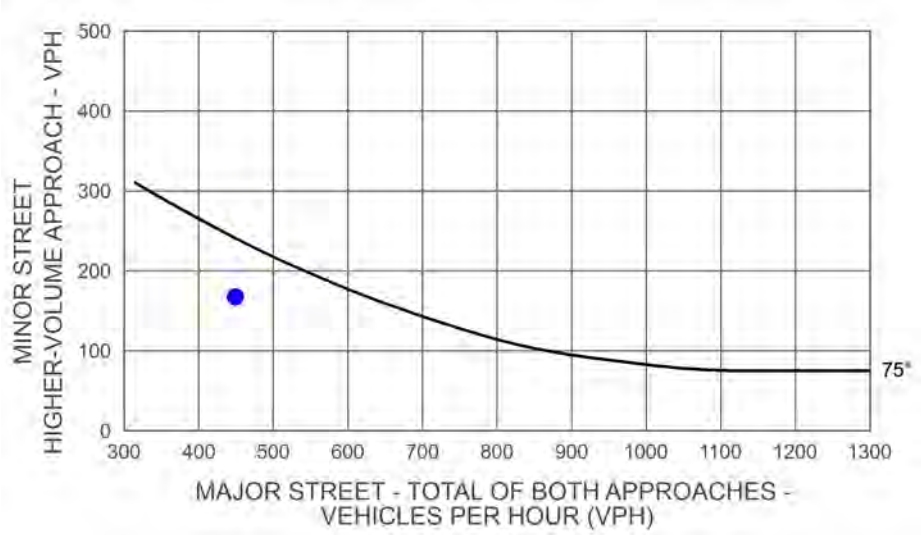


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future
Intersection #: 6

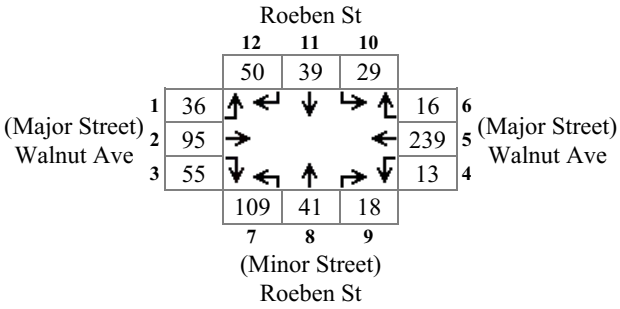


Major Total: 449
Minor High Volume: 168

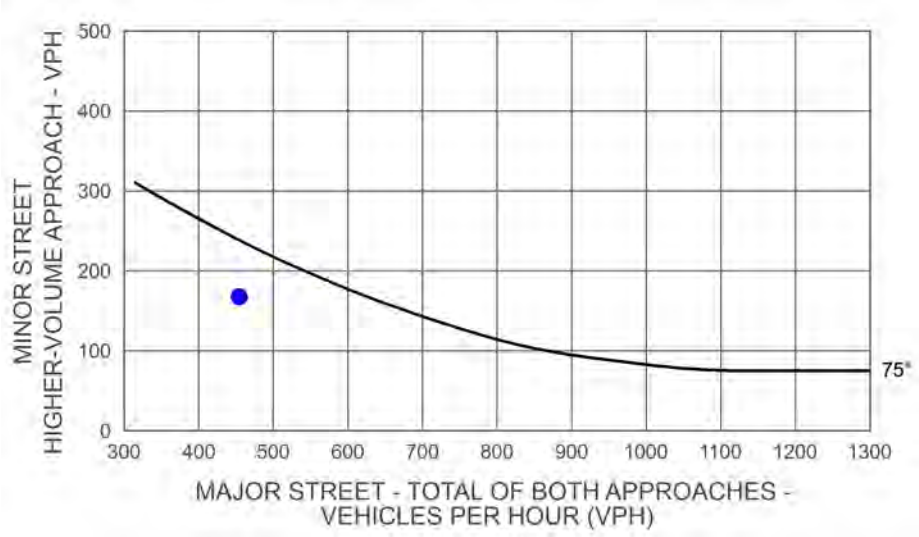


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future+Project
Intersection #: 6

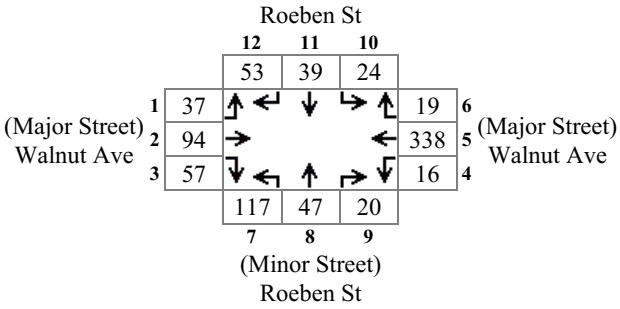


Major Total: 454
Minor High Volume: 168

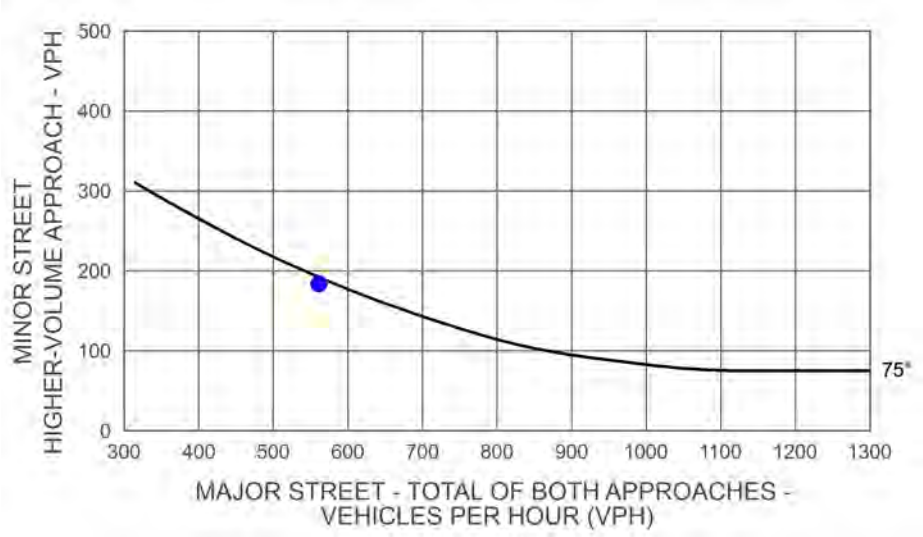


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future
Intersection #: 6

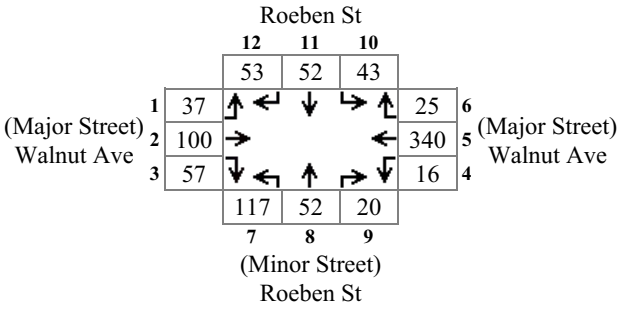


Major Total: 561
Minor High Volume: 184

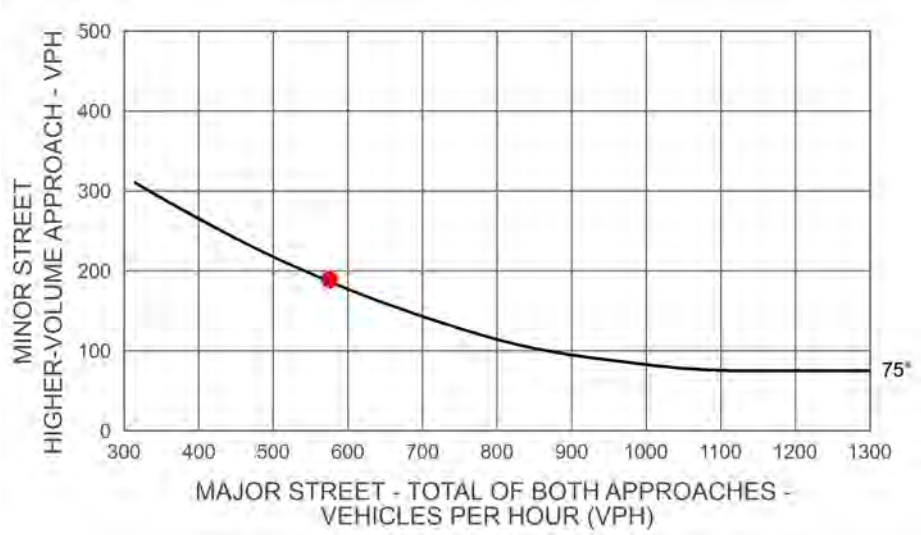


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Future+Project (Future)
Intersection #: 6



Major Total: 575
Minor High Volume: 189



Intersection 7
Street 3 & Tulare Ave

Intersection 8
Street 6 & Tulare Ave

Intersection 9
Shirk St & Avenue 4

Intersection 10
Roeben St & Avenue 6

2023

Warrant 1: Eight-hour Vehicular Volume

1: SR 198 WB Off Ramp & Shirk St

Intersection Information

Major Street Name:	Shirk Rd
Major Street Direction:	NB/SB
Minor Street Direction:	WB/WB

WARRANT 1 MET? Yes

Details:

Condition A Met?	Yes	11 Hours met (8 required)
Condition B Met?	Yes	10 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**5106**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**126**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**1126**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**322**		**225**		No	No	Yes	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	362		205		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:00 to 08:00	325		206		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:15 to 08:15	4329		122378		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:30 to 08:30	422		225		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:45 to 08:45	421		192		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:00 to 09:00	422		1758		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:15 to 09:15	285		152		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

08:30 to 09:30	**380**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**186**		**62**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**126**		**31**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**165**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**222**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**205**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**116**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**92**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:30 to 11:30	**115**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:45 to 11:45	**63**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:00 to 12:00	**61**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:15 to 12:15	**72**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:30 to 12:30	**83**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:45 to 12:45	**52**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	413		122		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:15 to 13:15	418		119		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:30 to 13:30	426		117		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:45 to 13:45	432		100		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:00 to 14:00	466		234		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:15 to 14:15	215		221		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:30 to 14:30	266		86		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	**209**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**366**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**426**		**117**		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				
14:30 to 15:30	**432**		**100**		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				
14:45 to 15:45	**466**		**234**		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				
15:00 to 16:00	**215**		**221**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
15:15 to 16:15	**266**		**86**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

2: SR 198 EB Off-Ramp & Shirk St

Intersection Information

Major Street Name:	Shirk Rd
Major Street Direction:	NB/SB
Minor Street Direction:	WB/WB

WARRANT 1 MET? Yes

Details:

Condition A Met?	Yes	8 Hours met (8 required)
Condition B Met?	Yes	8 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**0**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**5**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**3**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**24**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**23**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**28**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**33**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**56**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**85**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**201**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**318**		**210**		No	No	Yes	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	362		222		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:00 to 08:00	305		152		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:15 to 08:15	322		148		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:30 to 08:30	405		222		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:45 to 08:45	482		225		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:00 to 09:00	465		209		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:15 to 09:15	415		201		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

08:30 to 09:30	**132**		**64**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**185**		**62**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**199**		**35**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**66**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**68**		**18**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**78**		**5**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**69**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**82**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**22**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**63**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**69**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**65**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**105**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**119**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	222		44		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

12:15 to 13:15	336		85		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

12:30 to 13:30	426		215		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:45 to 13:45	432		232		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:00 to 14:00	466		234		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:15 to 14:15	326		221		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:30 to 14:30	315		176		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	226		120		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

14:00 to 15:00	205		54		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

14:15 to 15:15	206		26		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

14:30 to 15:30	65		20		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

14:45 to 15:45	91		15		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:00 to 16:00	102		10		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:15 to 16:15	102		9		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**55**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**62**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**19**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**21**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

4: Roeben St & Tulare Ave

Intersection Information

Major Street Name:	Tulare Ave
Major Street Direction:	EB/WB
Minor Street Direction:	NB/SB

WARRANT 1 MET? No

Details:

Condition A Met?	No	0 Hours met (8 required)
Condition B Met?	No	0 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**29**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**41**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:15 to 07:15	**46**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:30 to 07:30	**54**				No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

06:45 to 07:45	**63**		**290**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:00 to 08:00	**64**		**326**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:15 to 08:15	**69**		**312**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:30 to 08:30	**63**		**216**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:45 to 08:45	**59**		**146**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:00 to 09:00	**62**		**86**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:15 to 09:15	**52**		**49**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:30 to 09:30	**48**		**38**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**43**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**35**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**33**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**32**		**28**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**32**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**35**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**36**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**43**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**42**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**45**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**49**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**51**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**53**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	**49**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:15 to 13:15	**53**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:30 to 13:30	**47**		**128**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:45 to 13:45	**54**		**187**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:00 to 14:00	**58**		**234**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:15 to 14:15	**56**		**221**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:30 to 14:30	**60**		**176**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:45 to 14:45	**58**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**61**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**69**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**76**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

5: Shirk St & Walnut Ave

Intersection Information

Major Street Name:	Shirk St
Major Street Direction:	NB/SB
Minor Street Direction:	EB/WB

WARRANT 1 MET? **No**

Details:

Condition A Met?	No	0 Hours met (8 required)
Condition B Met?	No	0 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**29**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**41**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:15 to 07:15	**46**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:30 to 07:30	**54**				No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

06:45 to 07:45	**63**		**290**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:00 to 08:00	**64**		**326**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:15 to 08:15	**69**		**312**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:30 to 08:30	**63**		**216**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:45 to 08:45	**59**		**146**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:00 to 09:00	**62**		**86**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:15 to 09:15	**52**		**49**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:30 to 09:30	**48**		**38**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**43**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**35**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**33**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**32**		**28**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**32**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**35**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**36**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**43**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**42**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**45**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**49**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**51**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**53**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	**49**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:15 to 13:15	**53**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:30 to 13:30	**47**		**128**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:45 to 13:45	**54**		**187**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:00 to 14:00	**58**		**234**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:15 to 14:15	**56**		**221**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:30 to 14:30	**60**		**176**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:45 to 14:45	**58**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**61**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**69**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**76**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

6: Roeben St & Walnut Ave

Intersection Information

Major Street Name:	Walnut Ave
Major Street Direction:	EB/WB
Minor Street Direction:	NB/SB

WARRANT 1 MET? **No**

Details:

Condition A Met?	No	0 Hours met (8 required)
Condition B Met?	No	0 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**29**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**41**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**46**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**54**		**225**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	**80**		**52**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:00 to 08:00	**64**		**41**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:15 to 08:15	**69**		**31**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:30 to 08:30	**63**		**21**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:45 to 08:45	**59**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:00 to 09:00	**62**		**8**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:15 to 09:15	**52**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:30 to 09:30	**48**		**38**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**43**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**35**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**33**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**32**		**28**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**32**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**35**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**36**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**43**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**42**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**45**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**49**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**51**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**53**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	**49**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
12:15 to 13:15	**53**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
12:30 to 13:30	**128**		**42**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
12:45 to 13:45	**182**		**51**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
13:00 to 14:00	**234**		**42**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
13:15 to 14:15	**221**		**56**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
13:30 to 14:30	**176**		**43**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	**58**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**61**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**69**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**76**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

2023+Project

Warrant 1: Eight-hour Vehicular Volume

1: SR 198 WB Off Ramp & Shirk St

Intersection Information

Major Street Name:	Shirk Rd
Major Street Direction:	NB/SB
Minor Street Direction:	WB/WB

WARRANT 1 MET? Yes

Details:

Condition A Met?	Yes	11 Hours met (8 required)
Condition B Met?	Yes	10 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**5106**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**126**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**1126**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**322**		**225**		No	No	Yes	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	362		205		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:00 to 08:00	325		206		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:15 to 08:15	4329		122378		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:30 to 08:30	422		225		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:45 to 08:45	421		192		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:00 to 09:00	422		1758		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:15 to 09:15	285		152		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

08:30 to 09:30	**380**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**186**		**62**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**126**		**31**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**165**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**222**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**205**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**116**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**92**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:30 to 11:30	**115**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:45 to 11:45	**63**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:00 to 12:00	**61**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:15 to 12:15	**72**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:30 to 12:30	**83**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:45 to 12:45	**52**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	413		122		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:15 to 13:15	418		119		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:30 to 13:30	426		117		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:45 to 13:45	432		100		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:00 to 14:00	466		234		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:15 to 14:15	215		221		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:30 to 14:30	266		86		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	**209**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**366**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**426**		**117**		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				
14:30 to 15:30	**432**		**100**		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				
14:45 to 15:45	**466**		**234**		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				
15:00 to 16:00	**215**		**221**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
15:15 to 16:15	**266**		**86**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

2: SR 198 EB Off-Ramp & Shirk St

Intersection Information

Major Street Name:	Shirk Rd
Major Street Direction:	NB/SB
Minor Street Direction:	WB/WB

WARRANT 1 MET? Yes

Details:

Condition A Met?	Yes	8 Hours met (8 required)
Condition B Met?	Yes	8 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**0**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**5**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**3**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**24**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**23**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**28**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**33**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**56**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**85**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**201**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**318**		**210**		No	No	Yes	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	362		222		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:00 to 08:00	305		152		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:15 to 08:15	322		148		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:30 to 08:30	405		222		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:45 to 08:45	482		225		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:00 to 09:00	465		209		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:15 to 09:15	415		201		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

08:30 to 09:30	**132**		**64**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**185**		**62**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**199**		**35**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**66**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**68**		**18**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**78**		**5**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**69**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**82**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**22**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**63**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**69**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**65**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**105**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**119**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	222		44		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

12:15 to 13:15	336		85		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

12:30 to 13:30	426		215		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:45 to 13:45	432		232		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:00 to 14:00	466		234		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:15 to 14:15	326		221		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:30 to 14:30	315		176		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	226		120		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

14:00 to 15:00	205		54		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

14:15 to 15:15	206		26		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

14:30 to 15:30	65		20		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

14:45 to 15:45	91		15		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:00 to 16:00	102		10		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:15 to 16:15	102		9		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**55**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**62**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**19**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**21**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

4: Roeben St & Tulare Ave

Intersection Information

Major Street Name:	Tulare Ave
Major Street Direction:	EB/WB
Minor Street Direction:	NB/SB

WARRANT 1 MET? No

Details:

Condition A Met?	No	0 Hours met (8 required)
Condition B Met?	No	0 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**29**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**41**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:15 to 07:15	**46**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:30 to 07:30	**54**				No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

06:45 to 07:45	**63**		**290**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:00 to 08:00	**64**		**326**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:15 to 08:15	**69**		**312**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:30 to 08:30	**63**		**216**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:45 to 08:45	**59**		**146**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:00 to 09:00	**62**		**86**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:15 to 09:15	**52**		**49**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:30 to 09:30	**48**		**38**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**43**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**35**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**33**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**32**		**28**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**32**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**35**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**36**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**43**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**42**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**45**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**49**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**51**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**53**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	**49**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:15 to 13:15	**53**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:30 to 13:30	**47**		**128**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:45 to 13:45	**54**		**187**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:00 to 14:00	**58**		**234**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:15 to 14:15	**56**		**221**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:30 to 14:30	**60**		**176**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:45 to 14:45	**58**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**61**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**69**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**76**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

5: Shirk St & Walnut Ave

Intersection Information

Major Street Name:	Shirk St
Major Street Direction:	NB/SB
Minor Street Direction:	EB/WB

WARRANT 1 MET? **No**

Details:

Condition A Met?	No	0 Hours met (8 required)
Condition B Met?	No	0 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**29**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**41**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:15 to 07:15	**46**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:30 to 07:30	**54**				No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

06:45 to 07:45	**63**		**290**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:00 to 08:00	**64**		**326**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:15 to 08:15	**69**		**312**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:30 to 08:30	**63**		**216**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:45 to 08:45	**59**		**146**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:00 to 09:00	**62**		**86**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:15 to 09:15	**52**		**49**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:30 to 09:30	**48**		**38**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**43**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**35**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**33**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**32**		**28**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**32**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**35**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**36**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**43**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**42**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**45**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**49**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**51**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**53**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	**49**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:15 to 13:15	**53**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:30 to 13:30	**47**		**128**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:45 to 13:45	**54**		**187**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:00 to 14:00	**58**		**234**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:15 to 14:15	**56**		**221**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:30 to 14:30	**60**		**176**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:45 to 14:45	**58**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**61**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**69**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**76**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

6: Roeben St & Walnut Ave

Intersection Information

Major Street Name:	Walnut Ave
Major Street Direction:	EB/WB
Minor Street Direction:	NB/SB

WARRANT 1 MET? **No**

Details:

Condition A Met?	No	0 Hours met (8 required)
Condition B Met?	No	0 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**29**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**41**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**46**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**54**		**225**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	**80**		**52**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:00 to 08:00	**64**		**41**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:15 to 08:15	**69**		**31**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:30 to 08:30	**63**		**21**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:45 to 08:45	**59**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:00 to 09:00	**62**		**8**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:15 to 09:15	**52**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:30 to 09:30	**48**		**38**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**43**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**35**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**33**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**32**		**28**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**32**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**35**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**36**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**43**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**42**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**45**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**49**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**51**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**53**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	**49**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
12:15 to 13:15	**53**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
12:30 to 13:30	**128**		**42**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
12:45 to 13:45	**182**		**51**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
13:00 to 14:00	**234**		**42**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
13:15 to 14:15	**221**		**56**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
13:30 to 14:30	**176**		**43**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	**58**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**61**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**69**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**76**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

2028

Warrant 1: Eight-hour Vehicular Volume

1: SR 198 WB Off Ramp & Shirk St

Intersection Information

Major Street Name:	Shirk Rd
Major Street Direction:	NB/SB
Minor Street Direction:	WB/WB

WARRANT 1 MET? Yes

Details:

Condition A Met?	Yes	11 Hours met (8 required)
Condition B Met?	Yes	10 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**5106**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**126**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**1126**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**322**		**225**		No	No	Yes	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	362		205		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:00 to 08:00	325		206		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:15 to 08:15	4329		122378		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:30 to 08:30	422		225		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:45 to 08:45	421		192		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:00 to 09:00	422		1758		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:15 to 09:15	285		152		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

08:30 to 09:30	**380**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**186**		**62**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**126**		**31**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**165**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**222**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**205**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**116**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**92**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:30 to 11:30	**115**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:45 to 11:45	**63**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:00 to 12:00	**61**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:15 to 12:15	**72**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:30 to 12:30	**83**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:45 to 12:45	**52**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	413		122		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:15 to 13:15	418		119		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:30 to 13:30	426		117		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:45 to 13:45	432		100		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:00 to 14:00	466		234		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:15 to 14:15	215		221		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:30 to 14:30	266		86		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	**209**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**366**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**426**		**117**		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				
14:30 to 15:30	**432**		**100**		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				
14:45 to 15:45	**466**		**234**		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				
15:00 to 16:00	**215**		**221**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
15:15 to 16:15	**266**		**86**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

2: SR 198 EB Off-Ramp & Shirk St

Intersection Information

Major Street Name:	Shirk Rd
Major Street Direction:	NB/SB
Minor Street Direction:	WB/WB

WARRANT 1 MET? Yes

Details:

Condition A Met?	Yes	8 Hours met (8 required)
Condition B Met?	Yes	8 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**0**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**5**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**3**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**24**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**23**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**28**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**33**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**56**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**85**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**201**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**318**		**210**		No	No	Yes	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	362		222		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:00 to 08:00	305		152		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:15 to 08:15	322		148		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:30 to 08:30	405		222		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:45 to 08:45	482		225		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:00 to 09:00	465		209		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:15 to 09:15	415		201		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

08:30 to 09:30	**132**		**64**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**185**		**62**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**199**		**35**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**66**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**68**		**18**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**78**		**5**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**69**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**82**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**22**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**63**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**69**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**65**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**105**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**119**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	222		44		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

12:15 to 13:15	336		85		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

12:30 to 13:30	426		215		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:45 to 13:45	432		232		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:00 to 14:00	466		234		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:15 to 14:15	326		221		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:30 to 14:30	315		176		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	226		120		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

14:00 to 15:00	205		54		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

14:15 to 15:15	206		26		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

14:30 to 15:30	65		20		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

14:45 to 15:45	91		15		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:00 to 16:00	102		10		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:15 to 16:15	102		9		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**55**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**62**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**19**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**21**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

3: Shirk Rd & Tulare Ave

Intersection Information

Major Street Name:	Shirk Rd
Major Street Direction:	NB/SB
Minor Street Direction:	EB/WB

WARRANT 1 MET? **No**

Details:

Condition A Met?	No	0 Hours met (8 required)
Condition B Met?	No	0 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**29**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**41**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**46**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**54**		**225**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	**63**		**290**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:00 to 08:00	**64**		**326**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:15 to 08:15	**69**		**312**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:30 to 08:30	**63**		**216**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:45 to 08:45	**59**		**146**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:00 to 09:00	**62**		**86**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:15 to 09:15	**52**		**49**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:30 to 09:30	**48**		**38**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**43**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**35**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**33**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**32**		**28**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**32**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**35**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**36**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**43**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**42**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**45**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**49**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**51**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**53**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	**49**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:15 to 13:15	**53**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:30 to 13:30	**47**		**128**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:45 to 13:45	**54**		**187**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:00 to 14:00	**58**		**234**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:15 to 14:15	**56**		**221**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:30 to 14:30	**60**		**176**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:45 to 14:45	**58**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**61**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**69**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**76**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

4: Roeben St & Tulare Ave

Intersection Information

Major Street Name:	Tulare Ave
Major Street Direction:	EB/WB
Minor Street Direction:	NB/SB

WARRANT 1 MET? No

Details:

Condition A Met?	No	0 Hours met (8 required)
Condition B Met?	No	0 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**29**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**41**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:15 to 07:15	**46**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:30 to 07:30	**54**				No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

06:45 to 07:45	**63**		**290**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:00 to 08:00	**64**		**326**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:15 to 08:15	**69**		**312**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:30 to 08:30	**63**		**216**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:45 to 08:45	**59**		**146**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:00 to 09:00	**62**		**86**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:15 to 09:15	**52**		**49**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:30 to 09:30	**48**		**38**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**43**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**35**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**33**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**32**		**28**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**32**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**35**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**36**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**43**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**42**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**45**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**49**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**51**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**53**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	**49**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:15 to 13:15	**53**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:30 to 13:30	**47**		**128**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:45 to 13:45	**54**		**187**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:00 to 14:00	**58**		**234**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:15 to 14:15	**56**		**221**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:30 to 14:30	**60**		**176**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:45 to 14:45	**58**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**61**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**69**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**76**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

5: Shirk St & Walnut Ave

Intersection Information

Major Street Name:	Shirk Rd
Major Street Direction:	NB/SB
Minor Street Direction:	WB/WB

WARRANT 1 MET? Yes

Details:

Condition A Met?	Yes	8 Hours met (8 required)
Condition B Met?	Yes	9 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**56**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**82**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**156**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**312**		**225**		No	No	Yes	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	362		125		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:00 to 08:00	382		156		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:15 to 08:15	432		178		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:30 to 08:30	452		210		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:45 to 08:45	421		192		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:00 to 09:00	422		178		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:15 to 09:15	285		152		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

08:30 to 09:30	**355**		**53**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**386**		**62**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**103**		**37**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**64**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**82**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**95**		**18**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**86**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**82**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**71**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**63**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**61**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**71**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**118**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**210**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	225		44		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

12:15 to 13:15	386		85		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

12:30 to 13:30	526		117		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:45 to 13:45	532		185		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:00 to 14:00	565		234		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:15 to 14:15	342		221		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:30 to 14:30	215		176		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	**256**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**215**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**189**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**201**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

6: Roeben St & Walnut Ave

Intersection Information

Major Street Name:	Walnut Ave
Major Street Direction:	EB/WB
Minor Street Direction:	NB/SB

WARRANT 1 MET? **No**

Details:

Condition A Met?	No	0 Hours met (8 required)
Condition B Met?	No	0 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**29**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**41**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**46**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**54**		**225**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	**80**		**52**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:00 to 08:00	**64**		**41**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:15 to 08:15	**69**		**31**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:30 to 08:30	**63**		**21**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:45 to 08:45	**59**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:00 to 09:00	**62**		**8**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:15 to 09:15	**52**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:30 to 09:30	**48**		**38**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**43**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**35**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**33**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**32**		**28**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**32**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**35**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**36**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**43**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**42**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**45**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**49**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**51**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**53**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	**49**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
12:15 to 13:15	**53**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
12:30 to 13:30	**128**		**42**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
12:45 to 13:45	**182**		**51**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
13:00 to 14:00	**234**		**42**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
13:15 to 14:15	**221**		**56**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
13:30 to 14:30	**176**		**43**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	**58**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**61**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**69**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**76**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

2028+Project

Warrant 1: Eight-hour Vehicular Volume

1: SR 198 WB Off Ramp & Shirk St

Intersection Information

Major Street Name:	Shirk Rd
Major Street Direction:	NB/SB
Minor Street Direction:	WB/WB

WARRANT 1 MET? Yes

Details:

Condition A Met?	Yes	11 Hours met (8 required)
Condition B Met?	Yes	10 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**5106**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**126**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**1126**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**322**		**225**		No	No	Yes	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	362		205		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:00 to 08:00	325		206		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:15 to 08:15	4329		122378		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:30 to 08:30	422		225		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:45 to 08:45	421		192		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:00 to 09:00	422		1758		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:15 to 09:15	285		152		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

08:30 to 09:30	**380**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**186**		**62**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**126**		**31**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**165**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**222**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**205**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**116**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**92**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:30 to 11:30	**115**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:45 to 11:45	**63**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:00 to 12:00	**61**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:15 to 12:15	**72**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:30 to 12:30	**83**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:45 to 12:45	**52**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	413		122		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:15 to 13:15	418		119		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:30 to 13:30	426		117		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:45 to 13:45	432		100		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:00 to 14:00	466		234		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:15 to 14:15	215		221		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:30 to 14:30	266		86		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	**209**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**366**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**426**		**117**		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				
14:30 to 15:30	**432**		**100**		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				
14:45 to 15:45	**466**		**234**		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				
15:00 to 16:00	**215**		**221**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
15:15 to 16:15	**266**		**86**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

2: SR 198 EB Off-Ramp & Shirk St

Intersection Information

Major Street Name:	Shirk Rd
Major Street Direction:	NB/SB
Minor Street Direction:	WB/WB

WARRANT 1 MET? Yes

Details:

Condition A Met?	Yes	8 Hours met (8 required)
Condition B Met?	Yes	8 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**0**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**5**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**3**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**24**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**23**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**28**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**33**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**56**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**85**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**201**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**318**		**210**		No	No	Yes	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	362		222		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:00 to 08:00	305		152		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:15 to 08:15	322		148		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:30 to 08:30	405		222		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:45 to 08:45	482		225		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:00 to 09:00	465		209		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:15 to 09:15	415		201		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

08:30 to 09:30	**132**		**64**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**185**		**62**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**199**		**35**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**66**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**68**		**18**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**78**		**5**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**69**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**82**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**22**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**63**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**69**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**65**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**105**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**119**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	222		44		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

12:15 to 13:15	336		85		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

12:30 to 13:30	426		215		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:45 to 13:45	432		232		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:00 to 14:00	466		234		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:15 to 14:15	326		221		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:30 to 14:30	315		176		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	226		120		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

14:00 to 15:00	205		54		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

14:15 to 15:15	206		26		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

14:30 to 15:30	65		20		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

14:45 to 15:45	91		15		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:00 to 16:00	102		10		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:15 to 16:15	102		9		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**55**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**62**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**19**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**21**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

3: Shirk Rd & Tulare Ave

Intersection Information

Major Street Name:	Shirk Rd
Major Street Direction:	NB/SB
Minor Street Direction:	EB/WB

WARRANT 1 MET? **No**

Details:

Condition A Met?	No	0 Hours met (8 required)
Condition B Met?	No	0 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**29**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**41**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**46**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**54**		**225**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	**63**		**290**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:00 to 08:00	**64**		**326**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:15 to 08:15	**69**		**312**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:30 to 08:30	**63**		**216**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:45 to 08:45	**59**		**146**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:00 to 09:00	**62**		**86**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:15 to 09:15	**52**		**49**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:30 to 09:30	**48**		**38**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**43**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**35**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**33**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**32**		**28**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**32**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**35**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**36**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**43**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**42**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**45**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**49**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**51**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**53**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	**49**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:15 to 13:15	**53**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:30 to 13:30	**47**		**128**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:45 to 13:45	**54**		**187**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:00 to 14:00	**58**		**234**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:15 to 14:15	**56**		**221**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:30 to 14:30	**60**		**176**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:45 to 14:45	**58**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**61**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**69**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**76**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

4: Roeben St & Tulare Ave

Intersection Information

Major Street Name:	Tulare Ave
Major Street Direction:	EB/WB
Minor Street Direction:	NB/SB

WARRANT 1 MET? No

Details:

Condition A Met?	No	0 Hours met (8 required)
Condition B Met?	No	0 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**29**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**41**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:15 to 07:15	**46**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:30 to 07:30	**54**				No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

06:45 to 07:45	**63**		**290**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:00 to 08:00	**64**		**326**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:15 to 08:15	**69**		**312**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:30 to 08:30	**63**		**216**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:45 to 08:45	**59**		**146**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:00 to 09:00	**62**		**86**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:15 to 09:15	**52**		**49**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:30 to 09:30	**48**		**38**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**43**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**35**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**33**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**32**		**28**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**32**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**35**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**36**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**43**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**42**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**45**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**49**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**51**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**53**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	**49**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:15 to 13:15	**53**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:30 to 13:30	**47**		**128**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:45 to 13:45	**54**		**187**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:00 to 14:00	**58**		**234**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:15 to 14:15	**56**		**221**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:30 to 14:30	**60**		**176**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:45 to 14:45	**58**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**61**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**69**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**76**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

5: Shirk St & Walnut Ave

Intersection Information

Major Street Name:	Shirk Rd
Major Street Direction:	NB/SB
Minor Street Direction:	WB/WB

WARRANT 1 MET? Yes

Details:

Condition A Met?	Yes	8 Hours met (8 required)
Condition B Met?	Yes	9 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**56**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**82**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**156**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**312**		**225**		No	No	Yes	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	362		125		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:00 to 08:00	382		156		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:15 to 08:15	432		178		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:30 to 08:30	452		210		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:45 to 08:45	421		192		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:00 to 09:00	422		178		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:15 to 09:15	285		152		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

08:30 to 09:30	**355**		**53**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**386**		**62**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**103**		**37**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**64**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**82**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**95**		**18**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**86**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**82**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**71**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**63**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**61**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**71**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**118**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**210**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	225		44		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

12:15 to 13:15	386		85		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

12:30 to 13:30	526		117		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:45 to 13:45	532		185		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:00 to 14:00	565		234		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:15 to 14:15	342		221		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:30 to 14:30	215		176		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	**256**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**215**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**189**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**201**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

6: Roeben St & Walnut Ave

Intersection Information

Major Street Name:	Walnut Ave
Major Street Direction:	EB/WB
Minor Street Direction:	NB/SB

WARRANT 1 MET? **No**

Details:

Condition A Met?	No	0 Hours met (8 required)
Condition B Met?	No	0 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**29**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**41**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**46**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**54**		**225**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	**80**		**52**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:00 to 08:00	**64**		**41**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:15 to 08:15	**69**		**31**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:30 to 08:30	**63**		**21**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:45 to 08:45	**59**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:00 to 09:00	**62**		**8**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:15 to 09:15	**52**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:30 to 09:30	**48**		**38**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**43**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**35**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**33**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**32**		**28**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**32**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**35**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**36**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**43**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**42**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**45**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**49**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**51**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**53**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	**49**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
12:15 to 13:15	**53**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
12:30 to 13:30	**128**		**42**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
12:45 to 13:45	**182**		**51**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
13:00 to 14:00	**234**		**42**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
13:15 to 14:15	**221**		**56**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
13:30 to 14:30	**176**		**43**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	**58**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**61**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**69**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**76**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

2033

Warrant 1: Eight-hour Vehicular Volume

1: SR 198 WB Off Ramp & Shirk St

Intersection Information

Major Street Name:	Shirk Rd
Major Street Direction:	NB/SB
Minor Street Direction:	WB/WB

WARRANT 1 MET? Yes

Details:

Condition A Met?	Yes	11 Hours met (8 required)
Condition B Met?	Yes	10 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**5106**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**126**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**1126**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**322**		**225**		No	No	Yes	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	362		205		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:00 to 08:00	325		206		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:15 to 08:15	4329		122378		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:30 to 08:30	422		225		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:45 to 08:45	421		192		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:00 to 09:00	422		1758		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:15 to 09:15	285		152		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

08:30 to 09:30	**380**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**186**		**62**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**126**		**31**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**165**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**222**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**205**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**116**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**92**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:30 to 11:30	**115**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:45 to 11:45	**63**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:00 to 12:00	**61**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:15 to 12:15	**72**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:30 to 12:30	**83**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:45 to 12:45	**52**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	413		122		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:15 to 13:15	418		119		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:30 to 13:30	426		117		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:45 to 13:45	432		100		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:00 to 14:00	466		234		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:15 to 14:15	215		221		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:30 to 14:30	266		86		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	**209**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**366**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**426**		**117**		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				
14:30 to 15:30	**432**		**100**		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				
14:45 to 15:45	**466**		**234**		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				
15:00 to 16:00	**215**		**221**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
15:15 to 16:15	**266**		**86**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

2: SR 198 EB Off-Ramp & Shirk St

Intersection Information

Major Street Name:	Shirk Rd
Major Street Direction:	NB/SB
Minor Street Direction:	WB/WB

WARRANT 1 MET? Yes

Details:

Condition A Met?	Yes	8 Hours met (8 required)
Condition B Met?	Yes	8 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**0**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**5**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**3**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**24**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**23**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**28**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**33**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**56**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**85**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**201**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**318**		**210**		No	No	Yes	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	362		222		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:00 to 08:00	305		152		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:15 to 08:15	322		148		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:30 to 08:30	405		222		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:45 to 08:45	482		225		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:00 to 09:00	465		209		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:15 to 09:15	415		201		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

08:30 to 09:30	**132**		**64**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**185**		**62**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**199**		**35**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**66**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**68**		**18**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**78**		**5**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**69**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**82**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**22**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**63**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**69**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**65**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**105**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**119**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	222		44		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

12:15 to 13:15	336		85		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

12:30 to 13:30	426		215		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:45 to 13:45	432		232		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:00 to 14:00	466		234		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:15 to 14:15	326		221		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:30 to 14:30	315		176		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	226		120		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

14:00 to 15:00	205		54		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

14:15 to 15:15	206		26		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

14:30 to 15:30	65		20		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

14:45 to 15:45	91		15		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:00 to 16:00	102		10		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:15 to 16:15	102		9		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**55**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**62**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**19**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**21**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

3: Shirk Rd & Tulare Ave

Intersection Information

Major Street Name:	Shirk Rd
Major Street Direction:	NB/SB
Minor Street Direction:	EB/WB

WARRANT 1 MET? **No**

Details:

Condition A Met?	No	0 Hours met (8 required)
Condition B Met?	No	0 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**29**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**41**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**46**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**54**		**225**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	**63**		**290**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:00 to 08:00	**64**		**326**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:15 to 08:15	**69**		**312**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:30 to 08:30	**63**		**216**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:45 to 08:45	**59**		**146**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:00 to 09:00	**62**		**86**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:15 to 09:15	**52**		**49**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:30 to 09:30	**48**		**38**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**43**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**35**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**33**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**32**		**28**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**32**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**35**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**36**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**43**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**42**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**45**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**49**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**51**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**53**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	**49**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:15 to 13:15	**53**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:30 to 13:30	**47**		**128**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:45 to 13:45	**54**		**187**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:00 to 14:00	**58**		**234**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:15 to 14:15	**56**		**221**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:30 to 14:30	**60**		**176**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:45 to 14:45	**58**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**61**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**69**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**76**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

4: Roeben St & Tulare Ave

Intersection Information

Major Street Name:	Tulare Ave
Major Street Direction:	EB/WB
Minor Street Direction:	NB/SB

WARRANT 1 MET? No

Details:

Condition A Met?	No	0 Hours met (8 required)
Condition B Met?	No	0 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**29**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**41**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:15 to 07:15	**46**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:30 to 07:30	**54**				No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

06:45 to 07:45	**63**		**290**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:00 to 08:00	**64**		**326**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:15 to 08:15	**69**		**312**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:30 to 08:30	**63**		**216**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:45 to 08:45	**59**		**146**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:00 to 09:00	**62**		**86**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:15 to 09:15	**52**		**49**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:30 to 09:30	**48**		**38**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**43**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**35**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**33**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**32**		**28**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**32**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**35**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**36**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**43**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**42**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**45**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**49**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**51**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**53**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	**49**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:15 to 13:15	**53**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:30 to 13:30	**47**		**128**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:45 to 13:45	**54**		**187**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:00 to 14:00	**58**		**234**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:15 to 14:15	**56**		**221**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:30 to 14:30	**60**		**176**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:45 to 14:45	**58**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**61**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**69**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**76**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

5: Shirk St & Walnut Ave

Intersection Information

Major Street Name:	Shirk Rd
Major Street Direction:	NB/SB
Minor Street Direction:	WB/WB

WARRANT 1 MET? Yes

Details:

Condition A Met?	Yes	8 Hours met (8 required)
Condition B Met?	Yes	9 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**56**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**82**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**156**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**312**		**225**		No	No	Yes	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	362		125		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:00 to 08:00	382		156		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:15 to 08:15	432		178		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:30 to 08:30	452		210		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:45 to 08:45	421		192		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:00 to 09:00	422		178		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:15 to 09:15	285		152		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

08:30 to 09:30	**355**		**53**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**386**		**62**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**103**		**37**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**64**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**82**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**95**		**18**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**86**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**82**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**71**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**63**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**61**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**71**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**118**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**210**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	225		44		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

12:15 to 13:15	386		85		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

12:30 to 13:30	526		117		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:45 to 13:45	532		185		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:00 to 14:00	565		234		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:15 to 14:15	342		221		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:30 to 14:30	215		176		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	**256**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**215**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**189**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**201**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

6: Roeben St & Walnut Ave

Intersection Information

Major Street Name:	Walnut Ave
Major Street Direction:	EB/WB
Minor Street Direction:	NB/SB

WARRANT 1 MET? **No**

Details:

Condition A Met?	No	0 Hours met (8 required)
Condition B Met?	No	0 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**29**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**41**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**46**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**54**		**225**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	**80**		**52**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:00 to 08:00	**64**		**41**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:15 to 08:15	**69**		**31**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:30 to 08:30	**63**		**21**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:45 to 08:45	**59**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:00 to 09:00	**62**		**8**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:15 to 09:15	**52**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:30 to 09:30	**48**		**38**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**43**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**35**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**33**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**32**		**28**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**32**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**35**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**36**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**43**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**42**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**45**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**49**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**51**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**53**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	**49**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
12:15 to 13:15	**53**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
12:30 to 13:30	**128**		**42**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
12:45 to 13:45	**182**		**51**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
13:00 to 14:00	**234**		**42**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
13:15 to 14:15	**221**		**56**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
13:30 to 14:30	**176**		**43**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	**58**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**61**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**69**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**76**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

2033+Project

Warrant 1: Eight-hour Vehicular Volume

1: SR 198 WB Off Ramp & Shirk St

Intersection Information

Major Street Name:	Shirk Rd
Major Street Direction:	NB/SB
Minor Street Direction:	WB/WB

WARRANT 1 MET? Yes

Details:

Condition A Met?	Yes	11 Hours met (8 required)
Condition B Met?	Yes	10 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**5106**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**126**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**1126**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**322**		**225**		No	No	Yes	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	362		205		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:00 to 08:00	325		206		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:15 to 08:15	4329		122378		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:30 to 08:30	422		225		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:45 to 08:45	421		192		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:00 to 09:00	422		1758		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:15 to 09:15	285		152		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

08:30 to 09:30	**380**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**186**		**62**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**126**		**31**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**165**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**222**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**205**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**116**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**92**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:30 to 11:30	**115**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:45 to 11:45	**63**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:00 to 12:00	**61**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:15 to 12:15	**72**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:30 to 12:30	**83**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

11:45 to 12:45	**52**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	413		122		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:15 to 13:15	418		119		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:30 to 13:30	426		117		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:45 to 13:45	432		100		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:00 to 14:00	466		234		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:15 to 14:15	215		221		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:30 to 14:30	266		86		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	**209**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**366**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**426**		**117**		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				
14:30 to 15:30	**432**		**100**		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				
14:45 to 15:45	**466**		**234**		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				
15:00 to 16:00	**215**		**221**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
15:15 to 16:15	**266**		**86**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

2: SR 198 EB Off-Ramp & Shirk St

Intersection Information

Major Street Name:	Shirk Rd
Major Street Direction:	NB/SB
Minor Street Direction:	WB/WB

WARRANT 1 MET? Yes

Details:

Condition A Met?	Yes	8 Hours met (8 required)
Condition B Met?	Yes	8 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**0**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**5**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**3**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**24**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**23**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**28**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**33**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**56**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**85**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**201**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**318**		**210**		No	No	Yes	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	362		222		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:00 to 08:00	305		152		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:15 to 08:15	322		148		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:30 to 08:30	405		222		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:45 to 08:45	482		225		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:00 to 09:00	465		209		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:15 to 09:15	415		201		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

08:30 to 09:30	**132**		**64**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**185**		**62**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**199**		**35**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**66**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**68**		**18**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**78**		**5**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**69**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**82**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**22**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**63**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**69**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**65**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**105**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**119**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	222		44		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

12:15 to 13:15	336		85		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

12:30 to 13:30	426		215		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:45 to 13:45	432		232		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:00 to 14:00	466		234		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:15 to 14:15	326		221		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:30 to 14:30	315		176		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	226		120		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

14:00 to 15:00	205		54		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

14:15 to 15:15	206		26		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

14:30 to 15:30	65		20		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

14:45 to 15:45	91		15		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:00 to 16:00	102		10		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:15 to 16:15	102		9		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**55**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**62**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**19**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**21**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

3: Shirk Rd & Tulare Ave

Intersection Information

Major Street Name:	Shirk Rd
Major Street Direction:	NB/SB
Minor Street Direction:	EB/WB

WARRANT 1 MET? **No**

Details:

Condition A Met?	No	0 Hours met (8 required)
Condition B Met?	No	0 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**29**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**41**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**46**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**54**		**225**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	**63**		**290**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:00 to 08:00	**64**		**326**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:15 to 08:15	**69**		**312**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:30 to 08:30	**63**		**216**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:45 to 08:45	**59**		**146**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:00 to 09:00	**62**		**86**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:15 to 09:15	**52**		**49**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:30 to 09:30	**48**		**38**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**43**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**35**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**33**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**32**		**28**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**32**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**35**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**36**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**43**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**42**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**45**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**49**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**51**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**53**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	**49**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:15 to 13:15	**53**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:30 to 13:30	**47**		**128**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:45 to 13:45	**54**		**187**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:00 to 14:00	**58**		**234**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:15 to 14:15	**56**		**221**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:30 to 14:30	**60**		**176**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:45 to 14:45	**58**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**61**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**69**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**76**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

4: Roeben St & Tulare Ave

Intersection Information

Major Street Name:	Tulare Ave
Major Street Direction:	EB/WB
Minor Street Direction:	NB/SB

WARRANT 1 MET? No

Details:

Condition A Met?	No	0 Hours met (8 required)
Condition B Met?	No	0 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**29**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**41**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:15 to 07:15	**46**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:30 to 07:30	**54**				No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

06:45 to 07:45	**63**		**290**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:00 to 08:00	**64**		**326**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:15 to 08:15	**69**		**312**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:30 to 08:30	**63**		**216**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:45 to 08:45	**59**		**146**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:00 to 09:00	**62**		**86**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:15 to 09:15	**52**		**49**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:30 to 09:30	**48**		**38**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**43**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**35**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**33**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**32**		**28**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**32**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**35**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**36**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**43**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**42**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**45**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**49**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**51**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**53**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	**49**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:15 to 13:15	**53**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:30 to 13:30	**47**		**128**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:45 to 13:45	**54**		**187**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:00 to 14:00	**58**		**234**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:15 to 14:15	**56**		**221**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:30 to 14:30	**60**		**176**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

13:45 to 14:45	**58**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**61**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**69**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**76**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

5: Shirk St & Walnut Ave

Intersection Information

Major Street Name:	Shirk Rd
Major Street Direction:	NB/SB
Minor Street Direction:	WB/WB

WARRANT 1 MET? Yes

Details:

Condition A Met?	Yes	8 Hours met (8 required)
Condition B Met?	Yes	9 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**56**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**82**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**156**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**312**		**225**		No	No	Yes	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	362		125		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:00 to 08:00	382		156		Yes	No	Yes	No
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

07:15 to 08:15	432		178		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:30 to 08:30	452		210		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

07:45 to 08:45	421		192		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:00 to 09:00	422		178		Yes	No	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

08:15 to 09:15	285		152		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

08:30 to 09:30	**355**		**53**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**386**		**62**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**103**		**37**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**64**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**82**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**95**		**18**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**86**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**82**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**71**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**63**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**61**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**71**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**118**		**33**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**210**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	225		44		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

12:15 to 13:15	386		85		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

12:30 to 13:30	526		117		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

12:45 to 13:45	532		185		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:00 to 14:00	565		234		Yes	Yes	Yes	Yes
Condition A	Volume >= 70% column (350)?	Yes	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	Yes	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	Yes	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	Yes	**Volume >= 56% column (42)?**	Yes				

13:15 to 14:15	342		221		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:30 to 14:30	215		176		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	**256**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**215**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**189**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**201**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

Warrant 1: Eight-hour Vehicular Volume

6: Roeben St & Walnut Ave

Intersection Information

Major Street Name:	Walnut Ave
Major Street Direction:	EB/WB
Minor Street Direction:	NB/SB

WARRANT 1 MET? **No**

Details:

Condition A Met?	No	0 Hours met (8 required)
Condition B Met?	No	0 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)		High Volume Minor Approach Vehicles		70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
					Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
00:00 to 01:00	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
00:15 to 01:15	**1**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
01:30 to 02:30	**4**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
02:00 to 03:00	**3**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

02:15 to 03:15	**2**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:30 to 04:30	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
03:45 to 04:45	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:00 to 05:00	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:15 to 05:15	**9**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:30 to 05:30	**16**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
04:45 to 05:45	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

05:00 to 06:00	**21**		**2**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:15 to 06:15	**29**		**6**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:30 to 06:30	**29**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
05:45 to 06:45	**29**		**34**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
06:00 to 07:00	**41**		**70**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:15 to 07:15	**46**		**121**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
06:30 to 07:30	**54**		**225**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

06:45 to 07:45	**80**		**52**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:00 to 08:00	**64**		**41**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:15 to 08:15	**69**		**31**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:30 to 08:30	**63**		**21**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
07:45 to 08:45	**59**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:00 to 09:00	**62**		**8**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
08:15 to 09:15	**52**		**19**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:30 to 09:30	**48**		**38**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

08:45 to 09:45	**43**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:00 to 10:00	**35**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:15 to 10:15	**33**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:30 to 10:30	**32**		**28**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

09:45 to 10:45	**32**		**27**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:00 to 11:00	**35**		**29**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

10:15 to 11:15	**36**		**24**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:30 to 11:30	**43**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
10:45 to 11:45	**42**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:00 to 12:00	**45**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:15 to 12:15	**49**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:30 to 12:30	**51**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
11:45 to 12:45	**53**		**25**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

12:00 to 13:00	**49**		**44**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
12:15 to 13:15	**53**		**85**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
12:30 to 13:30	**128**		**42**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
12:45 to 13:45	**182**		**51**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
13:00 to 14:00	**234**		**42**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
13:15 to 14:15	**221**		**56**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
13:30 to 14:30	**176**		**43**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				

13:45 to 14:45	**58**		**120**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	Yes				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	Yes				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:00 to 15:00	**61**		**54**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	Yes				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	Yes				
14:15 to 15:15	**69**		**26**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:30 to 15:30	**76**		**20**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
14:45 to 15:45	**91**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:00 to 16:00	**102**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
15:15 to 16:15	**102**		**9**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:30 to 16:30	**105**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

15:45 to 16:45	**91**		**13**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:00 to 17:00	**88**		**14**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:15 to 17:15	**84**		**17**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:30 to 17:30	**82**		**16**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

16:45 to 17:45	**83**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:00 to 18:00	**72**		**15**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

17:15 to 18:15	**68**		**10**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:30 to 18:30	**61**		**7**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
17:45 to 18:45	**51**		**3**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:00 to 19:00	**46**		**1**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:15 to 19:15	**43**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:30 to 19:30	**38**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
18:45 to 19:45	**33**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

19:00 to 20:00	**28**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:15 to 20:15	**24**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:30 to 20:30	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
19:45 to 20:45	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:00 to 21:00	**26**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:15 to 21:15	**21**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				
20:30 to 21:30	**18**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

20:45 to 21:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:00 to 22:00	**11**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:15 to 22:15	**12**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

21:30 to 22:30	**14**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

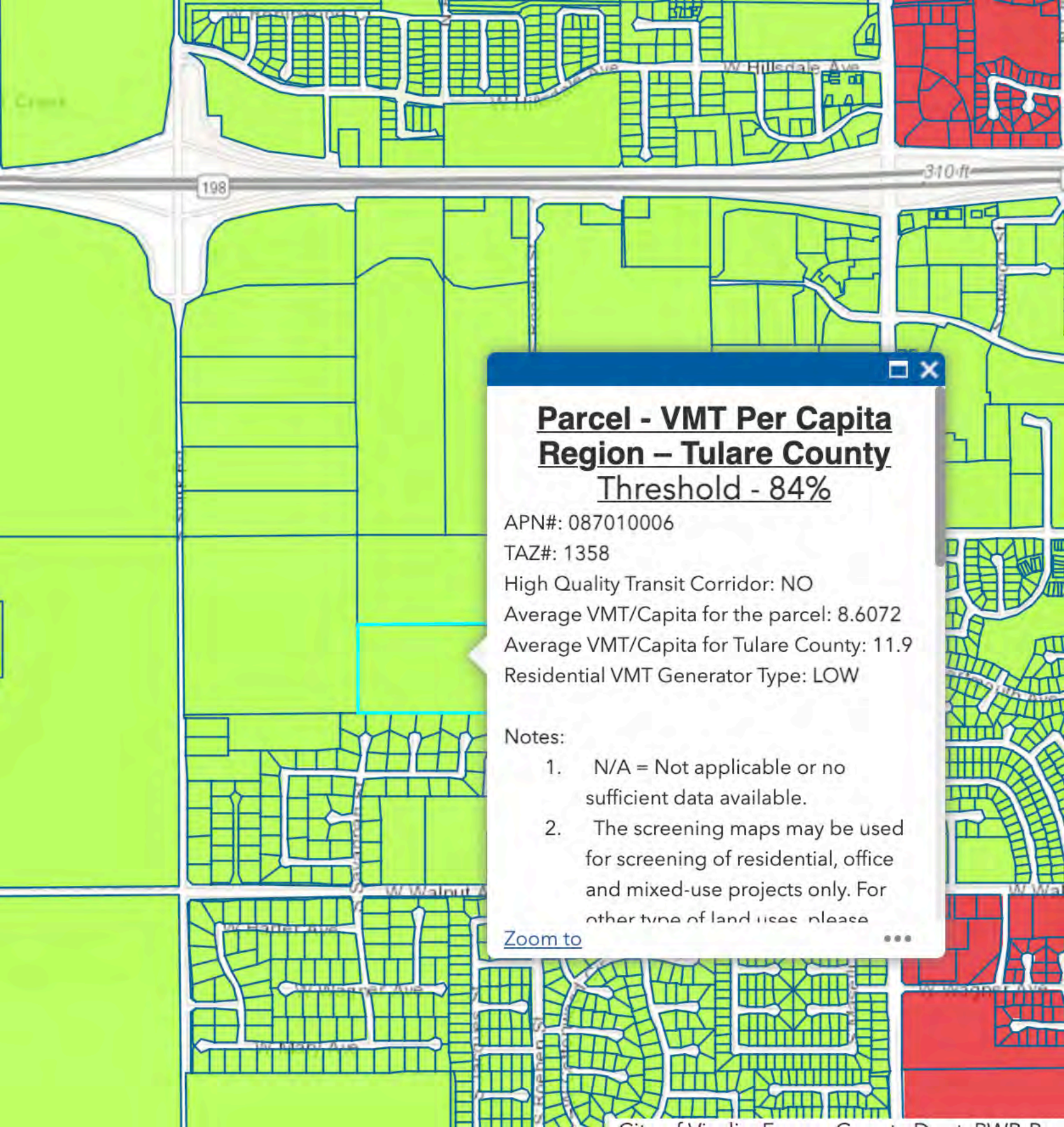
21:45 to 22:45	**13**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

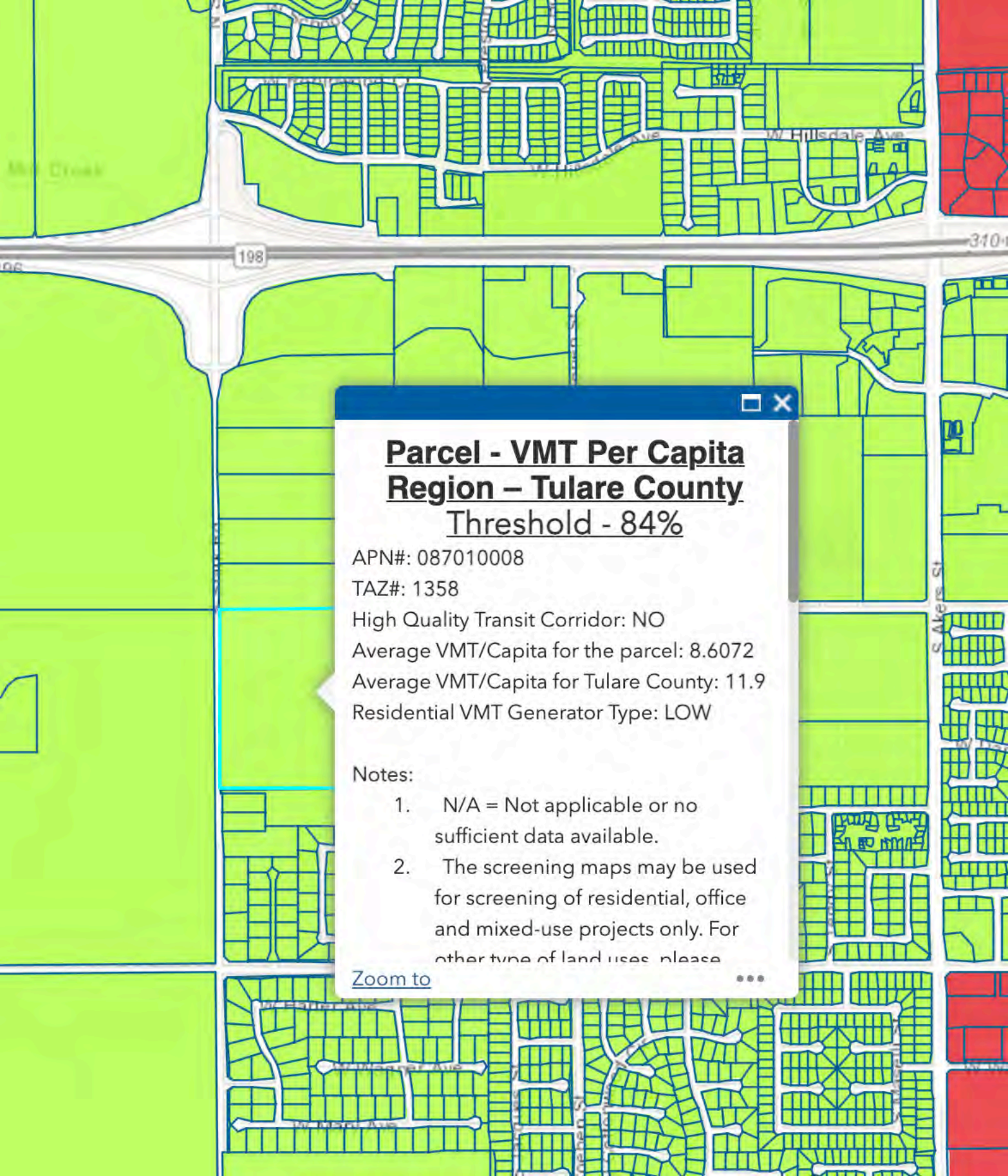
22:00 to 23:00	**9**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:15 to 23:15	**7**		**0**		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

22:30 to 23:30	2		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				

23:45 to 00:45	4		0		No	No	No	No
Condition A	Volume >= 70% column (350)?	No	Volume >= 70% column (525)?	No				
	Volume >= 56% column (280)?	No	Volume >= 56% column (420)?	No				
Condition B	**Volume >= 70% column (525)?**	No	**Volume >= 70% column (53)?**	No				
	Volume >= 56% column (420)?	No	**Volume >= 56% column (42)?**	No				


198
310 ft
W Hillsdale Ave
W Walnut Ave
Parcel - VMT Per Capita
Region – Tulare County
Threshold - 84%
APN#: 087010006
TAZ#: 1358
High Quality Transit Corridor: NO
Average VMT/Capita for the parcel: 8.6072
Average VMT/Capita for Tulare County: 11.9
Residential VMT Generator Type: LOW
Notes:
1. N/A = Not applicable or no sufficient data available.
2. The screening maps may be used for screening of residential, office and mixed-use projects only. For
Zoom to



Parcel - VMT Per Capita Region – Tulare County

Threshold - 84%

APN#: 087010008

TAZ#: 1358

High Quality Transit Corridor: NO

Average VMT/Capita for the parcel: 8.6072

Average VMT/Capita for Tulare County: 11.9

Residential VMT Generator Type: LOW

Notes:

1. N/A = Not applicable or no sufficient data available.
2. The screening maps may be used for screening of residential, office and mixed-use projects only. For other type of land uses, please

Metro Traffic Data Inc.
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Turning Movement Report

Prepared For:
Ruettgers & Schuler Civil Engineers
1800 30th St, Ste 260
Bakersfield, CA 93301

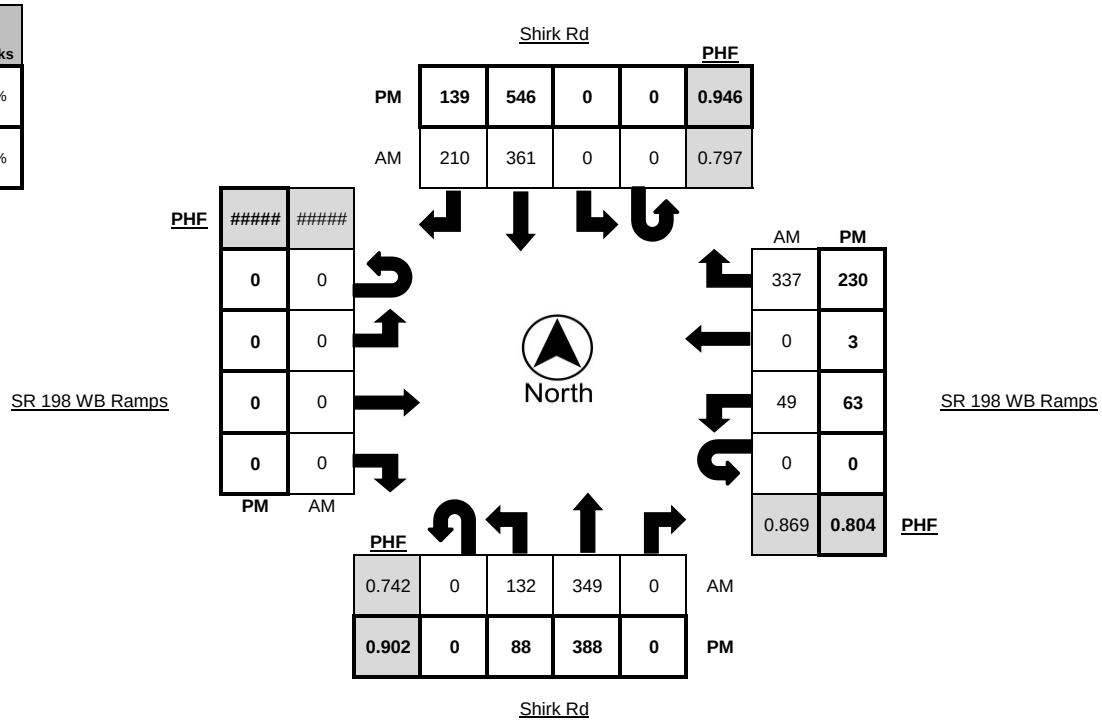
LOCATION Rd 92 @ SR 198 WB Ramps
LATITUDE 36.3281
COUNTY Tulare
LONGITUDE -119.3677
COLLECTION DATE Thursday, November 02, 2023
WEATHER Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
6:00 AM - 6:15 AM	0	18	33	0	4	0	0	37	27	3	0	0	0	0	0	0	4	0	45	1
6:15 AM - 6:30 AM	0	17	35	0	1	0	0	32	25	7	0	0	0	0	0	0	6	0	48	1
6:30 AM - 6:45 AM	0	27	50	0	1	0	0	35	40	4	0	0	0	0	0	0	8	1	49	3
6:45 AM - 7:00 AM	0	29	75	0	3	0	0	51	31	4	0	0	0	0	0	0	10	0	85	3
7:00 AM - 7:15 AM	0	23	62	0	5	0	0	68	39	3	0	0	0	0	0	0	8	0	70	5
7:15 AM - 7:30 AM	0	32	79	0	2	0	0	68	53	4	0	0	0	0	0	0	12	0	85	0
7:30 AM - 7:45 AM	0	41	82	0	5	0	0	108	56	10	0	0	0	0	0	0	12	0	88	2
7:45 AM - 8:00 AM	0	36	126	0	4	0	0	117	62	11	0	0	0	0	0	0	17	0	94	3
TOTAL	**0**	**223**	**542**	**0**	**25**	**0**	**0**	**516**	**333**	**46**	**0**	**0**	**0**	**0**	**0**	**0**	**77**	**1**	**564**	**18**

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
4:00 PM - 4:15 PM	0	16	91	0	2	0	0	129	32	4	0	0	0	0	0	0	14	2	60	2
4:15 PM - 4:30 PM	0	24	85	0	8	0	0	126	33	4	0	0	0	0	0	0	15	0	69	0
4:30 PM - 4:45 PM	0	15	96	0	8	0	0	142	30	4	0	0	0	0	0	0	20	0	50	2
4:45 PM - 5:00 PM	0	23	101	0	2	0	0	134	39	2	0	0	0	0	0	0	11	2	37	4
5:00 PM - 5:15 PM	0	26	106	0	4	0	0	144	37	3	0	0	0	0	0	0	17	1	74	3
5:15 PM - 5:30 PM	0	19	101	0	2	0	0	129	36	3	0	0	0	0	0	0	13	1	44	0
5:30 PM - 5:45 PM	0	16	93	0	2	0	0	131	28	0	0	0	0	0	0	0	9	2	56	3
5:45 PM - 6:00 PM	0	16	82	0	4	0	0	92	27	2	0	0	0	0	0	0	4	1	41	0
TOTAL	**0**	**155**	**755**	**0**	**32**	**0**	**0**	**1027**	**262**	**22**	**0**	**0**	**0**	**0**	**0**	**0**	**103**	**9**	**431**	**14**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:00 AM - 8:00 AM	0	132	349	0	16	0	0	361	210	28	0	0	0	0	0	0	49	0	337	10
4:15 PM - 5:15 PM	0	88	388	0	22	0	0	546	139	13	0	0	0	0	0	0	63	3	230	9

	PHF	Trucks
AM	0.795	3.8%
PM	0.899	3.0%



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Turning Movement Report

Prepared For:
Ruettgers & Schuler Civil Engineers
1800 30th St, Ste 260
Bakersfield, CA 93301

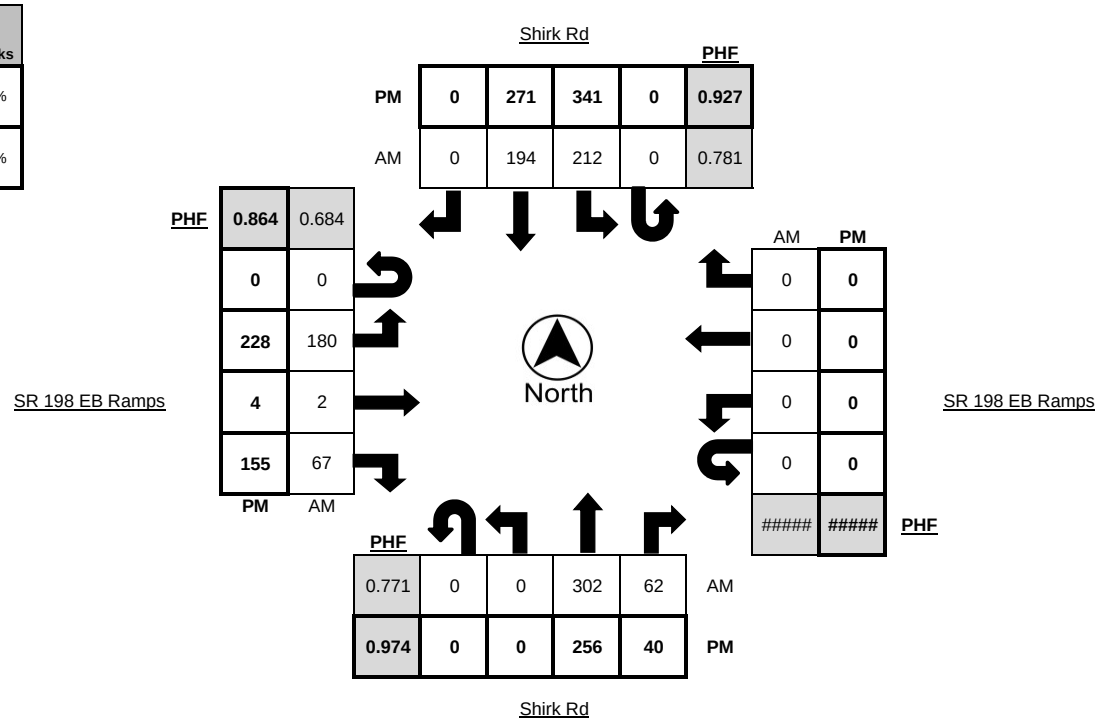
LOCATION Rd 92 @ SR 198 EB Ramps
LATITUDE 36.3265
COUNTY Tulare
LONGITUDE -119.3677
COLLECTION DATE Thursday, November 02, 2023
WEATHER Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
6:00 AM - 6:15 AM	0	0	37	5	0	0	18	21	0	1	0	15	0	3	3	0	0	0	0	0
6:15 AM - 6:30 AM	0	0	33	7	0	0	26	14	0	2	0	18	0	2	1	0	0	0	0	0
6:30 AM - 6:45 AM	0	0	48	4	0	0	20	23	0	1	0	27	1	7	2	0	0	0	0	0
6:45 AM - 7:00 AM	0	0	69	5	1	0	29	32	0	3	0	36	0	6	3	0	0	0	0	0
7:00 AM - 7:15 AM	0	0	48	7	0	0	42	34	0	4	0	38	1	12	4	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	74	10	1	0	36	45	0	3	0	33	0	13	3	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	85	22	1	0	62	57	0	6	0	40	1	20	5	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	95	23	0	0	72	58	0	6	0	69	0	22	4	0	0	0	0	0
TOTAL	**0**	**0**	**489**	**83**	**3**	**0**	**305**	**284**	**0**	**26**	**0**	**276**	**3**	**85**	**25**	**0**	**0**	**0**	**0**	**0**

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
4:00 PM - 4:15 PM	0	0	52	4	1	0	89	53	0	4	0	55	0	38	2	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	59	11	3	0	78	66	0	0	0	53	0	34	5	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	65	8	3	0	86	74	0	2	0	45	1	38	6	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	65	11	1	0	84	62	0	1	0	56	2	37	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	64	10	3	0	93	72	0	2	0	69	0	43	1	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	62	11	1	0	78	63	0	1	0	58	1	37	1	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	59	16	2	0	88	50	0	0	0	47	0	31	1	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	50	9	1	0	52	48	0	1	0	52	1	28	2	0	0	0	0	0
TOTAL	**0**	**0**	**476**	**80**	**15**	**0**	**648**	**488**	**0**	**11**	**0**	**435**	**5**	**286**	**18**	**0**	**0**	**0**	**0**	**0**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:00 AM - 8:00 AM	0	0	302	62	2	0	212	194	0	19	0	180	2	67	16	0	0	0	0	0
4:30 PM - 5:30 PM	0	0	256	40	8	0	341	271	0	6	0	228	4	155	8	0	0	0	0	0

	PHF	Trucks
AM	0.751	3.6%
PM	0.922	1.7%



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Turning Movement Report

Prepared For:
Ruettgers & Schuler Civil Engineers
1800 30th St, Ste 260
Bakersfield, CA 93301

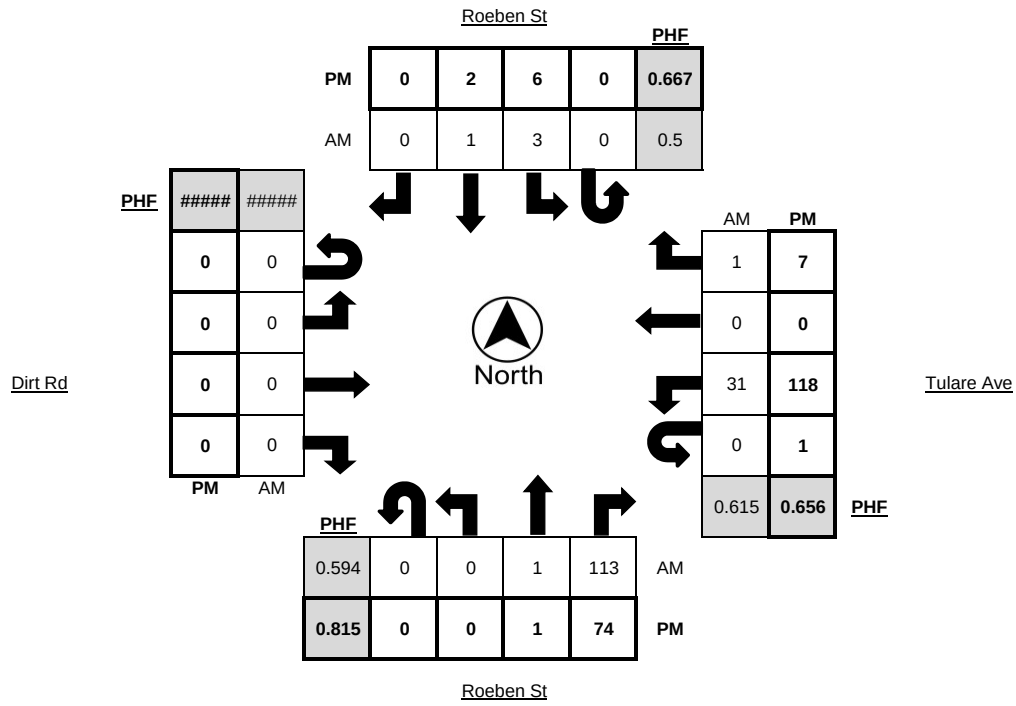
LOCATION Roeben St @ Tulare Ave
LATITUDE 36.3200
COUNTY Tulare
LONGITUDE -119.3586
COLLECTION DATE Thursday, November 02, 2023
WEATHER Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
6:00 AM - 6:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0
6:15 AM - 6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM - 6:45 AM	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
6:45 AM - 7:00 AM	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0
7:00 AM - 7:15 AM	0	0	0	18	0	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0
7:15 AM - 7:30 AM	0	0	0	16	1	0	0	0	0	0	0	0	0	0	0	0	5	0	1	1
7:30 AM - 7:45 AM	0	0	0	32	0	0	2	0	0	1	0	0	0	0	0	0	10	0	0	0
7:45 AM - 8:00 AM	0	0	1	47	1	0	1	0	0	1	0	0	0	0	0	0	13	0	0	1
TOTAL	**0**	**0**	**2**	**134**	**2**	**0**	**3**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**48**	**0**	**1**	**2**

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
4:00 PM - 4:15 PM	0	0	1	18	0	0	0	3	0	0	0	0	0	0	0	0	22	0	0	0
4:15 PM - 4:30 PM	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	1
4:30 PM - 4:45 PM	0	0	0	17	0	0	2	2	0	0	0	0	0	0	0	0	21	0	2	0
4:45 PM - 5:00 PM	0	0	2	13	0	0	1	0	0	0	0	0	0	0	0	0	19	0	2	0
5:00 PM - 5:15 PM	0	0	0	8	0	0	2	1	0	0	0	0	0	0	0	0	45	0	3	1
5:15 PM - 5:30 PM	0	0	0	23	0	0	2	1	0	0	0	0	0	0	0	0	23	0	2	0
5:30 PM - 5:45 PM	0	0	1	22	0	0	0	0	0	0	0	0	0	0	0	0	23	0	2	0
5:45 PM - 6:00 PM	0	0	0	21	0	0	2	0	0	0	0	0	0	0	0	1	27	0	0	0
TOTAL	**0**	**0**	**4**	**136**	**0**	**0**	**9**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**206**	**0**	**11**	**2**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:00 AM - 8:00 AM	0	0	1	113	2	0	3	1	0	2	0	0	0	0	0	0	31	0	1	2
5:00 PM - 6:00 PM	0	0	1	74	0	0	6	2	0	0	0	0	0	0	0	1	118	0	7	1

	PHF	Trucks
AM	0.605	4.0%
PM	0.886	0.5%



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Prepared For:
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Bakersfield, CA 93301

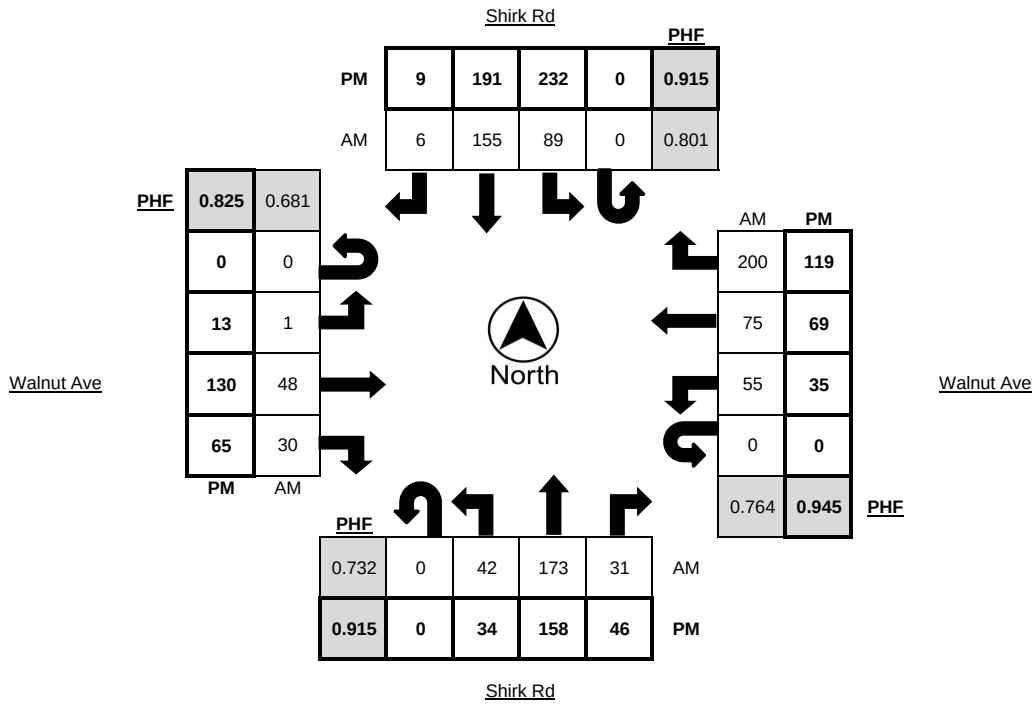
LOCATION Rd 92 @ Walnut Ave
LATITUDE 36.3127
COUNTY Tulare
LONGITUDE -119.3675
COLLECTION DATE Thursday, November 02, 2023
WEATHER Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
6:00 AM - 6:15 AM	0	3	18	0	1	0	3	17	0	1	0	0	3	0	0	0	2	8	26	0
6:15 AM - 6:30 AM	0	0	14	4	0	0	3	14	0	1	0	2	2	0	0	0	15	7	24	0
6:30 AM - 6:45 AM	0	5	25	0	0	0	4	18	2	2	0	0	2	2	1	0	8	22	29	0
6:45 AM - 7:00 AM	0	8	41	2	1	0	9	32	1	1	0	0	3	6	0	0	10	17	34	0
7:00 AM - 7:15 AM	0	7	29	8	1	0	13	28	1	1	0	0	11	4	0	0	5	11	33	0
7:15 AM - 7:30 AM	0	10	28	6	0	0	19	34	0	1	0	1	9	5	0	0	15	15	48	0
7:30 AM - 7:45 AM	0	20	49	5	1	0	31	45	2	1	0	0	9	11	0	0	16	26	66	0
7:45 AM - 8:00 AM	0	5	67	12	0	0	26	48	3	1	0	0	19	10	0	0	19	23	53	1
TOTAL	**0**	**58**	**271**	**37**	**4**	**0**	**108**	**236**	**9**	**9**	**0**	**3**	**58**	**38**	**1**	**0**	**90**	**129**	**313**	**1**

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
4:00 PM - 4:15 PM	0	8	36	5	0	0	44	43	3	2	0	2	27	17	0	0	13	15	22	1
4:15 PM - 4:30 PM	0	8	45	10	1	0	48	48	1	0	0	3	24	13	0	0	6	13	25	2
4:30 PM - 4:45 PM	0	9	37	12	4	0	67	49	2	1	0	1	23	22	1	0	7	20	31	1
4:45 PM - 5:00 PM	0	13	41	11	0	0	54	43	3	1	0	4	34	9	0	0	9	14	32	1
5:00 PM - 5:15 PM	0	6	37	13	1	0	56	47	3	2	0	5	39	19	0	0	9	17	33	1
5:15 PM - 5:30 PM	0	6	43	10	1	0	55	52	1	0	0	3	34	15	2	0	10	18	23	3
5:30 PM - 5:45 PM	0	8	48	15	0	0	40	37	4	0	0	0	27	11	0	0	11	17	30	0
5:45 PM - 6:00 PM	0	11	31	10	0	0	40	36	1	1	0	2	24	9	1	0	3	12	26	0
TOTAL	**0**	**69**	**318**	**86**	**7**	**0**	**404**	**355**	**18**	**7**	**0**	**20**	**232**	**115**	**4**	**0**	**68**	**126**	**222**	**9**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:00 AM - 8:00 AM	0	42	173	31	2	0	89	155	6	4	0	1	48	30	0	0	55	75	200	1
4:30 PM - 5:30 PM	0	34	158	46	6	0	232	191	9	4	0	13	130	65	3	0	35	69	119	6

	PHF	Trucks
AM	0.794	0.8%
PM	0.969	1.7%



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Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

Turning Movement Report

Prepared For:
Ruettgers & Schuler Civil Engineers
1800 30th St, Ste 260
Bakersfield, CA 93301

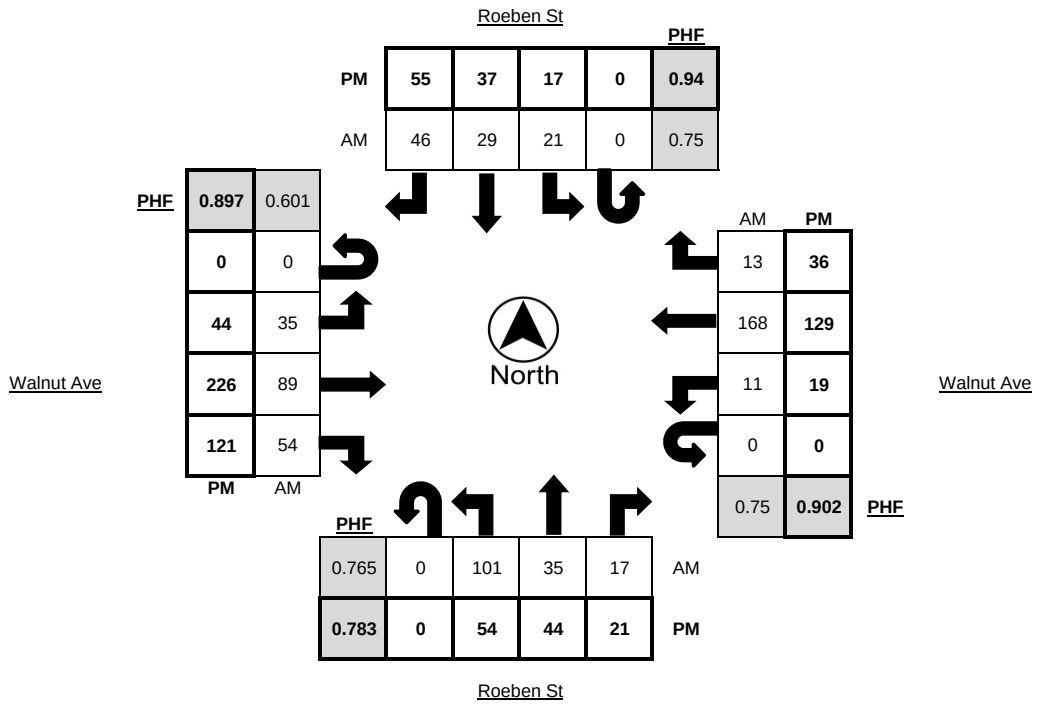
LOCATION Roeben St @ Walnut Ave
LATITUDE 36.3127
COUNTY Tulare
LONGITUDE -119.3586
COLLECTION DATE Thursday, November 02, 2023
WEATHER Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
6:00 AM - 6:15 AM	0	14	0	0	0	0	0	2	0	0	0	1	6	1	0	0	1	15	1	0
6:15 AM - 6:30 AM	0	14	1	2	0	0	1	2	4	0	0	3	6	5	0	0	0	17	0	0
6:30 AM - 6:45 AM	0	19	3	1	0	0	3	3	9	0	0	0	4	5	0	0	2	35	3	0
6:45 AM - 7:00 AM	0	19	7	1	0	0	1	4	14	0	0	6	3	3	0	0	1	28	2	0
7:00 AM - 7:15 AM	0	15	4	2	0	0	4	7	10	0	0	6	16	9	0	0	3	21	2	0
7:15 AM - 7:30 AM	0	23	7	3	0	0	4	9	9	0	0	4	16	13	0	0	1	42	0	0
7:30 AM - 7:45 AM	0	33	10	6	0	0	10	7	15	1	0	4	21	15	0	0	3	57	4	3
7:45 AM - 8:00 AM	0	30	14	6	0	0	3	6	12	1	0	21	36	17	1	0	4	48	7	0
TOTAL	**0**	**167**	**46**	**21**	**0**	**0**	**26**	**40**	**73**	**2**	**0**	**45**	**108**	**68**	**1**	**0**	**15**	**263**	**19**	**3**

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
4:00 PM - 4:15 PM	0	6	7	2	1	0	11	9	11	0	0	12	43	17	2	0	6	40	11	0
4:15 PM - 4:30 PM	0	14	8	3	1	0	2	14	12	1	0	7	56	20	1	0	4	24	9	1
4:30 PM - 4:45 PM	0	13	7	4	0	0	6	8	13	0	0	13	53	29	1	0	3	30	2	1
4:45 PM - 5:00 PM	0	14	7	2	1	0	3	8	14	0	0	14	57	30	0	0	5	26	10	0
5:00 PM - 5:15 PM	0	24	12	2	1	0	4	8	17	0	0	10	66	27	0	0	4	38	8	0
5:15 PM - 5:30 PM	0	11	12	4	1	0	5	10	11	1	0	10	65	34	1	0	3	30	9	1
5:30 PM - 5:45 PM	0	5	13	13	0	0	5	11	13	0	0	10	38	30	0	0	7	35	9	0
5:45 PM - 6:00 PM	0	14	8	4	0	0	5	14	9	0	0	11	39	23	0	0	5	19	10	0
TOTAL	**0**	**101**	**74**	**34**	**5**	**0**	**41**	**82**	**100**	**2**	**0**	**87**	**417**	**210**	**5**	**0**	**37**	**242**	**68**	**3**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:00 AM - 8:00 AM	0	101	35	17	0	0	21	29	46	2	0	35	89	54	1	0	11	168	13	3
4:45 PM - 5:45 PM	0	54	44	21	3	0	17	37	55	1	0	44	226	121	1	0	19	129	36	1

	PHF	Trucks
AM	0.759	1.0%
PM	0.913	0.7%



Traffic Accident Surveillance and Analysis System (TASAS)
Collision Data Summary

The data provided is protected by 23 U.S.C. § 407, and shall not be subject to discovery, nor admitted as evidence in any applicable legal proceeding against the State of California. By allowing the release of this information, the State of California, Department of Transportation does not waive any rights it has under 23 U.S.C. § 407.

SR 198 PM 05.500 to PM 06.100

Table 1 summarizes collision rates for the SR 198 freeway ramps at Shirk Road interchange in the County of Tulare. The Table B reports were generated on April 17, 2024, and they depict existing collision rates per million vehicles for the most recent 36-month period from July 1, 2020, to June 30, 2023, from the Traffic Accident Surveillance and Analysis System (TASAS).

Table 1
TASAS Table B Collision Rates

06-Tul-198 PM 5.50/6.10	TOTAL No. of Collisions	ACTUAL (per million vehicles)			AVERAGE (per million vehicles)		
		Fatal Collisions	Fatal + Injury Collisions	Total (1)	Fatal Collisions	Fatal + Injury Collisions	Total (1)
PM 005.590 WB On From Shirk Road	0	0.000	0.00	0.00	0.002	0.23	0.63
PM 005.601 EB Off to Shirk Road	2	0.00	0.00	0.68	0.003	0.38	1.04
PM 005.901 EB On From Shirk Road	0	0.00	0.00	0.00	0.002	0.23	0.63
PM 005.965 WB Off to Shirk Road	0	0.00	0.00	0.00	0.003	0.38	1.04

(1) All reported collisions (includes Property Damage Only (PDO) Collisions)

Analysis of the TASAS Table B records shows 2 collisions within the EB off-ramp to Shirk Road and study periods summarized above. It reflects that the actual Fatal, Fatal + Injury, and Total collision rates are below the average for similar facilities statewide.

Detailed analysis per the TASAS Table B shows that the primary collision factors in the segment were:

- "Speeding" (2)

The types of collisions included:

- “Hit Object” (1), and
- “Rear End” (1)

The object hit in the “Hit Object” collision was reported as a dike or curb.

End of summary.
ER/CW

PM Peak Hour Traffic Analysis

Street	2023		2023+Project Two-Way LOS		2028		2028+Project Two-Way LOS		2033 Two-Way LOS		2033+Project Two-Way LOS	
	VOL	LOS	VOL	LOS	VOL	LOS	VOL	LOS	VOL	LOS	VOL	LOS
Shirk St: Tulare Ave to Walnut Ave	722	C	753	C	854	C	870	C	1022	C	1054	C
Walnut Ave: Shirk St to Roeben St	-	C	-	C	159	C	184	C	205	C	250	C

AM Peak Hour Traffic Analysis

Street	2023		2023+Project Two-Way LOS		2028		2028+Project Two-Way LOS		2033 Two-Way LOS		2033+Project Two-Way LOS	
	VOL	LOS	VOL	LOS	VOL	LOS	VOL	LOS	VOL	LOS	VOL	LOS
Shirk St: Tulare Ave to Walnut Ave	624	C	648	C	733	C	749	C	870	C	879	C
Walnut Ave: Shirk St to Roeben St	-	C	-	C	150	C	166	C	207	C	234	C

Appendix E

Agricultural Mitigation Memo

ELLIOT PROPERTY

Agricultural Mitigation Memo

MITIGATION

Mitigation Measure AG-1: Following *Visalia Municipal Code Chapter 18.04: Agricultural Land Preservation Program,* the developer will acquire a minimum of 43.11 acres of Prime Farmland or Farmland of Statewide Importance. This land will be located in the southern San Joaquin Valley, but outside of Visalia's Sphere of Influence. This farmland will be preserved for long-term agricultural uses.

California Farmland Mapping and Monitoring Program (FMMP)

The FMMP is implemented by the California Department of Conservation (DOC) to conserve and protect agricultural lands within the State. Land is included in this program based on soil type, annual crop yields, and other factors that influence the quality of farmland. The FMMP mapping categories for the most important statewide farmland are as follows:

- *Prime Farmland* has the ideal physical and chemical composition for crop production. It has been used for irrigated production in the four years prior to classification and can produce sustained yields. 51% of the Visalia Planning Area is classified as Prime Farmland.
- *Farmland of Statewide Importance* has also been used for irrigated production in the four years prior to classification and is only slightly poorer quality than Prime Farmland. 11% of the Visalia Planning Area is classified as Farmland of Statewide Importance.
- *Unique Farmland* has been cropped in the four years prior to classification and does not meet the criteria for Prime Farmland or Farmland of Statewide Importance but has produced specific crops with high economic value. Less than 1% of the Visalia Planning Area is classified as Unique Farmland.
- *Farmland of Local Importance* encompasses farmland that does not meet the criteria for the previous three categories. These may lack irrigation, produce major crops, be zoned as agricultural, and/or support dairy. 2% of the Visalia Planning Area is classified as Farmland of Local Importance.

Visalia Municipal Code Chapter 18.04: Agricultural Land Preservation Program

Chapter 18.04 of the Visalia Municipal Code details the Agricultural Land Preservation Program (Program) in Visalia. The agricultural land preservation program intends to establish a process for the required preservation of agricultural land through the acquisition of agricultural conservation easements or the payment of an in-lieu fee for projects.

Easement Acquisition: The applicant shall convey, or arrange for the conveyance of, an area of land meeting its preserved land obligation to a qualified entity for execution of an agricultural conservation easement thereon. This shall include the conveyance of land within an agricultural land mitigation bank.

Determination of Preserved Land Obligation: The preserved land obligation shall be calculated at a ratio of one acre of preserved land for each acre of converted land. Converted land acreage shall be calculated by determining the applicable project acreage less the acreage of exclusions.

All projects authorized by the City that would result in the conversion of prime farmland or farmland of statewide importance are subject to the provisions detailed in the Program. Projects can be exempt or excluded from the Program due to:

1. *Location.* Projects, or portions thereof, located on lands that are not within the Tier II Urban Development Boundary or the Tier III Urban Growth Boundary.
2. *Size.* Projects of five acres or less in gross area. The City may disallow the use of this exemption if it finds that the subject property has been subdivided into five-acre or smaller parcels in whole or in part to avoid the preserved land obligation in accordance with this chapter.
3. *Prior Compliance.* Projects on sites that have demonstrated compliance with the provisions of this chapter for affected acreage.

Projects consistent with any of the following criteria are not subject to the provisions of this chapter and shall be excluded from the preserved land obligation Such exclusions may comprise the entire project area or may be a portion of the project area acreage. Only such portions of the project area that falls within any of the following categories shall be excluded.

1. *Farmland Designation.* Acreage not designated as prime farmland or farmland of statewide importance on the most recent Farmland Mapping and Monitoring Program (FMMP) map published by the California Department of Conservation.
2. *Farmland Designation.* Acreage that may be designated as prime farmland or farmland of statewide importance on the most recent Farmland Mapping and Monitoring Program (FMMP) map published by the California Department of Conservation but meets at least one of the following standards.
    - Land Use. The land is not currently and has not been used for irrigated agricultural production for a minimum of four consecutive calendar years.
    - Soils. The soil type is not listed on the Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance for Tulare County, as maintained by the Department of Conservation for purposes of the FMMP.
3. *Project Type or Use.* The following projects are exempt from the Program:
    - Affordable housing projects that comply with State Density Bonus Law.
    - Agricultural processing uses.
    - Agricultural buffers.
    - Public facilities.
    - Roadways.

Eligibility of Land for Easement. The preserved land shall meet all the following requirements to be eligible for placement in an agricultural conservation easement:

1. The preserved land shall be in the southern San Joaquin Valley, with preference afforded to preserved land located within 10 miles of the City limits. The preserved land must be located outside any city's limits and sphere of influence.
2. The preserved land shall be designated as prime farmland or farmland of statewide importance on the most recently published FMMP map.
3. The preserved land shall be a minimum of 20 contiguous acres in size.
4. The preserved land shall be zoned and planned for agricultural uses consistent with the purposes of an agricultural conservation easement.
5. The preserved land shall have at least one verified source of water.
6. The preserved land shall not be encumbered by any use or structure that would be incompatible with the purpose of the agricultural conservation easement. Such uses shall be deducted from the total acreage being preserved.

Eligibility of In-Lieu Fee Payment. To be eligible for payment of an in-lieu fee to satisfy the preserved land obligation, either of the following standards must be met.

1. The total preserved land obligation is less than 20 acres.
2. If the total preserved land obligation is 20 acres or more, the applicant must demonstrate at least one of the following to the satisfaction of the City:
    a. No qualified entity exists;
    b. The applicant has met with all qualified entities and all such entities are unable or unwilling to assist with the acquisition of an agricultural conservation easement, as certified in writing to the City; or
    c. Working with a qualified entity, the applicant has made at least one good faith offer to purchase an agricultural conservation easement, but any and all such offers have been declined by the potential seller, as certified in writing to the City.

City of Visalia General Plan

The 2030 General Plan includes the policies related to agricultural resources that correlate to the proposed Project:

- *LU-P-14*: Recognize the importance of agriculture-related business to the City and region, and support the continuation and development of agriculture and agriculture related enterprises in and around Visalia by:
    - Implementing growth boundaries and cooperating with the County on agricultural preservation efforts;
    - Accommodating agriculture-related industries in industrial districts;
    - Facilitating successful farmers' markets;
    - Helping to promote locally grown and produced agricultural goods, and the image of Visalia and Tulare County as an agricultural region.
- *LU-P-19*: Ensure that growth occurs in a compact and concentric fashion by implementing the General Plan's phased growth strategy.

- *LU-P-21*: Allow annexation and development of residential, commercial, and industrial land to occur within the Tier II UDB and the Tier III Urban Growth Boundary consistent with the City's Land Use Diagram, according to the stated phasing thresholds.
- *LU-P-30*: Maintain greenbelts, or agricultural/open space buffer areas, between Visalia and other communities by implementing growth boundaries and working with Tulare County and land developers to prevent premature urban growth north of the St. Johns River and in other sensitive locations within the timeframe of this General Plan.
- *LU-P-31*: Promote the preservation of permanent agricultural open space around the City by protecting viable agricultural operations and land within the City limits in the airport and wastewater treatment plant environs.
- *LU-P-32*: Continue to maintain a 20-acre minimum for parcel map proposals in areas designated for Agriculture to encourage viable agricultural operations in the Planning Area.
- *OSC-P-27*: To allow efficient cultivation, pest control and harvesting methods; require buffer and transition areas between urban development and adjoining or nearby agricultural land.
- *OSC-P-28*: Require new development to implement measures, as appropriate, to minimize soil erosion related to grading, site preparation, landscaping, and construction.

Tulare County General Plan

The 2030 Tulare County General Plan contains following policies related to agricultural resources that correlate to the proposed project:

- *AG-1.1*: The County shall maintain agriculture as the primary land use in the valley region of the County, not only in recognition of the economic importance of agriculture, but also in terms of agriculture's real contribution to the conservation of open space and natural resources.
- *AG-1.6*: The County shall consider developing an Agricultural Conservation Easement Program (ACEP) to help protect and preserve agricultural lands (including "Important Farmlands"), as defined in this Element. This program may require payment of an in-lieu fee sufficient to purchase a farmland conservation easement, farmland deed restriction, or other farmland conservation mechanism as a condition of approval for conservation of important agricultural land to non-agricultural use. If available, the ACEP shall be used for replacement lands determined to be of statewide significance (Prime or other Important Farmlands), or sensitive and necessary for the preservation of agricultural land, including land that may be a part of a community separator as part of a comprehensive program to establish community separators. The in-lieu fee or other conservation mechanism shall recognize the importance of land value and shall require equivalent mitigation.
- *AG*-1.7: The County shall promote the preservation of its agricultural economic base and open space resources through the implementation of resource management programs such as the Williamson Act, Rural Valley Lands Plan, Foothill Growth Management Plan or similar types of strategies and the identification of growth boundaries for all urban areas located in the County.
- *AG-1.8*: The County shall not approve applications for preserves or regular Williamson Act contracts on lands located within a UDB and/or HDB unless it is demonstrated that the restriction of such land will not detrimentally affect the growth of the community involved for the succeeding 10 years, that the property in question has special public values for open space, conservation, other comparable uses, or that the contract is consistent with the publicly

desirable future use and control of the land in question. If proposed within a UDB of an incorporated city, the County shall give written notice to the affected city pursuant to Government Code §51233.

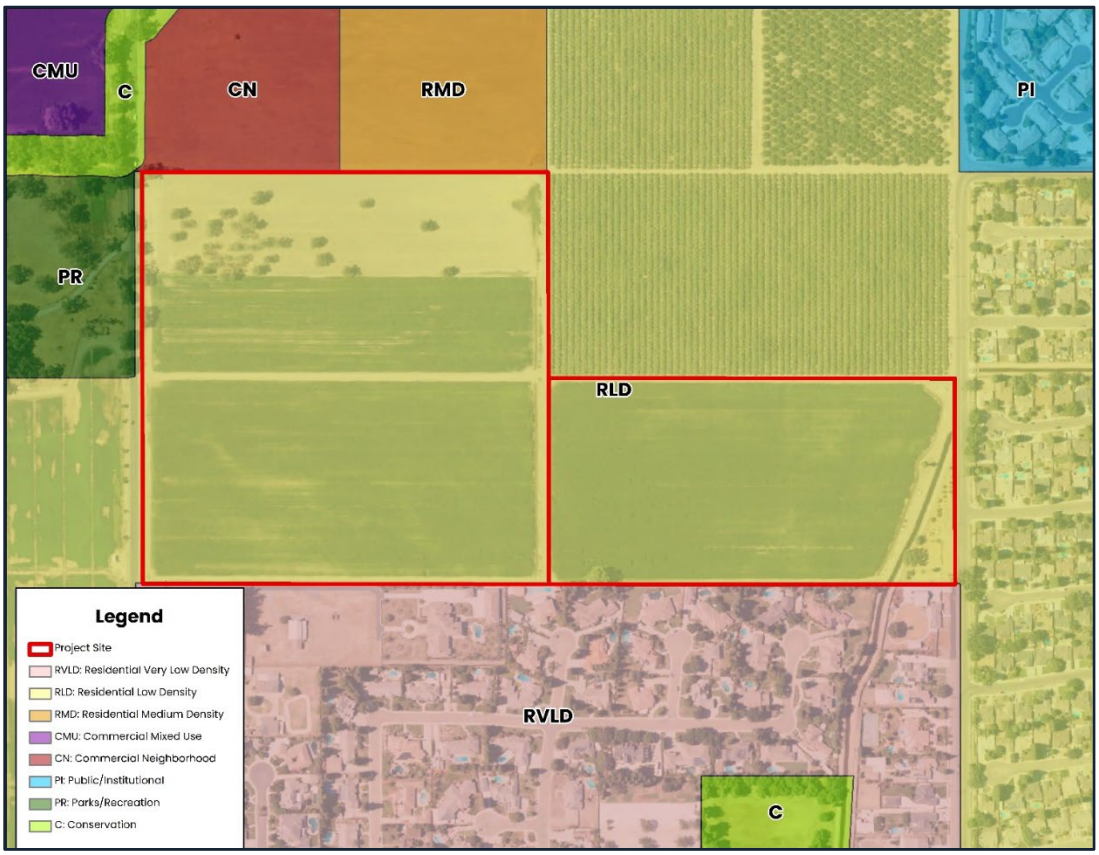
- *AG-1.10*: The County shall oppose extension of urban services, such as sewer lines, water lines, or other urban infrastructure, into areas designated for agriculture use unless necessary to resolve a public health situation. Where necessary to address a public health issue, services should be located in public rights-of-way in order to prevent interference with agricultural operations and to provide ease of access for operation and maintenance. Service capacity and length of lines should be designed to prevent the conversion of agricultural lands into urban/suburban uses.
- *AG-1.11*: The County shall examine the feasibility of employing agricultural buffers between agricultural and non-agricultural uses, and along the edges of UDBs and HDBs. Considering factors include the type of operation and chemicals used for spraying, building orientation, planting of trees for screening, location of existing and future rights-of-way (roads, railroads, canals, power lines, etc.), and unique site conditions.
- *LU-1.8*: The County shall encourage and provide incentives for infill development to occur in communities and hamlets within or adjacent to existing development in order to maximize the use of land within existing urban areas, minimize the conversion of existing agricultural land, and minimize environmental concerns associated with new development.
- *LU-2.1*: The County shall maintain agriculturally-designated areas for agriculture use by directing urban development away from valuable agricultural lands to cities, unincorporated communities, hamlets, and planned community areas where public facilities and infrastructure are available.
- *PF-1.2*: The County shall ensure that urban development only takes place in the following areas:
    - Within incorporated cities and CACUDBs
    - Within the UDBs of adjacent cities in other counties, unincorporated communities, planned community areas, and HDBs of hamlets
    - Within foothill development corridors as determined by procedures set forth in Foothill Growth Management Plan
    - Within areas set aside for urban use in the Mountain Framework Plan and the mountain sub-area plans; and
    - Within other areas suited for non-agricultural development, as determined by the procedures set forth in the Rural Valley Lands Plan.
- *PF-1.3*: The County shall encourage those types of urban land uses that benefit from urban services to develop within UDBs and HDBs. Permanent uses which do not benefit from urban services shall be discouraged within these areas. This shall not apply to agricultural or agricultural support uses, including the cultivation of land or other uses accessory to the cultivation of land provided that such accessory uses are time-limited through Special Use Permit procedures.
- *PF-1.4*: The County shall encourage urban development to locate in existing UDBs and HDBs where infrastructure is available or may be established in conjunction with development. The County shall ensure that development does not occur unless adequate infrastructure is available, that sufficient water supplies are available or can be made available, and that there are adequate provisions for long term management and maintenance of infrastructure and identified water supplies.

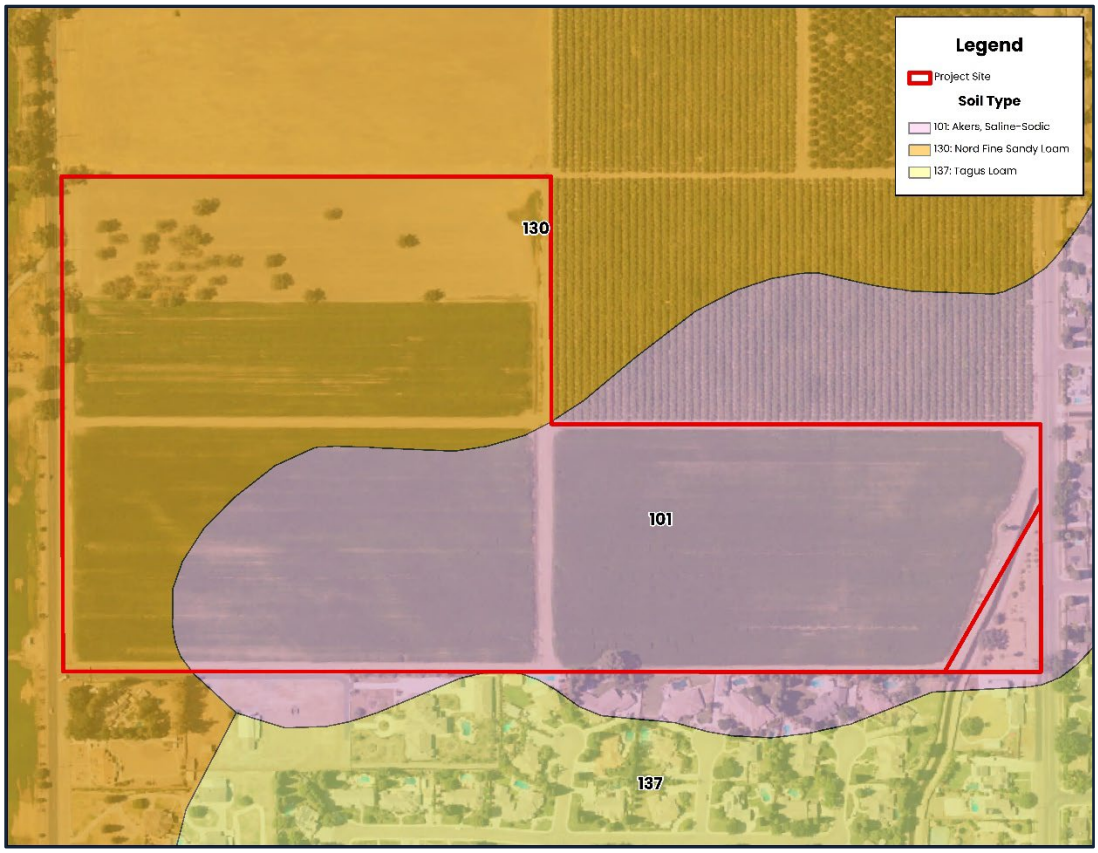
EXISTING FARMLAND

The proposed Project Site is located within the City of Visalia Planning Area in Tulare County. The Site is west of S Roeben Street, east of S Shirk Road, and south of Tulare Street. The Site is approximately 3.5 miles southwest of the Visalia downtown. The Project involves construction on APNs 087-010-006 and 087-010-008. The Site is topographically flat, with agricultural uses to the north and west and single-family housing to the south and east. The Site is zoned AE-20 (Exclusive Agriculture, 20 Acre Minimum Site Area) by Tulare County but will be zoned R-1-5, Single Family Residential, 5,000 square foot minimum site area, by the City of Visalia, pending annexation. The Visalia General Plan Designation is Low-Density Residential. The Site contains agricultural uses, vacant land, and an oak grove.

The site is 59.13 acres in total. 57.82 acres are designated as Prime Farmland by the 2018 FMMP. The remaining 1.31 acres are designated as Urban and Built-Up Land. Although the site is mostly Prime Farmland, it is designated for Low-Density Residential uses by the Visalia General Plan. The proposed project will follow this designation.

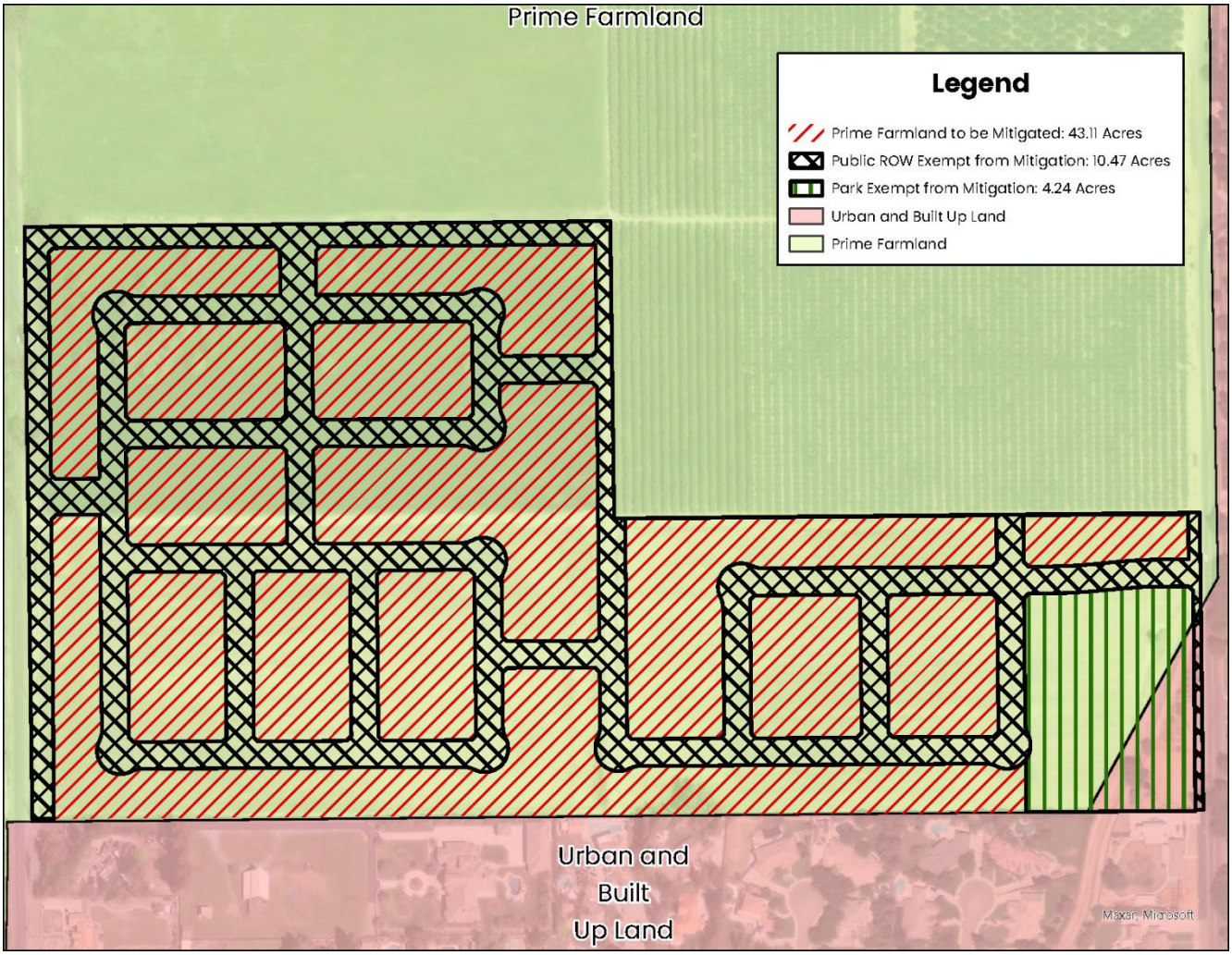
Visalia is planning for growth in this area due to its proximity to similar uses. Single-family homes currently exist to the east and south of the site. Farmland currently exists to the north and west of the site, however, these farmlands are designated as Low-Density Residential, Medium Density Residential, Neighborhood Commercial, and Parks/Recreation by the Visalia General Plan. The site borders the existing Visalia City boundaries to the east and is located within Visalia's Tier 2 Urban Development Boundary. These factors, along with the existing infrastructure and development in the surrounding area, make this site an ideal location for annexation and new development.


CMU
C
CN
RMD
PI
PR
RLD
RVLD
C
Legend
Project Site
RVLD: Residential Very Low Density
RLD: Residential Low Density
RMD: Residential Medium Density
CMU: Commercial Mixed Use
CN: Commercial Neighborhood
PI: Public/Institutional
PR: Parks/Recreation
C: Conservation


Legend
Project Site
Soil Type
101: Akers, Saline-Sodic
130: Nord Fine Sandy Loam
137: Tagus Loam
130
101
137

MITIGATED FARMLAND

The Project Site is not exempt from the Program. The Site is within the Tier 2 UBD and is larger than five acres. Following the Program's policies, the 1.31 acres designated as Urban and Built-up land will be exempt. The remaining 57.82 acres are Prime Farmland, which has been used for irrigated agricultural production in the past four years. However, of these 57.82 acres, 10.47 will be roadways and 4.24 acres will be a public park. According to the Program, public facilities, including roadways and parks, are excluded from the mitigation. The remaining 43.11 acres will need to be mitigated.



The farmland for the mitigation would follow all requirements set out in the Visalia Municipal Code Chapter 18.04. This includes:

1. The preserved land will be in the southern San Joaquin Valley and will be outside Visalia's City Limits/Sphere of Influence.
2. The preserved land will designated as prime farmland.
3. The preserved land shall be a minimum of 20 contiguous acres in size.
4. The preserved land will be zoned and planned for agricultural uses consistent with the purposes of an agricultural conservation easement.
5. The preserved land will have at least one verified source of water.

6. The preserved land will not be encumbered by any use or structure that would be incompatible with the purpose of the agricultural conservation easement.

IMPACTS OF PROJECT

The Project Site is currently occupied by agricultural land with field crops. Implementation of the proposed Project would result in the permanent conversion of approximately 57.82 acres of Prime Farmland to non-agricultural uses.

The loss of Prime Farmland on the Project Site would result in the decrease of Important Farmland inventory in the Visalia Planning Area. The Visalia Planning Area currently has an Important Farmland inventory of 43,155 acres, 33,991 acres of which were categorized as Prime Farmland. Implementation of the Project would convert 57.82 acres of Prime Farmland, which would result in a 0.13 percent decrease in the total Important Farmland inventory of the Visalia Planning Area and a 0.17 percent decrease in the Prime Farmland inventory.

Mitigation Measure AG-1 will secure 43.11 acres of permanent Prime Farmland outside of Visalia's development boundaries to reduce this impact.

BENEFITS OF PROJECT AND MITIGATION

While the Project will impact the farmland inventory, it will bring benefits to Visalia. The Project will add new housing close to the existing City. This will reduce the need for housing further away, which would potentially add transportation and infrastructure impacts. Additionally, separating farmland from existing residential neighborhoods is ideal for both the farmland and neighborhoods. It will reduce the amount of noise in the neighborhoods and reduce the potential for pollution on the farmland. This Project and mitigation will secure permanent farmland outside of Visalia's development boundaries. This will ensure that the agricultural uses will exist long-term and will not be impacted in the future.

ALTERNATIVES

Reduced Project Size

To remain under the Program's requirements, the Project would need to develop on less than 20 acres of Prime Farmland. If only 20 acres of the Prime Farmland were developed, the Project would be reduced to approximately 76 homes. This will reduce the amount of available housing in Visalia. This will not help Visalia's housing goals and will lead to development in other areas.

No Project

The No Project alternative would leave the site as it currently is. This would preserve the existing Prime Farmland; however, it would not add housing to Visalia. This will not help Visalia's housing goals and will lead to development in other areas. As previously discussed, this is an ideal location for new development and annexation into the City of Visalia. If the onsite farmland is preserved, it will eventually be surrounded by new development due to General Plan land designations and Visalia's housing demands.

Appendix F

Biochemical Oxygen Demand and Total Suspended Solids Calculations

April 5, 2024
Community Development Department
Planning Department
315 E. Acequia Ave.
Visalia, CA 93291

Re: Elliott Subdivision – Biochemical Oxygen Demand and Total Suspended Solids Calculations

To Whom It May Concern,

We have prepared the calculations below using the best available standards and practices that were able to find. Our calculations reference a report prepared by Provost and Prichard titled Local Discharge Limits Development, that was prepared for the City of Visalia in March 2011, see Appendix A. We have also utilized the City of Visalia's Sewer Master Plan, December 2005, to calculate an assumed volume of effluent for the proposed project. See below for the equation that will be utilized to calculate the assumed BOD and TSS that will be generated by the proposed project.

Equation 1 – AHL based on WDR limits

$$AHL_{wdr} = \frac{(8.34)(C_{wdr})(Q_{wwtf})}{(1-R_{wwtf})}$$

Where:

AHL_{wdr} = AHL based on WDR limit, lb/day
C_{wdr} = WDR permit limit, mg/L
Q_{wwtf} = WWTF average flow rate, MGD
R_{wwtf} = Plant removal efficiency, as decimal
8.34 = Conversion factor

Table 3-2 shows the allowable headworks loading for the POCs based upon the limitations contained in the WDR.

Table 3-2: WDR Based AHLs

Pollutant	WWTF Flow (MGD) (Qwwtf)	WDR Limit (mg/l) (Cwdr)	Select Removal Efficiency (from list)	Removal Efficiency (%) (Rwwtf)	Allowable Headworks (lbs/day)
Lead	12.18	0.05	User Entered	62.19	13.434
Ammonia	12.18	25	User Entered	43.89	4525.7652
BOD	12.18	30	User Entered	98.81	256354.5218
TSS	12.18	30	User Entered	98.65	226555.1037

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Elliott Subdivision is a new project being proposed by San Joaquin Valley Homes. The project is Located on Shirk Street, south of Highway 198. The project is proposing to develop 60 Gross Acres into a residential subdivision. Using Table 3.4 from the City of Visalia's Sewer Master Plan, the expected flow rates can be calculated using the Adjusted Flow Coefficients that have been provided.

Table 3.4 Average Sewer Flow Coefficients
Sewer System Master Plan
City of Visalia

Land Use Designation	Land Use Code	Urban Development Boundary [1,2] (ga)	Existing Sewered Service Area [3,4] (ga)	% of Total Service Area (%)	1994 Flow Coeff [5] (gpd/ga)	Calculated Flows (gpd)	Adjusted Flow Coefficient (gpd/ga)	2003 ADWF Balance (gpd)	% of Total ADWF (%)
Residential									
Rural	RA	1,007	413	2%	500	206,390	400	165,112	1%
Low Density	RLD	14,138	8,423	43%	1,000	8,422,750	800	6,738,200	55%
Medium Density	RMD	879	536	3%	1,800	964,296	1,300	696,436	6%
High Density	RHD	315	165	1%	2,500	413,200	2,000	330,560	3%
Commercial									
Commercial	COM	3,499	2,183	11%	1,000	2,183,180	650	1,419,067	12%

Table 1: Breakdown of Land Use for Phase 1

Land Use	Acreage	Adjusted Flow Coefficient	Expected Flow	Unit
Low Density Residential	60	800	48000	GPD
			Total Expected Flow: 48000 GPD	

Utilizing the equation and coefficients previously provided, we can calculate BOD as Follows:

$$AHL_{wdr} = \frac{(8.34)(C_{wdr})(Q_{wwtf})}{(1 - R_{wwtf})}$$

Where:

$$C_{wdr} = 30$$
$$Q_{wwtf} = .048\ MGD$$
$$R_{wwtf} = .9881$$

$$\boldsymbol{BOD = 1009.21\ Lb/Day}$$

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Utilizing the equation and coefficients previously provided, we can calculate TSS as Follows

$$AHL_{wdr} = \frac{(8.34)(C_{wdr})(Q_{wwtf})}{(1 - R_{wwtf})}$$

Where:

$$C_{wdr} = 30$$
$$Q_{wwtf} = .048\ MGD$$
$$R_{wwtf} = .9865$$

$$\boldsymbol{TSS = 889.60\ Lb/Day}$$

Please review the calculations provided and if there are any additional questions or information needed, please feel free to contact me at (559)802-3052.

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Appendix A

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