4.2 TRAFFIC AND CIRCULATION

4.2.1 INTRODUCTION

This section presents the results of an analysis by LSA Associates, Inc. (LSA) of the traffic impacts associated with the proposed project. Technical review of this analysis was conducted by the traffic engineering firm, DKS Associates, for the City of Rocklin. Consistent with the Sacramento Superior Court Ruling described in the Introduction, moreover, LSA prepared its analysis in close consultation with CB Richard Ellis ("CBRE"), the firm that prepared the project's economic impact and urban decay analysis.

This analysis examines the traffic impacts expected to result from the addition of vehicle traffic generated by the proposed project on the existing, existing plus approved projects, and cumulative (2030) traffic conditions at surrounding intersections and roadway segments. The "existing plus approved projects" scenario is used as the "baseline" for purposes of assessing the significance of project-specific impacts.[1] "Approved projects," in this context, are land use and infrastructure projects that have received all discretionary approvals requiring environmental review, and thus are virtually certain to be built and thereby affect the same transportation facilities that would be affected by the project. The use of this baseline is legally and factually conservative, in that the approach is intended to ensure that the analysis fully accounts for traffic that, though not yet manifested on the circulation system as of the time the City of Rocklin issued the Notice of Preparation for the project or as of the time the City commenced preparation of an updated traffic study pursuant to court order, would nevertheless be using the circulation system by the time the project, if approved by the City, opens for business. Had the traffic analysis not accounted for this reasonably foreseeable traffic, the result could understate the actual impacts of the project. This approach, which was used in the original traffic analysis and was neither challenged by any commenter nor questioned by the court, is also consistent with the general principle that environmental analysis in California is concerned with "the effects of projects on the actual environment upon which the proposal will operate."[2]

With respect to cumulative impacts, forecast traffic volumes and levels of service (LOS) for 2030 conditions were determined using the City of Rocklin's most current Travel Demand Model. Potential mitigation measures for facilities significantly affected by the project are identified in this traffic analysis.

4.2.2 METHODOLOGY

This traffic impact analysis is based on intersection and roadway LOS for the following scenarios during typical weekday and Saturday conditions:

- Existing
- Existing plus Project
- Existing plus Approved Projects (Baseline)
- Existing plus Approved Projects (Baseline) plus Project

[1] See Cal. Code Regs., tit. 14, div. 6, ch. 3 ("CEQA Guidelines"), § 15125, subd. (a).
[2] *Environmental Planning and Information Council v. County of El Dorado* (1982) 131 Cal.App.3d 350, 354.

- 2030 (Cumulative without Project)
- 2030 (Cumulative plus Project)

INTERSECTION LOS METHODOLOGY

Traffix computer software (Version 8.0 R1) was utilized to analyze all study area intersections. The LOS at signalized study area intersections within the City of Rocklin (except ramp intersections) were determined using the Circular 212 "Critical Movement Analysis" (CMA) planning methodology. Consistent with the preferences of Caltrans and the Town of Loomis, the Highway Capacity Manual (HCM) 2000 methodology was utilized to determine the LOS at ramp intersections (controlled by Caltrans) and all signalized and unsignalized study area intersections controlled by the Town of Loomis. Unsignalized intersections in the City of Rocklin and Placer County were analyzed using the Highway Capacity Manual methodology. The CMA methodology compares the amount of traffic an intersection is able to process (capacity) to the level of traffic during peak hours (volume). The resulting volume-to-capacity (v/c) ratio is expressed in terms of LOS, where LOS A represents free-flow activity and LOS F represents overcapacity operation. The CMA methodology provides a planning-level assessment of the traffic volume at an intersection and is used by many cities and agencies in California for the purposes of traffic impact analysis. Some of the cities and agencies besides Rocklin that utilize the Circular 212 CMA methodology include Placer County, West Sacramento, Fairfield, Roseville, Union City, San Carlos, the Contra Costa Transportation Authority, and the City/County Associations of Governments of San Mateo County. In addition, a number of agencies throughout the State utilize the Intersection Capacity Utilization (ICU) methodology, which is similar to the Circular 212 CMA methodology but does not take into account the effects of signal phasing on LOS. Utilization of a methodology that calculates the v/c ratio has proven to be an accurate method of disclosing traffic impacts of development projects.

LOS is a qualitative assessment of the quantitative effects of such factors as traffic volume, roadway geometrics, and signal phasing on roadway and intersection operations. Traffix computer software utilizing Circular 212 CMA methodology analyzes each intersection in isolation and does not consider other factors that could affect traffic operations, such as intersection spacing and downstream delay. These factors typically have a minor effect on traffic capacity at an intersection. LOS criteria for signalized intersections are presented below.

LOS Description

A No approach phase is fully utilized by traffic and no vehicle waits longer than one signal cycle. Typically, the approach appears quite open, turns are made easily, and nearly all drivers find freedom of operation.

B This service level represents stable operation, where an occasional approach phase is fully utilized and a substantial number are nearing full use. Many drivers begin to feel restricted within platoons of vehicles.

C This level still represents stable operating conditions. Occasionally, drivers may have to wait through more than one signal cycle and backups may develop behind turning vehicles. Most drivers feel somewhat restricted but not objectionably so.

D This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.

E Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is attained, no matter how great the demand.

F This level describes forced-flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially, and stoppages may occur for short or long periods due to the congestion. In extreme cases, speed can drop to zero.

The relationship between LOS and the v/c ratio for signalized intersections is as follows:

Level of Service	Volume-to-Capacity Ratio (CMA Methodology)
A	≤ 0.600
B	0.610–0.700
C	0.710–0.800
D	0.810–0.900
E	0.910–1.000
F	> 1.000
CMA = Critical Movement Analysis	

Because the CMA methodology does not provide an accurate representation of the LOS of an unsignalized intersection, the HCM methodology has been used to determine intersection LOS at all unsignalized intersections. For the unsignalized HCM methodology, LOS is presented in terms of total intersection delay (at four-way stop intersections) and approach delay of the major and minor streets (at two-way stop intersections) in seconds per vehicle. The relationship of delay and LOS at signalized and unsignalized intersections is summarized below.

Level of Service	Unsignalized Intersection Delay per Vehicle (sec)	Signalized Intersection Delay per Vehicle (sec)
A	≤ 10.0	≤ 10.0
B	> 10.0 and ≤ 15.0	> 10.0 and ≤ 20.0
C	> 15.0 and ≤ 25.0	> 20.0 and ≤ 35.0
D	> 25.0 and ≤ 35.0	> 35.0 and ≤ 55.0
E	> 35.0 and ≤ 50.0	> 55.0 and ≤ 80.0
F	> 50.0	> 80.0
sec = seconds		

The HCM methodology has also been used to determine LOS at the Caltrans controlled I-80 ramp intersections with Rocklin Road, Sierra College Boulevard, and Horseshoe Bar Road. As requested by the Town of Loomis and agreed to by the City of Rocklin, all signalized intersections within the Town of Loomis were analyzed using the HCM methodology. The HCM method is also used by Caltrans for intersections it controls.

ROADWAY LOS METHODOLOGY

Roadway segment analysis in the project area was also conducted as part of this traffic impact analysis. To identify the project's impact on the operating conditions of a roadway segment, an LOS ranking scale was used. The LOS is based on peak-hour directional traffic demand in a two-step process. Initially, average daily traffic (ADT) roadway segment threshold capacities, as presented below, are calculated to determine if there are any roadway segments that need to be further analyzed in the peak hour.

Roadway Segment Capacities: Two-Way Average Daily Traffic Volumes						
Two-Lane Collector	**Four-Lane Undivided Arterial**	**Four-Lane Divided Arterial**	**Four-Lane Restricted-Access Arterial**	**Six-Lane Divided Arterial**	**Six-Lane Restricted-Access Arterial**	**Four-Lane Freeway**
15,000	30,000	33,750	36,000	50,525	50,525	80,000

The capacities shown in the above table represent an approximation of the number of vehicles the roadway can comfortably carry on a daily basis before it is considered to be at capacity. If the ADT on a roadway segment exceeds these capacities, then a peak hour direction evaluation is initiated. It is important to note that an ADT capacity must assume several critical characteristics of traffic, including the percentage of daily traffic in the peak hour and the directional split within that peak hour. Actual characteristics of a specific roadway can significantly influence the daily capacity, as described below. To calculate the daily LOS for each roadway segment, the ADT on each segment was divided by the capacity of the segment to determine the daily v/c ratio for each roadway.

The daily capacity, as described above, is a planning-level tool that is generally used to determine the overall cross-sections of roadways within a circulation network. While it can provide a preliminary indication during the planning process of whether the existing or forecast volumes would be accommodated within the existing or future roadway width, it does not provide an accurate representation of the actual operation of the roadway, especially during the peak hours of the day. This is because traffic along a roadway segment will be highest during the peak commute hours. As a result, if traffic operations are satisfactory during the peak hours, when traffic volumes are highest, the segment will also operate at satisfactory LOS during the remaining off-peak hours of the day. For the roadway segment analysis, the peak-hour directional v/c ratio is the critical LOS threshold. If the peak-hour capacity is exceeded, the segment is considered to be operating at an unsatisfactory LOS. A capacity of 1,650 vehicles per hour per lane (vphpl) was used to evaluate the peak-hour v/c ratio. The capacity (1,650) is an average of the per-lane capacity used in Circular 212 methodology (1,400) and the per-lane capacity used in the HCM methodology (1,900). The v/c ratio was

compared to the values in the table below to determine the peak-hour LOS for each roadway segment.

Level of Service	Volume-to-Capacity Ratio
A	≤ 0.600
B	0.610–0.700
C	0.710–0.800
D	0.810–0.900
E	0.910–1.000
F	> 1.000

FREEWAY LOS METHODOLOGY

As prescribed in Chapter 13 (Freeway Concepts) of the HCM, the freeway was divided into segments for the purposes of this analysis. Peak-hour volumes on basic segments were analyzed using the methodology contained in HCM Chapter 23 (Basic Freeway Segments), with calculations performed using the Highway Capacity Software Plus (HCS Plus, Version 5.2). LOS on the freeway mainline is determined by the density of vehicles on the segment. The table below shows the LOS criteria for freeway segments.

Level of Service	Density (pc/mi/ln) for Basic Freeway Segments
A	≤ 11
B	> 11 and ≤ 18
C	> 18 and ≤ 26
D	> 26 and ≤ 35
E	>35 and ≤ 45
F	> 45
pc/mi/ln = passenger cars per mile per lane	

LOS STANDARDS

City of Rocklin - According to the City General Plan Circulation Element, the City considers LOS C the upper limit of satisfactory operations except at intersections (both signalized and unsignalized) and on roadway segments located within 0.5 mile (mi) of direct access to an interstate freeway, where LOS D is considered satisfactory.

Town of Loomis - For intersections within the Town of Loomis in general, LOS C is the upper limit of satisfactory operations regardless of proximity to an interstate freeway. Although the Project, which would be located within the City limits of Rocklin, is not subject to the Town of Loomis Circulation Element, that document is relevant in the assessment of the significance of impacts that would occur within Loomis. The Town of Loomis General Plan Circulation

Element (2001) includes the following level of service policy applicable to "development approved within the Town":

> In order to minimize congestion, maintain Level of Service C on all roads and intersections within the Town of Loomis. Level of Service D may be allowed in conjunction with development approved within the Town as an exception to this standard, at the intersections of King and Taylor, Horseshoe Bar Road and Taylor, Horseshoe Bar Road and Interstate 80, Sierra College and Brace Road, and Webb and Taylor, when:
>
> 1. The deficiency is substantially caused by "through" traffic, which neither begins nor ends in Loomis, and is primarily generated by non-residents; or
>
> 2. The deficiency will be temporary (less than three years), and a fully-funded plan is in place to provide the improvements needed to remedy the substandard condition.

The Environmental Impact Report prepared for the Town of Loomis General Plan further clarifies these thresholds by identifying an increase of 5 percent (addition of 0.05) to the v/c ratio for roadway segments as a significant project impact.

Therefore, under the Loomis General Plan, projects approved by the Town should not cause intersections within the Town to exceed the LOS C standard regardless of their proximity to a freeway access location.

Placer County - The Placer County General Plan (1994) includes the following adopted minimum LOS standards:

- LOS "C" on rural roadways, except within one-half mile of state highways where the standard shall be LOS "D".
- LOS "C" on urban/suburban roadways except within one-half mile of state highways where the standard shall be LOS "D".

The County may allow exceptions to these LOS standards where it finds that the improvements or other measures required to achieve the LOS standards are unacceptable based on established criteria. In allowing any exception to the standards, the County shall consider the following factors:

- The number of hours per day that the intersection or roadway segment would operate at conditions worse than the standard.
- The ability of the required improvement to significantly reduce peak hour delay and improve traffic operations.
- The right-of-way needs and the physical impacts on surrounding properties.
- The visual aesthetics of the required improvement and its impact on community identity and character.
- Environmental impacts including air quality and noise impacts.
- Construction and right-of-way acquisition costs.

- The impacts on general safety.
- The impacts of the required construction phasing and traffic maintenance.
- The impacts on quality of life as perceived by residents.
- Consideration of other environmental, social, or economic factors on which the County may base findings to allow an exceedance of the standards.

Exceptions to the standards will only be allowed after all feasible measures and options are explored, including alternative forms of transportation.

Caltrans - Caltrans considers LOS E the upper limit of satisfactory operations for all its freeway mainline facilities.

THRESHOLDS OF SIGNIFICANCE

An impact is considered significant for any intersection, roadway segment, or freeway mainline segment where project traffic causes the intersection, roadway segment, or freeway mainline segment to deteriorate from satisfactory to unsatisfactory operations. Satisfactory operations for intersections and roadway segments within the City of Rocklin are considered to be LOS C or better except at intersections (both signalized and unsignalized) and on roadway segments located within 0.5 mile of direct access to an interstate freeway, where LOS D or better is considered satisfactory. For intersections and roadway segments within the Town of Loomis, LOS C or better is considered to be satisfactory operations regardless of proximity to an interstate freeway. Satisfactory operations within Placer County are LOS C or better except at intersections (both signalized and unsignalized) and on roadway segments located within 0.5 mile of State highways, where LOS D is considered satisfactory. LOS E or better is considered to be satisfactory operations by Caltrans for all its freeway mainline facilities.

The City of Rocklin, Town of Loomis, Placer County and Caltrans do not have an adopted criterion that defines a significant impact at an existing deficient intersection, roadway segment or freeway mainline segment that is affected by project traffic; therefore, criteria were developed by the City to address this potential condition. Since the intersections are analyzed using two different methodologies (Circular 212 and HCM), slightly different significance criteria must be employed. These significance criteria are discussed below.

Although some individuals and groups in California have argued that, under CEQA, “one car” added to an already impacted roadway or intersection must per se be treated as a significant effect on the environment, the City disagrees. The City does not subscribe to the notion that, where existing conditions or projected cumulative conditions are already bad or will be bad even without the project, *any* additional traffic from the project represents a significant impact or a cumulatively considerable contribution to a significant cumulative traffic impact. The City’s rejection of this notion reflects the nature of traffic impacts, compared with other categories of environmental impact, which often involve public health or ecological concerns. Worsened congestion might cause irritation or inconvenience to people, but not any adverse effects on public health or ecosystems.

Thus, while the addition of relatively small amounts of air pollution in a polluted air basin might worsen the adverse health effects of air pollution, no similar health effects result from additional traffic congestion. Similarly, while the loss of relatively small amounts of the habitat

of an endangered or threatened species might cause ecological consequences of note, worsened traffic congestion has no such consequences to biological resources. In fact, "mitigation" for traffic impacts often has its own adverse consequences on biological resources (i.e., road widenings often wipe out habitat areas). In short, the City does not believe that a "one car" threshold of significance for traffic impacts on already-congested transportation facilities is either practical or desirable from a policy standpoint. Nor is such an approach mandated by CEQA or CEQA case law. While the 0.05 threshold, by allowing small amounts of traffic without triggering additional mitigation, might require drivers to endure minor additional delays during peak periods, this purely human inconvenience is not, in the City's view, a "significant effect on the environment."

Circular 212 Methodology

If an intersection, or roadway segment, is already operating at unsatisfactory LOS, an increase of 0.05 to the v/c ratio would constitute a significant project impact. An increase of 0.05 in the v/c ratio would be considered a measurable worsening of the intersection or roadway operations, and therefore, would constitute a significant project impact. Notably, the Sacramento Superior Court rejected a challenge to the use of this threshold by the Town of Loomis, and Loomis dropped its appeal, which might have raised the issue again, as part of a settlement agreement with the project proponents. The legal validity of this approach for purposes of this EIR is therefore now beyond question,

In any event, the use of this 0.05 threshold is quite common in the region based on the prevailing opinion amongst transportation engineers that 0.05 v/c represents the threshold at which a "measurable worsening" of level of service is credible. There are many factors that affect inputs to the LOS analysis, which in turn result in fluctuations in traffic volumes and levels of service; and many jurisdictions (Sacramento County, City of Sacramento, Rancho Cordova, etc.) have determined that use of a threshold that is less than the one used by the City of Rocklin is not appropriate for defining a significant impact for locations that are already congested.

Given that traffic volumes can typically fluctuate by 10% or more from day to day, the recognition that a significant impact would occur when the volume-to-capacity ratio increases by 5% (or 0.05) is reasonable, because such a change would typically represent less than half of the normal daily (weekday) fluctuation in traffic volumes. This degree of change also represents a threshold that would be noticeable to the average driver. Thus, an increase of 0.05 in the v/c ratio is significant, as it reflects what would be considered a measurable worsening of the intersection or roadway operations and therefore would constitute a significant project impact. In other words, regardless of whether the existing LOS is D, E, or F, unless there is an increase of at least 0.05 in the v/c ratio, the increase would generally go unnoticed, and therefore would not be significant.

Moreover, application of the 0.05 increase to the v/c ratio actually results in an increasing sensitivity to increased traffic volumes as the LOS degrades (i.e., as the LOS conditions worsen, the 0.05 v/c threshold is triggered by smaller percentage increases in traffic volume). To illustrate this point, assume that the capacity at an intersection is 100 vehicles. If the project adds 5 vehicles, the v/c ratio would increase by 0.05 and meet the threshold. As the congestion level increases (i.e. as the number of vehicles through the intersection approaches or exceeds the intersection capacity), however, the same 5 vehicles equate to descending

percentages (6.2% (for a v/c ratio of 0.81 increasing to 0.86) to 4.1% (for a v/c ratio of 1.21 increasing to 1.26) of allowable increases in traffic volume before an impact is triggered (see the table below). Thus, the same 5% (addition of 0.05 to the v/c ratio) criterion is appropriate for the full range of conditions exceeding the basic level of service criteria, because the 0.05 threshold does not equate to a fixed percentage increase in traffic triggering an impact at each LOS condition. Rather, when the 0.05 increase in v/c ratio is applied to the v/c ratio at any LOS condition, the percentage of additional traffic necessary to trigger an impact decreases as congestion levels increase and LOS conditions degrade.

Significance Threshold	V/C without Project	V/C with Project	Percent Project traffic at intersection that would trigger impact
0.05 (5%)	0.81	0.86	6.2%
0.05 (5%)	0.91	0.96	5.5%
0.05 (5%)	1.01	1.06	4.95%
0.05 (5%)	1.11	1.16	4.5%
0.05 (5%)	1.21	1.26	4.13%

HCM Methodology

The HCM methodology calculates the average delay experienced by a vehicle at an intersection, which is then used to determine the LOS at that location. The determination of LOS using the HCM methodology does not rely on the volume-to-capacity ratio at the intersection, as is used with the Circular 212 Methodology. Hence, for an intersection that is analyzed using the HCM methodology and that is already operating at unsatisfactory LOS, the significance criterion of 0.05 increase in v/c would not be applicable. An analogous criterion is appropriate, however, as explained below.

For intersections that are analyzed using HCM methodology, the LOS is calculated based on the average vehicle delay. The City does not have an established threshold of significance expressed in terms of delay for intersections that are already operating at unsatisfactory LOS. For that reason, a threshold of 5 percent increase in traffic volume, which is similar to the threshold for the intersections analyzed using Circular 212 methodology, was applied to the intersections analyzed using HCM methodology. Therefore, if an unsignalized or signalized intersection that is analyzed using HCM methodology is already operating at unsatisfactory LOS D (LOS E within 0.5 mi of freeway access), and then the addition of more than 5 percent of the total traffic at the intersection would also be considered a significant project impact.

The significance criteria used for intersections and roadway segments in the Town of Loomis are consistent with the criteria used in previous traffic studies, including the *Rocklin Commons Traffic Study*, which reflected input from Brian Fragiao of the Town of Loomis staff. As directed by the City of Rocklin, LSA has previously applied the same significance criteria to the Town of

Loomis intersections and roadway segments as applied in the City of Rocklin[3]. The City has therefore determined that it continues to be permissible to use this approach.

Similar to the criteria used for intersections and roadway segments analyzed using HCM, for the freeway mainline, an impact is considered significant if project traffic causes a freeway segment to deteriorate from satisfactory to unsatisfactory operating conditions. If a freeway segment is already operating at unsatisfactory LOS (F), then the addition of more than 5 percent of the total traffic on the freeway segment would also be considered a significant project impact.

Based on the preceding discussion and Appendix G of the CEQA Guidelines, the City has determined that a project would also result in a significant effect on the environment if it would:

- conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths and mass transit;
- conflict with an applicable congestion management program, including but not limited to level of service standards established by the City of Rocklin, the Town of Loomis, Placer County or the California Department of Transportation, for designated roads and highways;
- substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- result in inadequate emergency access; or
- conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Study Area

The study area was developed in consultation with the City and was based on several considerations, such as the Superior Court's Ruling, recent projects in the vicinity, professional judgment, and public input on the Notice of Preparation. LSA also coordinated with CBRE, which had identified the primary and secondary market areas for the "big box" components of the project based on its economic impact and urban decay analysis, thus providing insights as to the likely origins of most of the single purpose shopping trips associated with the big box components. Although some project-related trips would originate beyond the study area, the numbers of such trips are quite minimal measured in terms of the percentage of trips on affected roadways attributable to the project. Consistent with standard engineering practice and professional judgment, the existence of such minimal amounts of traffic in those areas/facilities was not enough to justify including particular areas/facilities within the study area, though the underlying travel demand models, being regional in scale, do account for such trips. Of the 21 study area intersections, 7 are located within 0.5 mile of direct access to an interstate freeway, while the remaining 14 intersections are located more than 0.5 mile from an interstate facility.

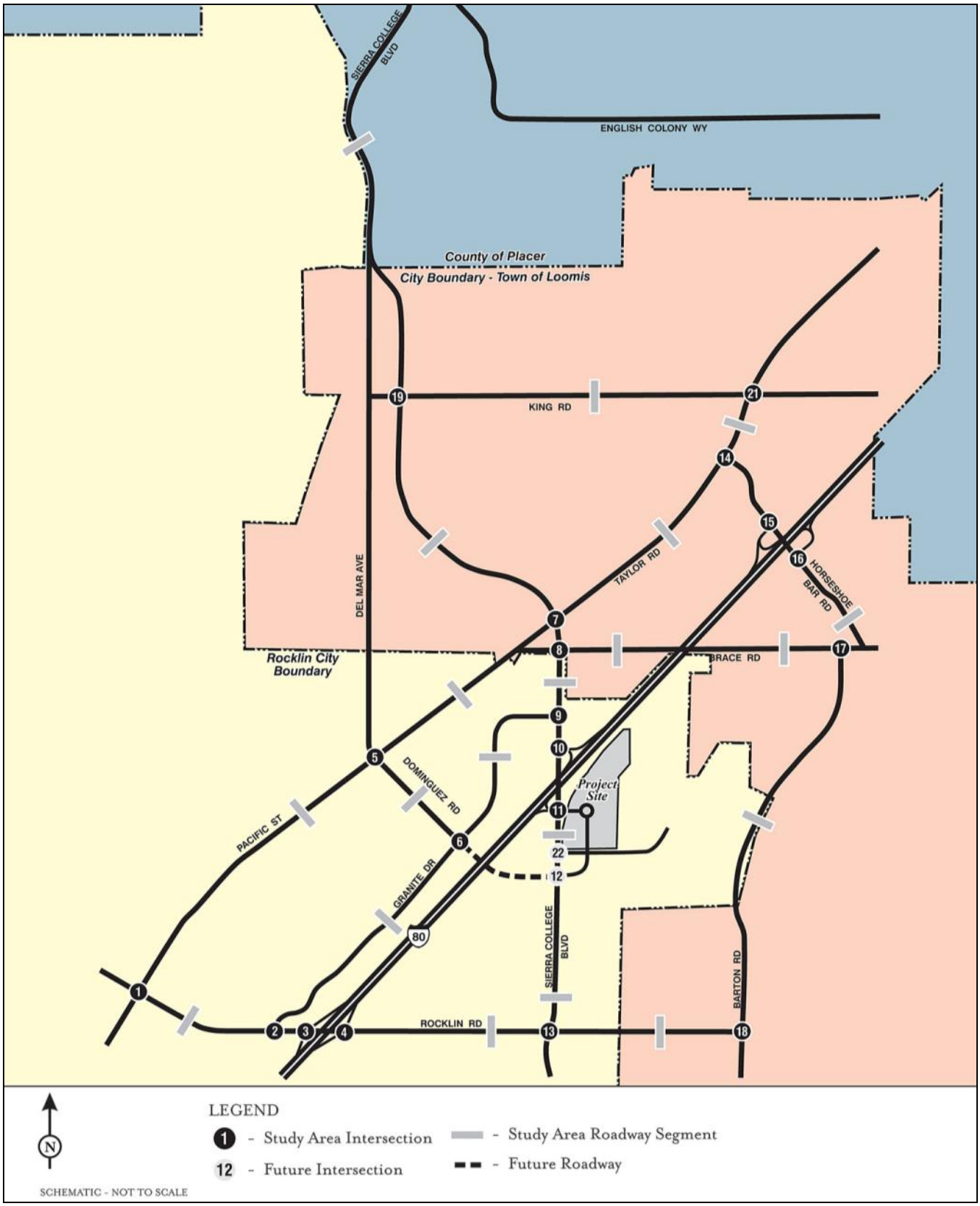
[3] October 30, 2008 Declaration of Les Card of LSA Associates, Inc. regarding December 12, 2006 personal communication with Brian Fragiao, Town of Loomis City Engineer/Public Works Direct clarifying the significance criteria that should be applied to intersections that currently operate in excess of Loomis's LOS C threshold

LOS was analyzed at the following study area intersections for the a.m., p.m., and Saturday peak hours for each development scenario. City of Rocklin intersections within 0.5 mile of a freeway access location (where the LOS D standard would apply) are noted with an asterisk (*). As indicated above, all intersections within the Town of Loomis or located in Placer County have an LOS C standard. The jurisdictions of intersections located outside the City of Rocklin are indicated in parentheses after the intersection name:

- Pacific Street/Rocklin Road
- Granite Drive/Rocklin Road*
- I-80 westbound ramp/Rocklin Road*
- I-80 eastbound ramp/Rocklin Road*
- Dominguez Road (Del Mar Avenue)/Pacific Street
- Granite Drive/Dominguez Road
- Sierra College Boulevard/Taylor Road (Loomis)
- Sierra College Boulevard/Brace Road (Loomis)
- Sierra College Boulevard/Granite Drive*
- Sierra College Boulevard/I-80 westbound ramp*
- Sierra College Boulevard/I-80 eastbound ramp*
- Sierra College Boulevard/Dominguez Road* (future intersection)
- Sierra College Boulevard/Rocklin Road
- Taylor Road/Horseshoe Bar Road (Loomis)
- Horseshoe Bar Road/I-80 westbound ramp (Loomis)
- Horseshoe Bar Road/I-80 eastbound ramp (Loomis)
- Barton Road/Brace Road (Loomis)
- Barton Road/Rocklin Road (Loomis)
- Sierra College Boulevard/King Road (Loomis)
- Sierra College Boulevard/English Colony Way (Placer County)
- Taylor Road/King Road (Loomis)

The following roadway segments were included in the study area. City of Rocklin roadway segments located within 0.5 mile of direct access to an interstate freeway, where LOS D is considered satisfactory, are noted with an asterisk (*). The location of the study area intersections and study area roadway segments are illustrated on Exhibit 4.2-1.

- Taylor Road between King Road and Horseshoe Bar Road (Loomis)
- Taylor Road between Horseshoe Bar Road and Sierra College Boulevard (Loomis)
- Pacific Street between Sierra College Boulevard and Dominguez Road
- Pacific Street between Dominguez Road and Rocklin Road
- Rocklin Road between Pacific Street and Granite Drive*
- Rocklin Road between I-80 and Sierra College Boulevard*
- Rocklin Road between Sierra College Boulevard and Barton Road (Loomis)
- Barton Road between Rocklin Road and Brace Road (Loomis)
- Horseshoe Bar Road between I-80 and Brace Road (Loomis)
- Brace Road between I-80 and Barton Road (Loomis)



Source: LSA Associates 2010

Study Intersections and Roadway Segments **Exhibit 4.2-1**

- Brace Road between I-80 and Sierra College Boulevard (Loomis)
- Sierra College Boulevard between English Colony Way and King Road (Placer County)
- Sierra College Boulevard between King Road and Taylor Road (Loomis)
- Sierra College Boulevard between Taylor Road and I-80*
- Sierra College Boulevard between I-80 and Dominguez Road (future intersection)*
- Sierra College Boulevard between Dominguez Road (future intersection) and Rocklin Road
- Granite Drive between Dominguez Road and Sierra College Boulevard
- Granite Drive between Dominguez Road and Rocklin Road
- Dominguez Road between Pacific Street and Granite Drive
- King Road between Sierra College Boulevard and Taylor Road (Loomis)

4.2.3 REGULATORY SETTING

CITY OF ROCKLIN GENERAL PLAN

The Circulation Element of the City of Rocklin General Plan (1991) includes the following relevant goal and policies related to traffic and circulation.

Goal: To provide and maintain a safe and efficient system of streets, highways, and public transportation to meet community needs and promote sound land use.

- **Policy 1**. To maintain existing streets in a safe condition and require that new streets be built to City standards.
- **Policy 2**. To ensure that streets and highways will be available to serve new development by requiring detailed traffic studies as a part of all major development proposals.
- **Policy 6**. To promote pedestrian convenience through development conditions requiring sidewalks, walking paths, or hiking trails that connect residential areas with commercial, shopping, and employment centers.
- **Policy 7**. To require landscaping and tree planting along major new streets and highways, and along existing streets as appropriate.
- **Policy 8**. To encourage a variety of building sites, building types, and land use treatments along major streets and highways.
- **Policy 10**. To promote the use of public transit through development conditions requiring park-and-ride lots, bus turnouts and passenger shelters along major streets.
- **Policy 11**. To enforce the transportation system management requirements of the existing ridesharing ordinance.
- **Policy 13**. To maintain a minimum traffic level of service “C” for all streets and intersections, except for intersections located within ½ mile from direct access to an interstate freeway where a level of service “D” will be acceptable. Exceptions may be made for peak hour traffic where not all movements exceed the acceptable level of service.

CITY OF ROCKLIN CAPITAL IMPROVEMENT PROGRAM

- The City's Traffic Impact Fee and Capital Improvement Program (CIP) defines the roadway and intersection improvements needed to maintain the Level of Service (LOS) policy adopted in the City's General Plan. (See Rocklin General Plan Circulation Element, Policy 13.) The City regularly monitors traffic on City streets to include in the City's CIP those improvements needed to maintain an acceptable LOS through the use of traffic fees and other financing mechanisms. The City updated its CIP and traffic impact fees in 2005, and extended the horizon year for the CIP from 2020 to 2025.
- On May 22, 2007, the Rocklin City Council adopted Resolution No. 2007-126, increasing the Citywide traffic impact fee based on increased construction costs for all developments within the City. In conjunction with this fee increase, the City also updated its CIP. The updated CIP includes the following improvements in the vicinity of the proposed project:
- widen Rocklin Road to 4-lanes from the Loomis Town limits to east of Sierra College Boulevard;
- widen Rocklin Road to 6-lanes (add 2 lanes) from west of Sierra College Boulevard to I-80 eastbound ramps;
- widen Rocklin Road to 6-lanes from I-80 westbound ramps to west of Granite Drive;
- widen Sierra College Boulevard to 6-lanes (add 2 lanes) from Nightwatch Drive to Aguilar Tributary;
- widen Sierra College Boulevard to 6 lanes from I-80 to south of Taylor Road;
- widen Sierra College Boulevard to 6 lanes from Aguilar tributary to I-80;
- construct a 2-lane extension with bridge over I-80 on Dominguez Road from Granite Drive to Sierra College Boulevard;
- reconstruct the Rocklin Road/I-80 interchange; and
- widen Pacific Street to 4 lanes from Sierra Meadows Drive to Loomis Town limits.

The traffic impact mitigation fee program is one of the various methods that the City of Rocklin uses for financing improvements identified in the Capital Improvement Program (CIP). The CIP, which is overseen by the City's Engineering Division, is updated periodically to assure that growth in the City and surrounding jurisdictions does not degrade the Level of Service on the City's roadways. The roadway improvements that are identified in the CIP in response to anticipated development and population growth are consistent with the City's Circulation Element. The traffic impact fee program collects funds from new development in the City to finance a portion of the roadway improvements that result from traffic generated by new development. Fees are calculated on a citywide basis, differentiated by type of development in relationship to their relative traffic impacts. The intent of the fee is to provide an equitable means of ensuring that future development contributes their fair share of roadway improvements, so that the City's General Plan Circulation policies and quality of life can be maintained.

SOUTH PLACER REGIONAL TRANSPORTATION AUTHORITY

In January 2002, the cities of Rocklin, Roseville, Lincoln, the County of Placer, and the Placer County Transportation and Planning Agency entered into a Joint Powers Authority (JPA)

known as the South Placer Regional Transportation Authority (SPRTA). The JPA was formed for the purpose of implementing a regional transportation and air quality mitigation fee to fund specified regional transportation projects (SPRTA 2007). These improvements include:

- Sierra College Boulevard Widening;
- Lincoln Bypass;
- Douglas Boulevard/Interstate 80 Interchange;
- Placer Parkway;
- Transit Projects;
- SR-65 Widening;
- I-80/Rocklin Road Interchange; and
- Auburn Folsom Road Widening.

The estimated completion date for the above projects will be established after the JPA board of directors establishes their respective priorities. In general, the improvements are expected to be made during the next several years, but the timing of these roadway and transit system projects is ultimately dependent on the collection of the fees necessary to fund them (Raney Planning & Management, Inc. 2006). It should be noted that the Interstate 80 Interchange/Douglas Boulevard project has been completed, the SR-65 Lincoln Bypass is under construction, and some widening of Sierra College Boulevard through the City of Rocklin occurred in 2009/2010 and will continue into 2011.

Because Sierra College Boulevard would serve as a primary transportation link to the Rocklin Crossings project, the improvements related to this roadway included in the JPA are described below:

> Sierra College Boulevard is a major north-south arterial that provides a link from State Route 193 in Lincoln to Interstate 80 in Rocklin and on to the Sacramento County line. Sierra College Boulevard traverses Lincoln, unincorporated Placer County, Loomis, Rocklin, and Roseville. The improvements to Sierra College Boulevard would consist of widening the roadway to four or six lanes from State Route 193 to the Sacramento County line, excluding improvements to the interchange at Interstate 80, which will be funded by a combination of Rocklin and state funds.

The Sierra College Boulevard segments to be funded or credited by the fee program include:

- Segment 1 - from State Route 193 to the northern city limits of the City of Rocklin. This segment would consist of a four-lane facility.
- Segment 2a - from the northern city limits of the City of Rocklin to the northern boundary of the Town of Loomis. This facility would also be built to four lanes.
- Segment 5 - Interstate 80 to Rocklin Road. This segment would consist of six lanes.
- Segment 6 - Rocklin Road to the southern city limits of the City of Rocklin. This segment would consist of six lanes (Raney Planning & Management, Inc. 2006).

The widening of Sierra College Boulevard between Taylor Road and El Don Drive is a planned improvement. The overall Sierra College Boulevard Widening project is broken into two phases: Phase I, south of the I-80 interchange to El Don Drive (in Rocklin); and Phase II, north

of the I-80 interchange from Granite Drive to Taylor Road (which includes segments in both Rocklin and Loomis). City staff indicated that Phase I (the widening of Sierra College Boulevard to four lanes between I-80 and El Don Drive) is currently under construction. Construction on Phases I and II is anticipated to be completed by the end of 2010, and by spring 2011, respectively, per City of Rocklin staff.

The creation of SPRTA resulted in the establishment of an impact fee schedule for new development in the participating jurisdictions. In the past, the primary source of funding for regional transportation projects in Placer County has been the State Transportation Improvement Program (STIP), which typically falls short of financing current project needs throughout the county. In addition, several jurisdictions in Placer County currently have some form of development fees for local transportation projects, but the County has not had a mechanism to fund large scale or multi-jurisdictional projects. Therefore, with the creation of SPRTA and a list of transportation improvements identified in the JPA, as well as the regional transportation impact fee schedule, the necessary funding for construction of regional improvements (including improvements to Sierra College Boulevard) has been ensured (Raney Planning & Management, Inc. 2006).

Town of Loomis Capital Improvement Plan

In December 2008, the Loomis Town Council adopted an updated five-year Capital Improvement Plan. A Staff Report dated October 21, 2008, from the Loomis Public Works Director/Town Engineer summarized the "Financial and/or Policy Implications" of the updated CIP as follows:

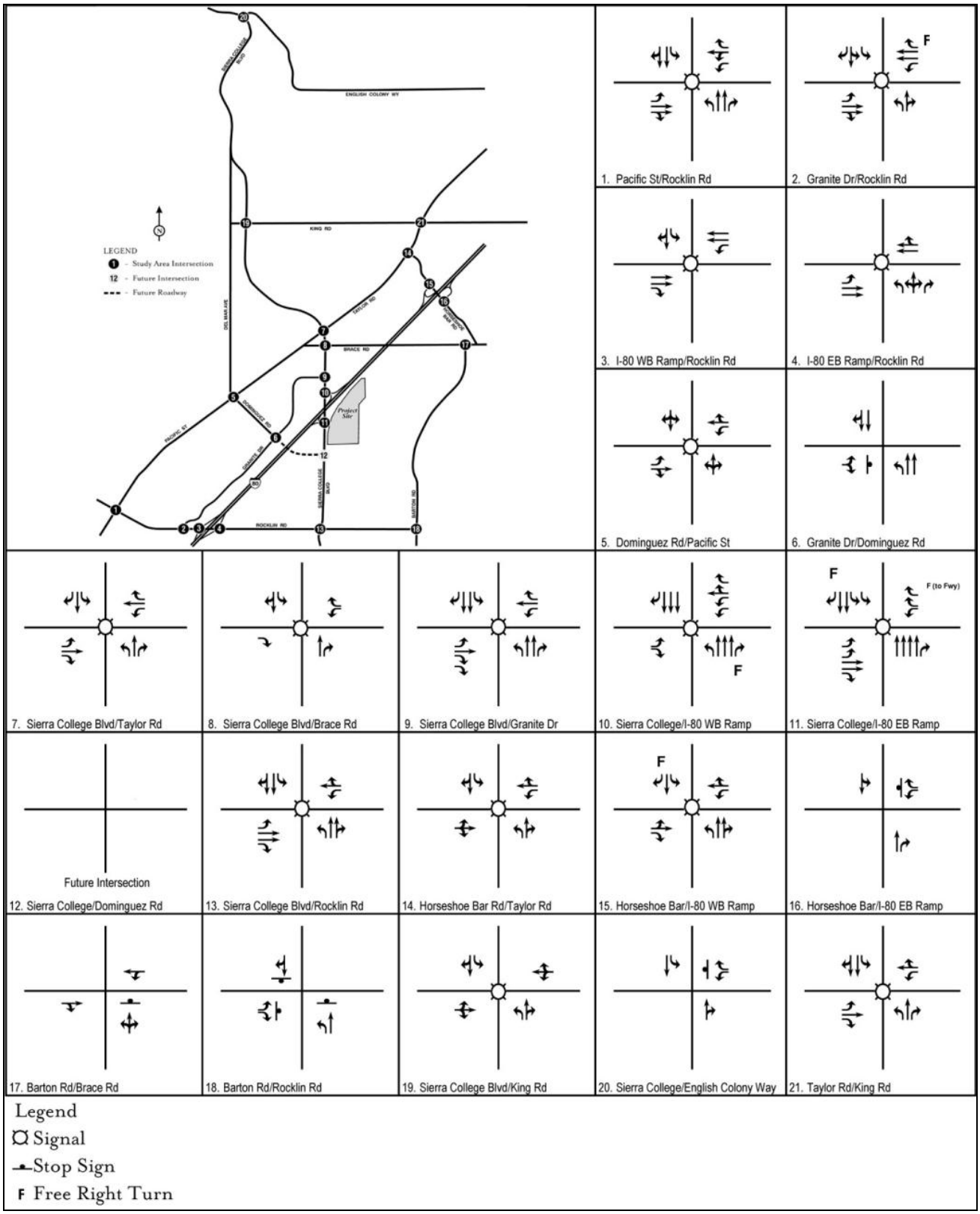
> The Town currently has $322,650 under the development fee account that would cover projects identified in the General Plan Circulation Element. The CIP improvements will be funded by various funding sources. Transportation Development Act money (+/- $300,000 received each year), Gas Tax Funds (currently $43,000), Bickford Ranch Mitigation Funding ($661,000) and General Fund Reserve ($1.5 Million). Staff has CMAQ ($400,000) and RSTP ($119,000) funds reserved and will also look into additional State and Federal funding that applies to these improvements to help off-set costs.

Exhibit A to the October 21, 2008, Staff Report, entitled, "Capital Improvement Program Budget Summary for the Next 5 Years," listed a number of specific improvements and their estimated costs, and identified the year(s), if any, when the improvements were anticipated to be built. The Sierra College Boulevard Widening Project identified in the Loomis Capital Improvement Plan is relevant to the Rocklin Crossings project.

4.2.4 EXISTING CONDITIONS

ROADWAY NETWORK

The existing intersection geometrics and traffic control at study area intersections are illustrated on Exhibit 4.2-2. The roadway that would provide access to the project is described below.



Source: LSA Associates 2010

Existing Geometrics and Traffic Control **Exhibit 4.2-2**

- **Sierra College Boulevard.** Sierra College Boulevard is a north-south roadway that forms the eastern boundary of the project site. This roadway is classified as an Arterial with an ultimate six-lane cross-section in the City's General Plan Circulation Element. Sierra College Boulevard is designated as a Truck Route by the City. Within the study area, Sierra College Boulevard is a two-lane roadway north of Rocklin Road and a four-lane roadway immediately south of Rocklin Road. The roadway segment (near the project access) from Granite Drive to just south of the I-80 eastbound ramps is widened to three lanes in the northbound direction and two lanes in the southbound direction. Primary access to the project would be provided via three locations on Sierra College Boulevard.

  Although the Sierra College Boulevard/I-80 Interchange Reconstruction project was not part of the proposed project description, the interchange project significantly affects access to the project site. The Sierra College Boulevard/I-80 Interchange reconstruction project included widening the bridge over I-80, reconstruction of the on- and off-ramps, and full widening of Sierra College Boulevard across the northerly portion of the frontage of the Rocklin Crossings project. The Sierra College Boulevard/-80 Interchange Reconstruction project has already been completed. The main access into Rocklin Crossings has been constructed as part of the Sierra College Boulevard Interchange Reconstruction project and dedicated as a City right-of-way.

Other roads in the vicinity of the project are described below:

- **Granite Drive.** Granite Drive is a four-lane southwest-northeast roadway located west of I-80. Granite Drive is classified as an Arterial in the City General Plan Circulation Element. Granite Drive runs from Rocklin Road in the south and terminates at Sierra College Boulevard just north of the project site. Granite Drive is classified as a Truck Route from Dominguez Road to Sierra College Boulevard.

- **I-80.** I-80 is an interstate highway providing interregional access in the vicinity of the project. Throughout the study area, I-80 generally travels in a southwest-northeast direction. Interchanges along I-80 near the project site are provided at Rocklin Road, Sierra College Boulevard, and Horseshoe Bar Road. Direct access to the project site would be provided from the I-80 eastbound ramps at Sierra College Boulevard. I-80 provides three travel lanes in each direction north of State Route 65 (SR-65) and four travel lanes in each direction south of SR-65.

- **State Route 65.** SR-65 provides regional access in the vicinity of the project. SR-65 runs generally northwest from I-80 and joins State Route 70 (SR-70) near the Town of Marysville. Near the I-80 connector, SR-65 is a four-lane expressway with interchanges at Galleria Boulevard/Stanford Ranch Road, Pleasant Grove Boulevard, Blue Oaks Boulevard/Washington Boulevard.

- **Pacific Street.** Pacific Street is a two-lane roadway east of Granite Drive, a four-lane roadway from Rocklin Road to Sierra Meadows Drive, and a two-lane roadway north of Sierra Meadows Drive. Pacific Street is classified as an Arterial in the City General Plan Circulation Element and is classified as a Truck Route by the City. This roadway provides travel through the entire City limits. Pacific Street becomes Taylor Road in all jurisdictions other than Rocklin.

- **Rocklin Road.** Rocklin Road is an east-west roadway located south of the project site. West of Sierra College Boulevard, Rocklin Road is a four-lane roadway. Immediately east of Sierra College Boulevard, there are one westbound and two eastbound travel lanes. Farther east, Rocklin Road becomes a two-lane roadway and terminates at Barton Road.

- **Dominguez Road.** Dominguez Road is classified as a Collector roadway on the City's General Plan. North of Pacific Street, Dominguez Road becomes Del Mar Avenue. Dominguez Road/Del Mar Avenue is currently a two-lane undivided roadway. Currently, Dominguez Road terminates at Granite Drive west of I-80. Dominguez Road is planned to be extended across I-80 (just an overcrossing) to Sierra College Boulevard to form a fourth leg at the intersection of Sierra College Boulevard/Southern Project Boundary. The Dominguez Road extension is included in the City's Traffic Impact Fee and Capital Improvement Program (CIP).

- **Brace Road.** Brace Road is a two-lane east-west roadway located north of the project site. This roadway is mostly located within the Town of Loomis, but a short segment from west of Sierra College Boulevard is located within the City of Rocklin.

- **Horseshoe Bar Road.** This roadway is located within the Town of Loomis and provides access to I-80. Horseshoe Bar Road is a two-lane roadway running in a northwest-southeast direction and is located north of the project site.

As shown in Exhibit 4.2-2, the intersection of Sierra College Boulevard/English Colony Way has a shared through/right-turn lane in the northbound direction, an exclusive left-turn lane, and a through lane in the southbound direction, and an exclusive left-turn lane and an exclusive right-turn lane in the westbound direction. It should be noted that even though two lanes (left turn and right turn) are not striped along the westbound approach, it currently functions as two lanes. The westbound approach is approximately 30 feet wide at the intersection and more than 19 feet wide for a distance of 60 feet east of the stop line. Due to the wide approach, two vehicles can be accommodated side-by-side. Hence, the intersection was analyzed with an exclusive left-turn lane and an exclusive right-turn lane in the westbound direction. Additionally, since the left turning volume along westbound approach is very low (1 vehicle in the a.m. peak hour and 3 in the p.m. peak hour), it is less likely to form long queues (vehicles waiting to turn left onto southbound Sierra College Boulevard) and block the right turning vehicles.

EXISTING TRAFFIC VOLUMES

Despite the fact that the Sacramento Superior Court's ruling (discussed in the Introduction) said nothing about the need for the City to provide updated traffic counts, as part of its efforts to achieve a greater level of consistency between the traffic study for the project and the economic impact and urban decay analysis, the City instructed LSA to obtain new traffic counts in order to utilize the most recent and best available data to determine the traffic impacts of the project. Thus, just as CBRE conducted a new economic impact and urban decay analysis reflecting current and anticipated economic conditions, LSA collected new traffic counts.

Existing traffic counts at the 20 study area intersections (the intersection of Sierra College Boulevard/Dominguez Road is a future intersection that does not yet exist) were collected in May 2010 for the a.m. (7:00 a.m. to 9:00 a.m.), p.m. (4:00 p.m. to 6:00 p.m.), and Saturday midday (11:00 a.m. to 1:00 p.m.) peak hours. These counts were taken during a non-holiday (excluding summer and winter breaks) period when schools were in session, and therefore, include the traffic generated by Sierra College and all schools in the study area. The daily counts collected in May 2010 are lower than the daily counts collected in 2006 at a majority of the study area locations. For the weekday peak hours, a majority of the locations have lower counts in 2010. On Saturday, however, a majority of the locations have moderately higher volumes in 2010. These changes are not surprising, recognizing that reduced economic activity sometimes translates into reduced weekday traffic (due, among other things, to fewer commuters on the road). The existing a.m. and p.m. peak-hour and Saturday peak-hour traffic volumes are illustrated on Exhibits 4.2-3 and 4.2-4, respectively, and are available in Appendix B.

EXISTING LEVELS OF SERVICE

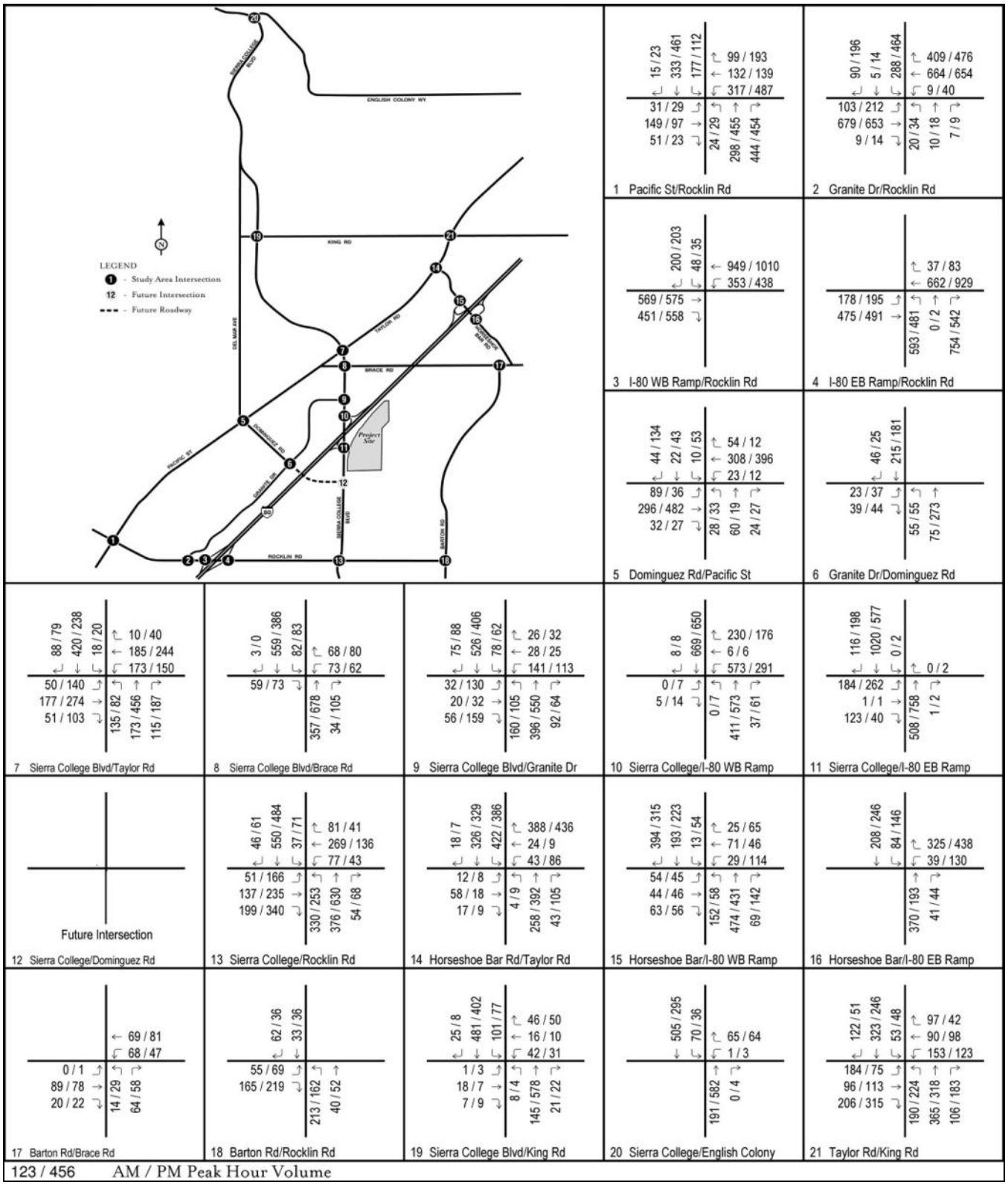
LOS at study area intersections and roadway segments were calculated for the existing conditions and are summarized in Tables 4.2-1 and 4.2-2. The existing LOS worksheets are provided in Appendix B.

As shown in Table 4.2-1, all study area intersections are operating at satisfactory LOS in the existing condition.

Roadway segments were analyzed using the two step process explained previously in the methodology section. First, the segments were reviewed using generalized daily capacities; and, as shown in Table 4.2-2, most of the study area roadway segments are forecast to operate within their generalized daily roadway capacities in the existing condition except for three segments. Next, a detailed directional peak-hour roadway segment analysis was prepared for these three segments and is shown in Table 4.2-3. In the a.m., p.m., and Saturday midday peak hours, those three roadway segments would operate with satisfactory v/c ratios. Because the roadway segments would operate with satisfactory v/c ratios during the peak hours of roadway traffic, they are not considered deficient.

4.2.5 PROJECT TRIP GENERATION AND DISTRIBUTION

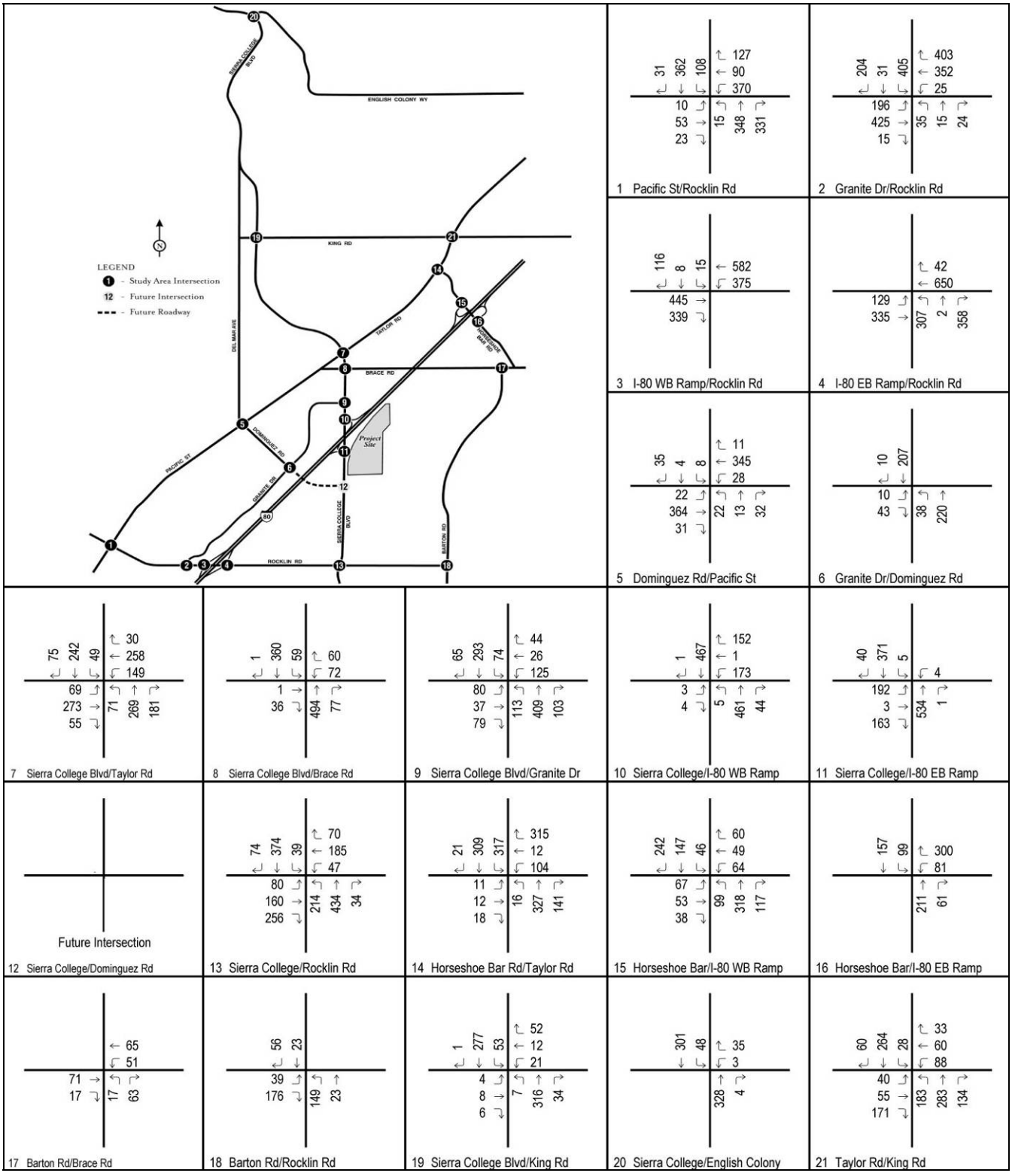
The proposed project is a regional shopping center with approximately 543,500 square feet of retail/ commercial uses, including two major tenants (presently expected to be a Walmart and a Home Depot store). The generation and distribution of trips associated with the proposed project are discussed below.



Source: LSA Associates 2010

Existing Peak Hour Traffic Volumes

Exhibit 4.2-3



Source: LSA Associates 2010

Existing Saturday Peak Hour Traffic Volumes **Exhibit 4.2-4**

Table 4.2-1: Existing Peak-Hour Intersection Levels of Service

	Intersection	Existing Condition					
		AM Peak Hour		PM Peak Hour		Saturday	
		V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS
1	Rocklin Road/Pacific Street [1]	0.699	B	0.701	C	0.528	A
2	Rocklin Road/Granite Drive	0.448	A	0.607	B	0.472	A
3	Rocklin Road/I-80 Westbound Ramps	19.1 sec	B	18.8 sec	B	18.7 sec	B
4	Rocklin Road/I-80 Eastbound Ramps	25.4 sec	C	24.6 sec	C	22.0 sec	C
5	Dominguez Road/Pacific Street [1]	0.385	A	0.483	A	0.337	A
6	Dominguez Road/Granite Drive* [1]	11.3 sec	B	11.5 sec	B	9.9 sec	A
7	Sierra College Boulevard/Taylor Road [1] (Loomis)	28.6 sec	C	28.2 sec	C	28.5 sec	C
8	Sierra College Boulevard/Brace Road [1] (Loomis)	19.1 sec	B	12.9 sec	B	12.1 sec	B
9	Sierra College Boulevard/Granite Drive	0.433	A	0.391	A	0.325	A
10	Sierra College Boulevard/I-80 Westbound Ramps	16.1 sec	B	9.7 sec	A	8.6 sec	A
11	Sierra College Boulevard/I-80 Eastbound Ramps	7.3 sec	A	6.9 sec	A	8.1 sec	A
12	Sierra College Boulevard/Dominguez Road	-	-	-	-	-	-
13	Sierra College Boulevard/Rocklin Road [1]	0.748	C	0.661	B	0.562	A
14	Taylor Road/Horseshoe Bar Road [1] (Loomis)	25.8 sec	C	18.6 sec	B	17.6 sec	B
15	Horseshoe Bar Road/I-80 Westbound Ramps [1] (Loomis)	18.5 sec	B	19.4 sec	B	21.7 sec	C
16	Horseshoe Bar Road/I-80 Eastbound Ramps* [1] (Loomis)	16.8 sec	C	16.9 sec	C	13.4 sec	B
17	Barton Road/Brace Road* [1] (Loomis)	9.8 sec	A	9.7 sec	A	9.5 sec	A
18	Barton Road/Rocklin Road* [1] (Loomis)	9.9 sec	A	9.7 sec	A	9.0 sec	A
19	Sierra College Boulevard/King Road [1] (Loomis)	15.5 sec	B	11.2 sec	B	13.6 sec	B
20	Sierra College Boulevard/English Colony Way* [1] (Placer County)	9.8 sec	A	13.8 sec	B	10.8 sec	B
21	Taylor Road/King Road [1] (Loomis)	33.0 sec	C	30.0 sec	C	27.8 sec	C

Notes:

ICU V/C ratio is used for signalized intersections in the City of Rocklin. HCM delay in seconds is used for unsignalized intersections and in the Town of Loomis.

* Indicates unsignalized intersection

[1] LOS C required for these intersections. LOS D acceptable for all other intersections.

☐ Exceeds level of service criteria

Table 4.2-2: Existing Daily Roadway Segment Level of Service Summary

Roadway	Segment	Configuration	Capacity	Weekday			Saturday		
				Volume	V/C	LOS	Volume	V/C	LOS
Taylor Road	King Road and Horseshoe Bar Road [1] (Loomis)	Two-lane Collector	15,000	16,184	1.08	F	11,797	0.79	C
	Horseshoe Bar Road and Sierra College Boulevard [1] (Loomis)	Two-lane Collector	15,000	9,541	0.64	B	9,179	0.61	B
	Sierra College Boulevard and City Limits [1] (Loomis)	Two-lane Collector	15,000	10,182	0.68	B	8,535	0.57	A
Pacific Street	City Limits and Dominguez Road [1]	Two-lane Collector	15,000	10,182	0.68	B	8,535	0.57	A
	Dominguez Road and Rocklin Road [1]	Four-lane Undivided Arterial	30,000	12,347	0.41	A	10,015	0.33	A
Rocklin Road	Pacific Street and Granite Drive	Four-lane Undivided Arterial	30,000	17,056	0.57	A	12,963	0.43	A
	I-80 and Sierra College Boulevard	Four-lane Undivided Arterial	30,000	14,795	0.49	A	11,787	0.39	A
	Sierra College Boulevard and Barton Road [1] (Loomis)	Two-lane Collector	15,000	6,228	0.42	A	5,029	0.34	A
Barton Road	Rocklin Road and Brace Road [1] (Loomis)	Two-lane Collector	15,000	1,755	0.12	A	1,456	0.10	A
Horseshoe Bar Road	I-80 and Brace Road [1] (Loomis)	Two-lane Collector	15,000	7,194	0.48	A	6,327	0.42	A
Brace Road	I-80 and Barton Road [1] (Loomis)	Two-lane Collector	15,000	2,397	0.16	A	1,867	0.12	A
	I-80 and Sierra College Boulevard [1] (Loomis)	Two-lane Collector	15,000	2,757	0.18	A	2,523	0.17	A
Sierra College Boulevard	English Colony Way and King Road [1] (Placer County)	Two-lane Collector	15,000	9,861	0.66	B	8,215	0.55	A
	King Road and Taylor Road [1] (Loomis)	Two-lane Collector	15,000	9,618	0.64	B	8,288	0.55	A
	Taylor Road and I-80	Two-lane Collector	15,000	16,150	1.08	F	13,510	0.90	E
	I-80 and Dominguez Road [2]	Four-lane Undivided Arterial	30,000	17,320	0.58	A	12,682	0.42	A
	Dominguez Road [2] and Rocklin Road [1]	Two-lane Collector	15,000	17,467	1.16	F	12,716	0.85	D
Granite Drive	Dominguez Road and Sierra College Boulevard [1]	Four-lane Undivided Arterial	30,000	7,462	0.25	A	5,973	0.20	A
	Dominguez Road and Rocklin Road [1]	Four-lane Undivided Arterial	30,000	5,547	0.18	A	4,668	0.16	A
Dominguez Road	Pacific Street and Granite Drive [1]	Two-lane Collector	15,000	1,958	0.13	A	737	0.05	A
King Road	Sierra College Boulevard and Taylor Road [1] (Loomis)	Two-lane Collector	15,000	2,980	0.20	A	2,501	0.17	A

Notes:

[1] LOS C required for these segments. LOS D acceptable for all other segments.

[2] Proposed location of the future extension of Dominguez Road.

☐ Exceeds level of service criteria

Table 4.2-3: Existing Peak-Hour Roadway Segment Level of Service Summary

Roadway	Segment	Capacity	Existing		
			Volume	V/C	LOS
Taylor Road	King Rd and Horseshoe Bar Rd (Loomis)				
	A.M. Peak Hour Northbound	1,650	660	0.40	A
	A.M. Peak Hour Southbound	1,650	724	0.44	A
	P.M Peak Hour Northbound	1,650	781	0.47	A
	P.M Peak Hour Southbound	1,650	703	0.43	A
	Saturday Peak Hour Northbound	1,650	627	0.38	A
	Saturday Peak Hour Southbound	1,650	585	0.35	A
Sierra College Boulevard	Taylor Rd and I-80				
	A.M. Peak Hour Northbound	1,650	423	0.26	A
	A.M. Peak Hour Southbound	1,650	685	0.42	A
	P.M Peak Hour Northbound	1,650	748	0.45	A
	P.M Peak Hour Southbound	1,650	539	0.33	A
	Saturday Peak Hour Northbound	1,650	552	0.33	A
	Saturday Peak Hour Southbound	1,650	450	0.27	A
Sierra College Boulevard	Dominguez Rd and Rocklin Rd				
	A.M. Peak Hour Northbound	1,650	508	0.31	A
	A.M. Peak Hour Southbound	1,650	633	0.38	A
	P.M Peak Hour Northbound	1,650	837	0.51	A
	P.M Peak Hour Southbound	1,650	616	0.37	A
	Saturday Peak Hour Northbound	1,650	584	0.35	A
	Saturday Peak Hour Southbound	1,650	487	0.30	A

PROJECT TRIP GENERATION

Trip generation for the proposed project is calculated based on rates contained in the Institute of Transportation Engineers' (ITE) *Trip Generation, 8th Edition*, which is a standard reference used by jurisdictions throughout the country for estimating the trip generation potential of proposed developments. The previous traffic analysis used trip generation rates from an ITE Journal article to develop the trip generation for the superstore (Walmart) component of the project and ITE manual (Seventh Edition) for the remaining components (Home Improvement store, Shopping Center) of the project. The new edition (8th Edition) of the ITE Trip Generation Manual (not available for the previous study) is now the best available information regarding the trip generation rates and hence was used to develop the trip generation for the proposed project. The Crossings project site was divided into three land use categories for developing the trip generation. Trips were generated for each of these categories individually and then added to calculate the total trip generation for the proposed development.

The proposed Walmart is most appropriately classified as a Free-Standing Discount Superstore (ITE Land Use 813). Trip generation calculations were based on the square footage of the enclosed building (including the garden center). As noted in the description of the land use code for Free-Standing Discount Superstore, garden centers contained within the principal outside faces of the exterior building walls were included in the gross square floor area reported. Outdoor or fenced-in areas outside the principal faces of the exterior building walls were excluded. Since the proposed Walmart has both an indoor and an outdoor garden center, in this study the square footage for the garden center (both indoor and outdoor) was conservatively included in the trip generation calculations for the Free-Standing Discount Superstore. The trip generation is shown in Table 4.2-4.

Table 4.2-4: Rocklin Crossings Trip Generation

				A.M. Peak Hour			P.M. Peak Hour			Saturday		
Land Use	**Size**	**Units**	**ADT**	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Discount Superstore	231.353	TSF										
Trip Rate [1]			53.13	0.94	0.73	1.67	2.26	2.35	4.61	2.82	2.82	5.64
Trip Generation			12,292	216	170	386	523	544	1,067	652	652	1,305
Home Improvement Store [2]	141.038	TSF										
Trip Rate [3]			29.80	0.72	0.54	1.26	1.14	1.23	2.37	2.30	2.21	4.51
Trip Generation			3,065	74	56	130	117	127	244	237	227	464
Shopping Center	171.109	TSF										
Trip Rate [4,5]			37.55	0.47	0.30	0.77	1.78	1.86	3.64	2.46	2.27	4.74
Trip Generation			6,425	80	51	132	305	318	623	422	389	811
Total Site Gross Trips			21,782	371	277	648	945	988	1,933	1,311	1,269	2,580
Total Site Pass-by Trips [6]			-2,178	-37	-28	-65	-189	-198	-387	-262	-254	-516
Total Site Trip Generation	**543.500**	**TSF**	**19,604**	**333**	**249**	**583**	**756**	**791**	**1,546**	**1,048**	**1,015**	**2,064**

Note: volumes show n rounded to nearest integer

[1] Trip generation based on rates for Land Use 813 - Free-Standing Discount Superstore from *ITE Trip Generation (8th Edition)*

[2] Trip generation of Home Improvement Store does not include garden center (34,760 sq. ft) and vestibules (3,411 sq. ft) per description of land use in ITE Trip Generation (8th Edition).

[3] Trip generation based on rates for Land Use 862 - Home Improvement Superstore from *ITE Trip Generation (8th Edition)*

[4] Average rate derived from total site generation (543.5 TSF) using fitted curve equations for Land Use 820 - Shopping Center from *ITE Trip Generation (8th Edition)*

[5] ADT: Ln(T) = 0.65 Ln(X) + 5.83; AM: Ln(T) = 0.59 Ln(X) + 2.32; PM: Ln(T) = 0.67 Ln(X) + 3.37; Saturday: Ln(T) = 0.65 Ln(X) + 3.76

[6] Pass-by trip percentages from ITE *Trip Generation Handbook*, 2004 vary betw een 23% and 48% for various land uses. How ever, a 10% estimate for daily trips and the a.m. peak hour and 20% estimate for the p.m. and Saturday midday peak hours have been used as a conservative average pass-by trip reduction rate for the entire retail center.

TSF = Thousand square feet

The proposed Home Depot store trip generation was calculated using ITE rates for a Home Improvement Store (ITE Land Use 862). The ITE rates for the Home Improvement Store were calculated based on several surveys/studies that counted the number of vehicles arriving at the Home Improvement Stores all over the country. The traffic volume measured at each site was divided by the square footage of each store (excluding the outside garden center) to calculate the trip generation rate. This square footage used in the calculation of the trip rate did not include the area of the outdoor garden center. Hence this trip generation rate is only applied to the square footage of the proposed Home Improvement Store excluding the area of the outdoor garden center. This does not mean that the trips associated with the outdoor garden center are not counted. In fact it means that the trips generated by the outdoor garden center are included in the trip rate. Since the Home Depot garden center would be outside the

principal exterior building walls, which is consistent with the description of the land use code for Home Improvement Store, the vehicle trip generation shown in Table 4.2-4 for the Home Improvement Store designation is based on the floor area without the garden center.

The remaining uses within the project site were classified as Shopping Center uses (ITE Land Use 820). The trip generation for the Shopping Center land use was calculated in two steps. First, the fitted-curve equations[4] were applied to the total square footage of the proposed buildings within the project site (including the area occupied by the Walmart and Home Depot store) to develop a gross trip generation. The gross trips generated were then divided by the total size (square footage) of the proposed buildings within the project site to estimate the average trip generation rate. This rate was then applied to the remaining portion (excluding Walmart and Home Depot) of the project site, as indicated in Table 4.2-4. This procedure properly reflects the internal trip-generating characteristics of a regional shopping center. Based on the ITE fitted-curve equations, as the size of the shopping center increases, the trips per square foot decrease. This reflects the concept of increasing multi-store activity as a shopping center increases in size. To apply this consideration to this project, the Shopping Center trip rate per square foot was calculated combining the total square footage of the site (including Walmart and Home Depot) and then applying it to the remaining Shopping Center square footage.

Pass-By Trips

Some of the trips generated by a retail shopping center such as the proposed project would be pass-by trips, or trips whose primary destination is not the shopping center. These would include trips such as a work-to-home trip in which the driver stops at a retail center on the way home from work. These trips would not be new trips generated by the project; rather, they are trips that are already on the roadway network that would make a stop at the proposed shopping center. ITE's *Trip Generation Handbook*[5] (2004) provides estimates of pass-by trip percentages for various types of land uses. The *Trip Generation Handbook* includes weekday p.m. and some Saturday information. The Handbook documents an average weekday p.m. pass-by reduction rate for a Free-Standing Discount Superstore (Land Use 813) of 28 percent. No weekday a.m., daily (ADT) and Saturday pass-by data were available for a Free-Standing Discount Superstore. The average weekday p.m. pass-by reduction for a Home Improvement Superstore (Land Use 862) was 48 percent. No weekday a.m., daily (ADT) and Saturday pass-by data was available for the Home Improvement Superstore classification. The average weekday p.m. and Saturday pass-by reduction for a Shopping Center (Land Use 820) is 34 and 26 percent, respectively. No weekday a.m. pass-by data were available for the Shopping Center designation. The unavailability of weekday a.m. pass-by data does not mean that there are no pass-by trips in the a.m. peak hour; it just means they have not been counted.

In consideration of the above information, an average pass-by reduction factor of 20 percent was selected for the weekday p.m. and Saturday conditions, rather than the higher (permitted) rate ranging from 26 to 48%. This approach was taken to be conservative so as to allow the

[4] Curve fitting is the process of constructing a curve, or mathematical function, that has the best fit to a series of data points, which in this case is trip generation data for shopping centers. The mathematical function is known as the fitted curve equation.

[5] Note that the Trip Generation Handbook is different than a Trip Generation Manual that was previously referenced in the report.

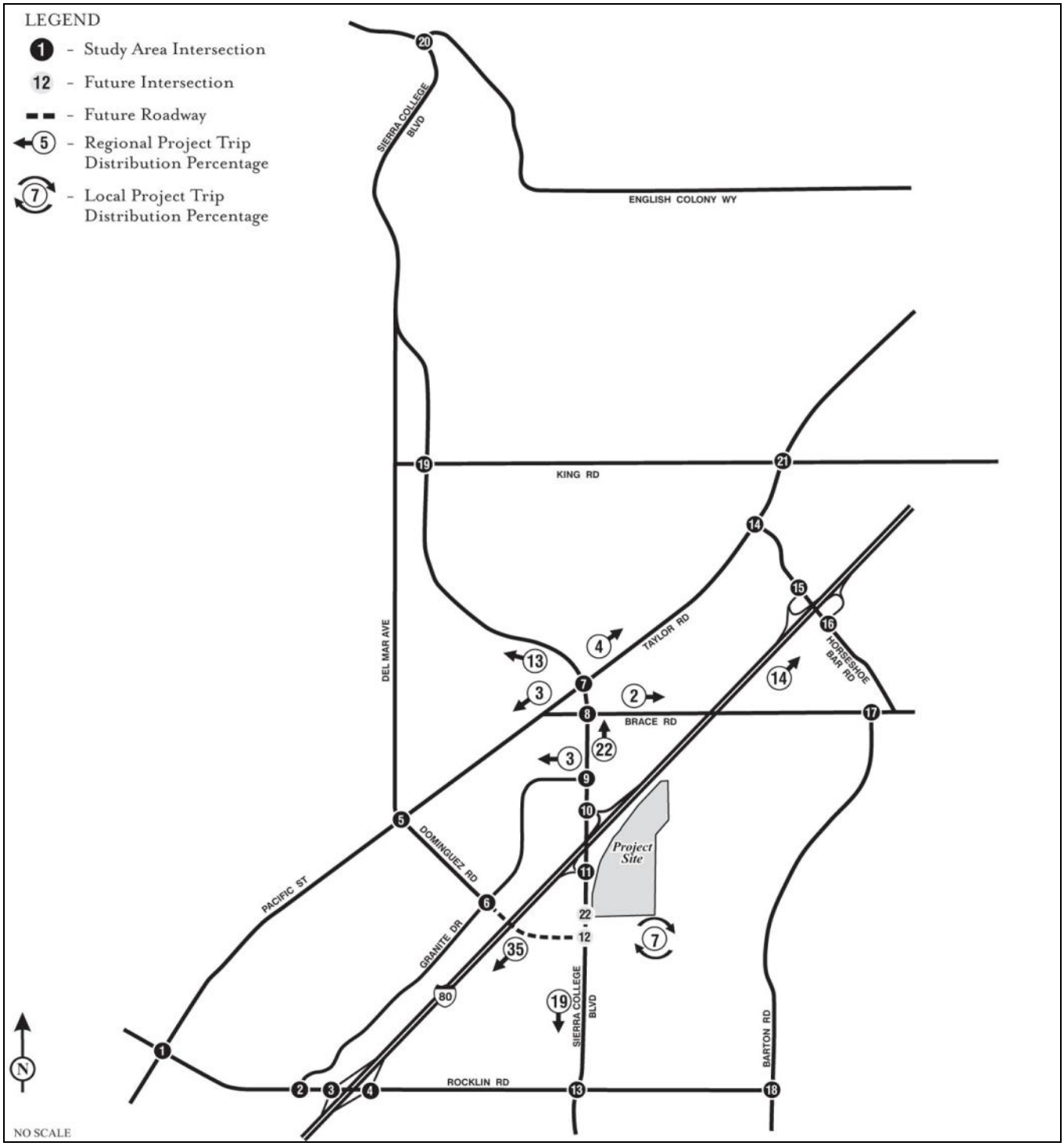
City to have confidence that no impacts would be understated. Due to the absence of data (in the ITE *Trip Generation Handbook*) for the a.m. peak hour and the ADT, a conservative estimate of 10 percent average pass-by trip reduction rate is proposed for the a.m. peak hour and the average daily trips generated by the entire retail center. Although the use of these conservative rates might well understate the actual percentage of pass-by trips the center would experience and thereby also overstate the number of "new trips" attributable to the project, the City, DKS and LSA opted to use the conservative rates anyway in order to avoid any possibility of understating project impacts.

As indicated in Table 4.2-4, the project is forecast to generate 19,604 daily trips, 583 a.m. peak-hour trips, 1,546 p.m. peak-hour trips, and 2,064 Saturday midday peak-hour trips. Even though these project trips are used in the analysis for all the intersections and roadway segments, the project driveways were analyzed using "gross trips," as shown in Table 4.2-4.

PROJECT TRIP DISTRIBUTION

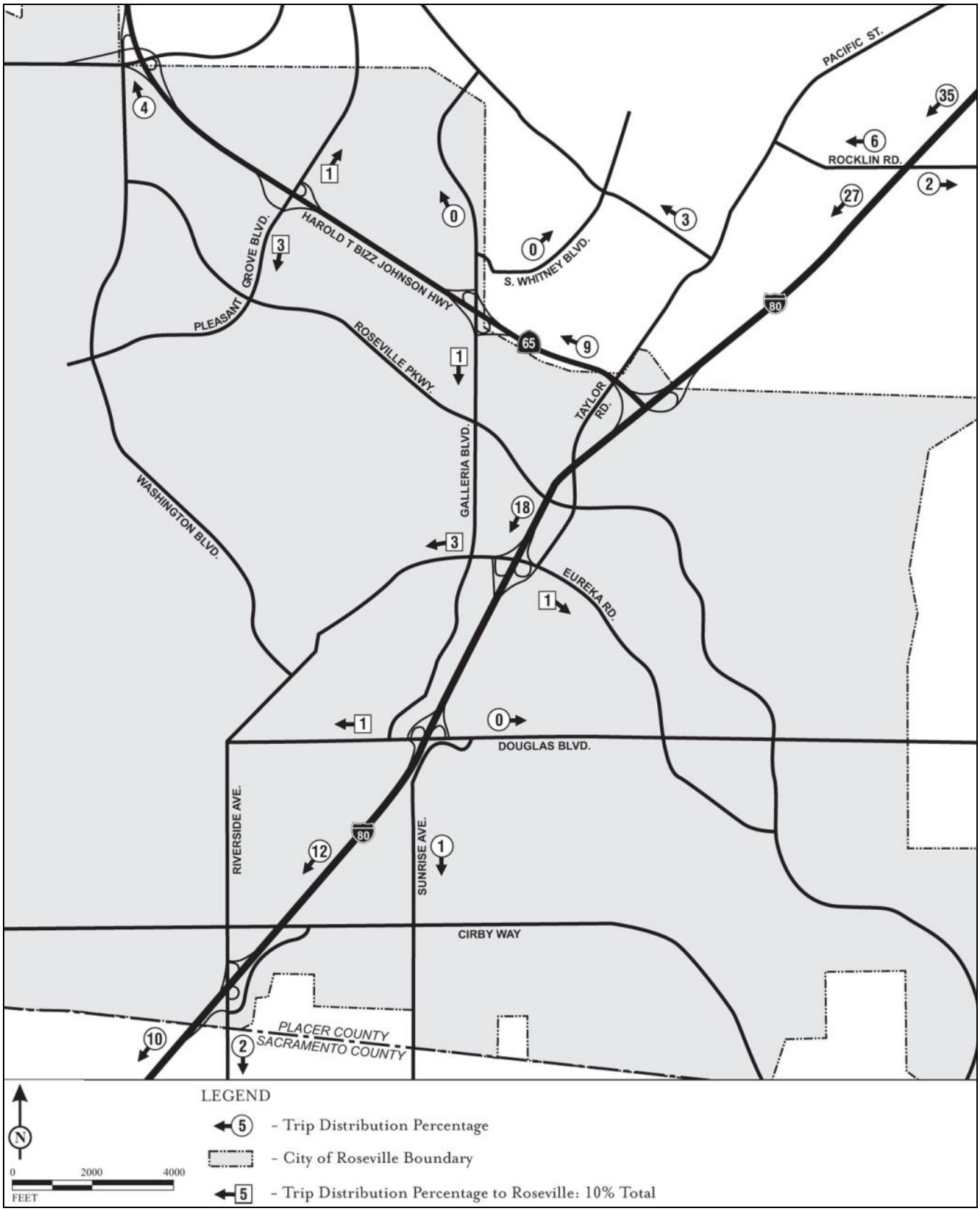
Project trips were distributed throughout the study area using information from the City's current travel demand model, and with the benefit of information obtained from CBRE with respect to the primary and secondary market areas for the "big box" components of the project. Using the travel demand model, a process known as "select zone assignment" is applied to distribute and assign trips from a specific zone (the project) through the highway network to an origin. The travel demand model goes through several iterations to develop the most likely distribution pattern that takes into account several factors such as the shortest distance between origin and destination, availability of capacity, type of uses, etc. before assigning the project trips. The select zone assignment process does *not* recognize specific brands of retail (Walmart, Home Depot, etc.) but instead applies generic land uses such as retail, industrial or office. This is the superior methodology, as over time, brands come and go and move while use categories offer greater stability. A manual trip distribution process would be required to consider specific retail brands. However, a manual process would not reflect the migration of such businesses over time nor would it be compatible with other travel demand model applications (such as 2030 cumulative conditions). Businesses migrate from one location to another with no changes to zoning or general plan land uses. It is the zoning and general plan land uses that are reflected in the travel demand model data base, and therefore, represent a more accurate and sustained approach toward analysis of resultant trip making characteristics. The travel demand model will include additional trips toward the Roseville area that must be considered (deliveries, employees and pass-by trips) but are not considered in the economic impact and urban decay analysis. These trips will be evident on I-80 into Sacramento County and SR-65 into Lincoln. Therefore, the travel demand model represents the most accurate means of analysis and draws more sustainable conclusions, particularly over extended periods of time. Hence the select zone model assignment for the proposed project was used to determine the trip distribution.

The regional trip distribution percentages in the vicinity of the project site are illustrated on Exhibit 4.2-5 and the trip distribution percentages south of Rocklin Road/I-80 interchange are illustrated on Exhibit 4.2-6. A detailed breakdown of the trip distribution within the study area (Exhibit 4.2-5) and south of Rocklin Road/I-80 interchange (Exhibit 4.2-6) is presented such that trip distribution percentages to specific regions/cities can be easily determined. It should also be noted that the land uses in the travel demand model are generic commercial/retail uses and do not necessarily reflect the characteristics of specific retailers (Walmart, Home



Source: LSA Associates 2010

Project Trip Distribution (Study Area) **Exhibit 4.2-5**



Source: LSA Associates 2010

Project Trip Distribution (South of Rocklin Road/I-80 Interchange) **Exhibit 4.2-6**

Depot, etc.). This is appropriate because, as explained above, retailers on any given site can change over time.

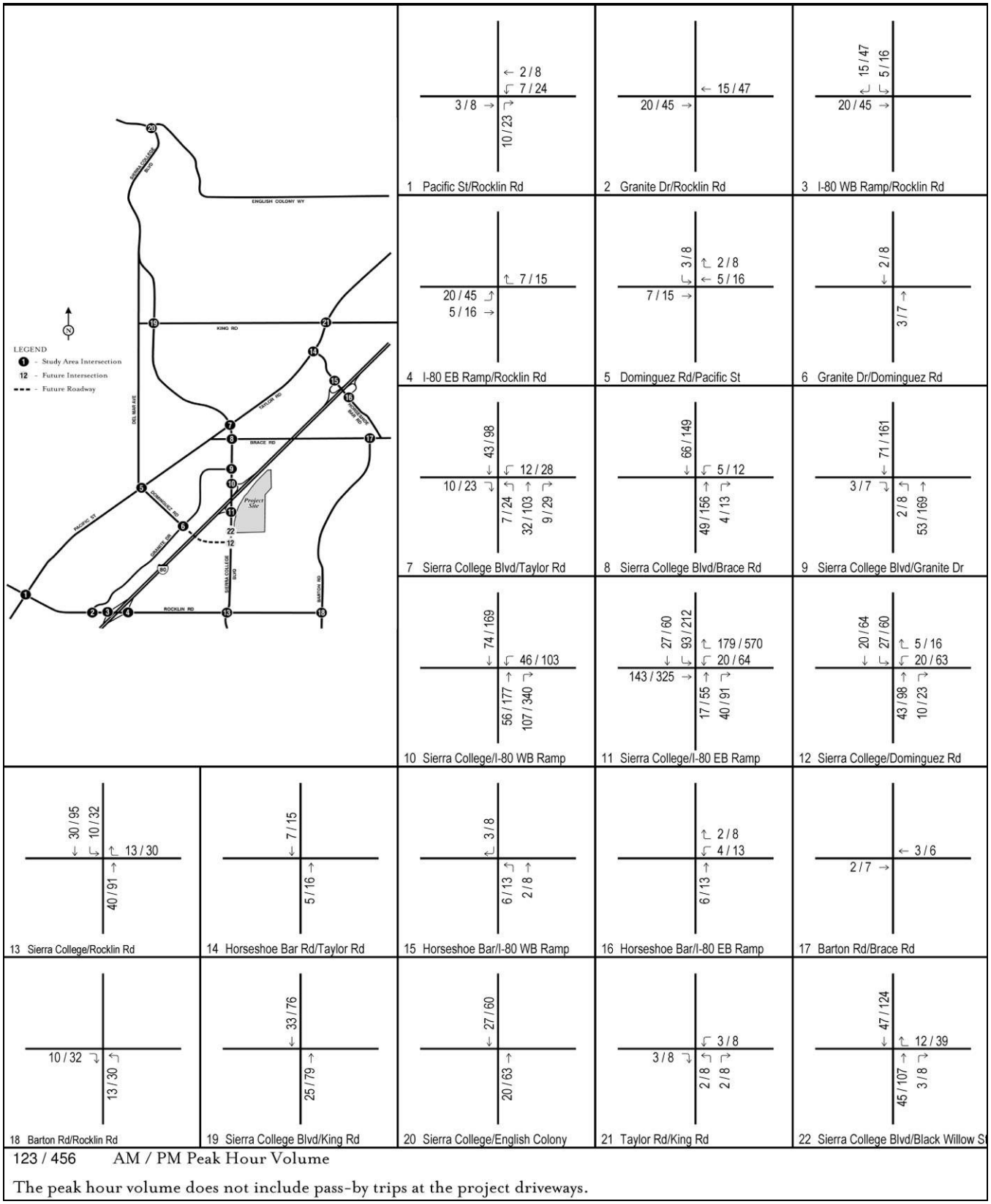
As seen in Exhibit 4.2-5, project traffic is distributed as follows: 14 percent of project traffic would travel northeast along I-80, 35 percent of project traffic would travel southwest along I-80, 22 percent would travel north along Sierra College Boulevard, 19 percent would travel south along Sierra College Boulevard, 3 percent would travel southwest along Granite Drive, and 7 percent would have destinations within close proximity to the project site.

As discussed earlier (Exhibit 4.2-5), approximately 35 percent of project traffic would travel southwest along I-80 before Rocklin Road. Approximately 8 percent of the traffic (out of 35 percent) would exit at the Rocklin Road interchange (Exhibit 4.2-6), 6 percent would travel west, and 2 percent would travel east along Rocklin Road. As seen on Exhibit 4.2-6, the remaining 27 percent of the traffic would travel southwest along I-80 up to SR-65. At that point, 9 percent would travel west on SR-65 and the remaining 18 percent would travel southwest along I-80 beyond SR-65. Of the 18 percent of project traffic continuing southwest along I-80, 12 percent would continue to travel southwest beyond the County line into Sacramento County (10% via I-80 and 2% via Riverside Avenue). The project trips at each study area intersection are illustrated on Exhibits 4.2-7 and 4.2-8.

As seen in Exhibit 4.2-6, approximately 10 percent of project trips most likely end or originate in the City of Roseville (shown in squares). Of the 10 percent, approximately 5 percent of the project trips use SR-65 (4 percent exit at Pleasant Grove Boulevard and 1 percent exits Galleria Boulevard) while 5 percent of the project trips use I-80 (4 percent exit at Eureka Road, and 1 percent exit Douglas Boulevard). Due to the dynamic nature of the travel demand model, it is likely that there could be some trips that travel through Roseville and actually end in Rocklin (e.g. trips exiting Pleasant Grove Boulevard from SR-65 and traveling north) and, on the other hand, some trips that travel through Rocklin may actually end in Roseville (e.g. trips traveling south along Sierra College Boulevard). Even after considering these factors, it can be said that approximately 10 percent of the trips would end in Roseville. In order to explain the trip distribution in simple terms the above discussion only uses the outbound trips. It should be noted that the inbound trips would originate from the areas where the outbound trips end and follow the same paths (in reverse direction) to get to the project.

The trip distribution for the proposed Crossings project was reviewed and compared to the market area assessment included in the *Economic Impact and Urban Decay Analysis* prepared by CB Richard Ellis (CBRE). Although the economic impact and urban decay analysis did not include Roseville within either the primary or the secondary market area, as discussed on page 16 of the CBRE study, it nevertheless assumes that approximately 10 percent of shoppers would originate from Roseville. As that study explains, most of these Roseville residents would not be making single purpose shopping trips with Rocklin Crossings as their destination, as there are opportunities to shop at both Walmart and Home Depot at closer locations. Rather, these Roseville residents shopping at Rocklin Crossings would likely do so in connection with "pass-by trips," meaning that these persons would stop in at the center on their way to other destinations.

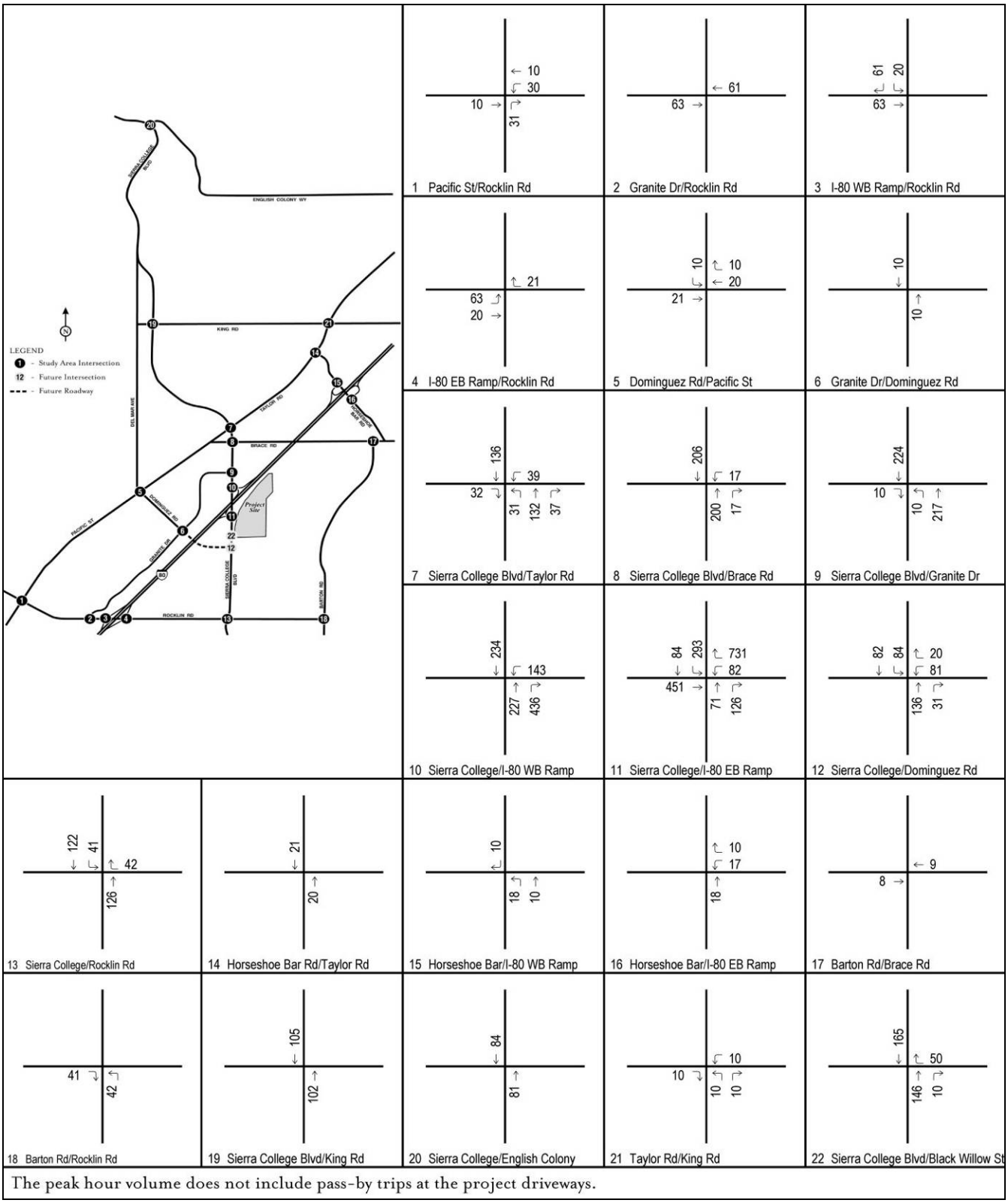
The economic impact and urban decay analysis focuses on shoppers only and is not intended to represent an analysis of trips, traffic, traffic generation or similar concepts. The economic impact and urban decay analysis also does not take into account the employee, delivery, and



Source: LSA Associates 2010

AM and PM Peak-Hour Project Trips

Exhibit 4.2-7



The peak hour volume does not include pass-by trips at the project driveways.

Source: LSA Associates 2010

Saturday Peak-Hour Project Trips

Exhibit 4.2-8

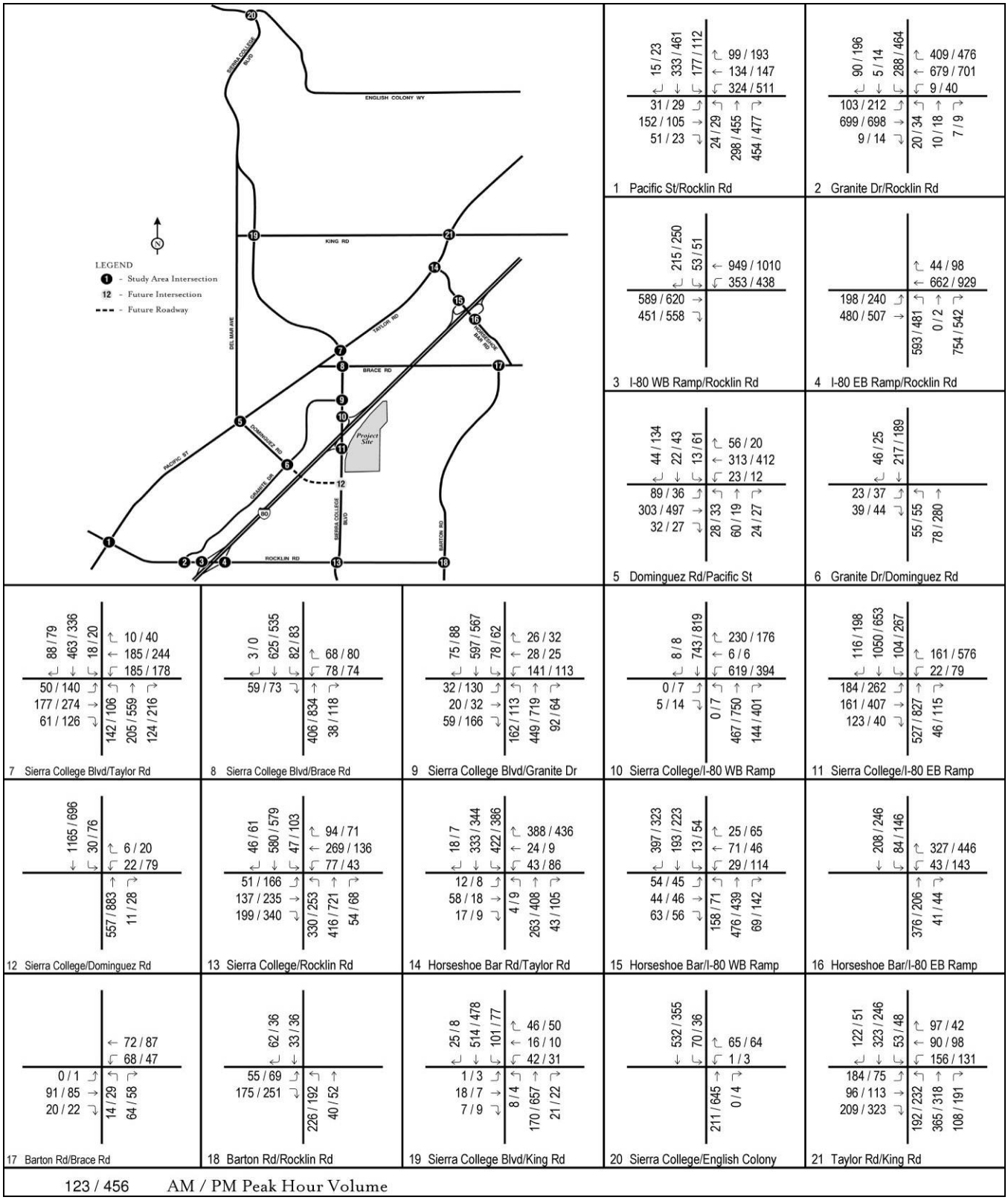
pass-by traffic. While the traffic study must consider all traffic categories (shoppers, employees, deliveries, etc.) coming to the project, the economic study only considered shoppers and economic activity. As a result of these differences in assumptions and methodology, the distribution patterns of project-related traffic should not be identical when comparing the two studies or working within each discipline. Additional divergences can be explained by the manner in which each study has chosen to be conservative, consistent with CEQA principles. Just as the traffic study prepared for this SPRDEIR uses a very conservative pass-by percentage of 20 percent (even though a substantially higher percentage would be supported by the technical literature), the economic impact and urban decay analysis assumes a greater percentage of shoppers from the primary and secondary market areas than might be supportable based on the economic literature, as CBRE explained to LSA during the coordination between the two studies and further discussed in its report to the City. The authors of the respective studies have opted to err on the side of caution as a way of avoiding understating environmental impacts (either traffic impacts or potential urban decay impacts). In short, in order to be true to the best available information used in their respective disciplines, and in order to be conservative in different respects so as to avoid understating impacts, the authors chose not to seek a perfect convergence of assumptions for its own sake, despite the obvious temptation to reach such a result in light of the Superior Court ruling. It is the professional judgment of the preparers of the two studies that it would be inappropriate, and would not serve the interest of the public or the City of Rocklin, to take steps to artificially coordinate the data to provide for identical assumptions between these two very different studies. Nevertheless, the traffic analysis, like CBRE's new economic impact and urban decay analysis, reflects close coordination and ongoing conversations between the two experts (in their respective fields), and each study has been prepared with intellectual integrity based on the best information available and best professional judgment and analysis of each firm and in consideration of the work of the other.

4.2.6 EXISTING PLUS PROJECT

Traffic volumes generated by the proposed project were added to the existing traffic volumes and LOS conclusions were calculated for the existing plus project scenario. Construction of the project would follow construction of other previously approved projects in the study area; therefore, the existing plus project conditions are not the real-world physical condition (where the project would be constructed before other approved projects in the region) that the project would affect. However, an existing plus project condition has nevertheless been analyzed for disclosure purposes. The existing plus project weekday and Saturday peak-hour traffic volumes are illustrated on Exhibits 4.2-9 and 4.2-10. The LOS for study area intersections and roadway segments in the existing plus project scenario are shown in Tables 4.2-5 and 4.2-6. The existing plus project LOS worksheets are provided in Appendix B.

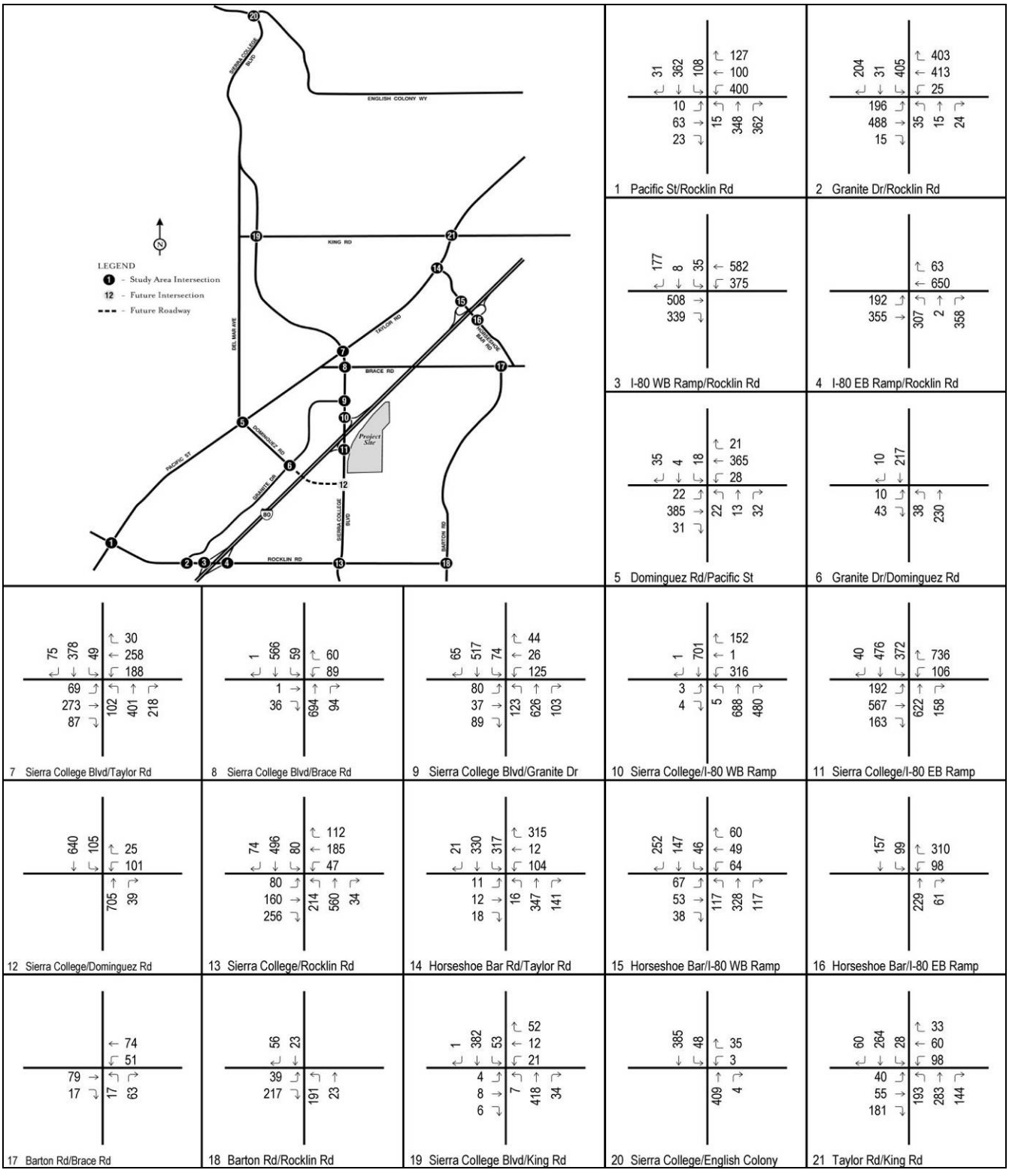
As shown in Table 4.2-5, all study area intersections are forecast to operate at satisfactory LOS in the existing plus project scenario.

For roadway segments, Tables 4.2-6 and 4.2-7 show that application of the two-step procedure, first evaluating daily volume to capacity and then, if necessary, peak hour directional volume to capacity, results in no project impacts. While three roadway segments exceeded daily capacities, the peak hour directional analysis confirmed that these three segments would operate at acceptable LOS.



Source: LSA Associates 2010

Existing Plus Project Peak-Hour Traffic Volumes — Exhibit 4.2-9



Source: LSA Associates 2010

Existing Plus Project Saturday Peak-Hour Traffic Volumes Exhibit 4.2-10

Table 4.2-5: Existing plus Project Peak-Hour Intersection Level of Service Summary

	Intersection	Existing Condition						Existing Plus Project Condition					
		AM Peak Hour		PM Peak Hour		Saturday		AM Peak Hour		PM Peak Hour		Saturday	
		V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS
1	Rocklin Road/Pacific Street [1]	0.699	B	0.701	C	0.528	A	0.711	C	0.733	C	0.569	A
2	Rocklin Road/Granite Drive	0.448	A	0.607	B	0.472	A	0.453	A	0.625	B	0.494	A
3	Rocklin Road/I-80 Westbound Ramps	19.1 sec	B	18.8 sec	B	18.7 sec	B	19.7 sec	B	23.1 sec	C	21.6 sec	C
4	Rocklin Road/I-80 Eastbound Ramps	25.4 sec	C	24.6 sec	C	22.0 sec	C	26.1 sec	C	27.9 sec	C	23.5 sec	C
5	Dominguez Road/Pacific Street [1]	0.385	A	0.483	A	0.337	A	0.392	A	0.493	A	0.352	A
6	Dominguez Road/Granite Drive* [1]	11.3 sec	B	11.5 sec	B	9.9 sec	A	11.3 sec	B	11.6 sec	B	10.0 sec	B
7	Sierra College Boulevard/Taylor Road [1] (Loomis)	28.6 sec	C	28.2 sec	C	28.5 sec	C	28.7 sec	C	29.5 sec	C	29.0 sec	C
8	Sierra College Boulevard/Brace Road [1] (Loomis)	19.1 sec	B	12.9 sec	B	12.1 sec	B	20.0 sec	B	13.3 sec	B	10.8 sec	B
9	Sierra College Boulevard/Granite Drive	0.433	A	0.391	A	0.325	A	0.461	A	0.455	A	0.408	A
10	Sierra College Boulevard/I-80 Westbound Ramps	16.1 sec	B	9.7 sec	A	8.6 sec	A	15.3 sec	B	9.5 sec	A	9.7 sec	A
11	Sierra College Boulevard/I-80 Eastbound Ramps	7.3 sec	A	6.9 sec	A	8.1 sec	A	13.1 sec	B	25.6 sec	C	32.2 sec	C
12	Sierra College Boulevard/Dominguez Road	-	-	-	-	-	-	-	-	-	-	-	-
13	Sierra College Boulevard/Rocklin Road [1]	0.748	C	0.661	B	0.562	A	0.769	C	0.695	B	0.637	B
14	Taylor Road/Horseshoe Bar Road [1] (Loomis)	25.8 sec	C	18.6 sec	B	17.6 sec	B	26.0 sec	C	28.5 sec	C	17.7 sec	B
15	Horseshoe Bar Road/I-80 Westbound Ramps [1] (Loomis	18.5 sec	B	19.4 sec	B	21.7 sec	C	18.5 sec	B	20.3 sec	C	21.8 sec	C
16	Horseshoe Bar Road/I-80 Eastbound Ramps* [1] (Loomis	16.8 sec	C	16.9 sec	C	13.4 sec	B	17.1 sec	C	18.1 sec	C	14.1 sec	B
17	Barton Road/Brace Road* [1] (Loomis)	9.8 sec	A	9.7 sec	A	9.5 sec	A	9.8 sec	A	9.7 sec	A	9.5 sec	A
18	Barton Road/Rocklin Road* [1] (Loomis)	9.9 sec	A	9.7 sec	A	9.0 sec	A	10.1 sec	A	10.4 sec	B	9.8 sec	A
19	Sierra College Boulevard/King Road [1] (Loomis)	15.5 sec	B	11.2 sec	B	13.6 sec	B	15.2 sec	B	11.0 sec	B	11.7 sec	B
20	Sierra College Boulevard/English Colony Way* [1] (Placer	9.8 sec	A	13.8 sec	B	10.8 sec	B	10.0 sec	A	14.8 sec	B	11.6 sec	B
21	Taylor Road/King Road [1] (Loomis)	33.0 sec	C	30.0 sec	C	27.8 sec	C	33.1 sec	C	31.0 sec	C	28.2 sec	C

Notes:

ICU V/C ratio is used for signalized intersections in the City of Rocklin. HCM delay in seconds is used for unsignalized intersections and in the Town of Loomis.

* Indicates unsignalized intersection

[1] LOS C required for these intersections. LOS D acceptable for all other intersections.

[2] Project-related increase is less than 0.05 in V/C ratio or less than 5% of the total traffic at the intersection, therefore not a significant impact.

Exceeds level of service criteria

(Shade) = Significant Impact

Table 4.2-6: Existing plus Project Daily Roadway Segment Level of Service Summary

Roadway	Segment	Configuration	Capacity	Existing						Existing Plus Project					
				Weekday			Saturday			Weekday			Saturday		
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS
Taylor Road	King Road and Horseshoe Bar Road [1] (Loomis)	Two-lane Collector	15,000	16,184	1.08	F	11,797	0.79	C	16,499	1.10	F	12,202	0.81	D
	Horseshoe Bar Road and Sierra College Boulevard[1] (Loomis)	Two-lane Collector	15,000	9,541	0.64	B	9,179	0.61	B	9,981	0.67	B	9,764	0.65	B
	Sierra College Boulevard and City Limits [1] (Loomis)	Two-lane Collector	15,000	10,182	0.68	B	8,535	0.57	A	10,652	0.71	B	9,155	0.61	B
Pacific Street	City Limits and Dominguez Road [1]	Two-lane Collector	15,000	10,182	0.68	B	8,535	0.57	A	10,652	0.71	B	9,155	0.61	B
	Dominguez Road and Rocklin Road [1]	Four-lane Undivided Arterial	30,000	12,347	0.41	A	10,015	0.33	A	12,502	0.42	A	10,220	0.34	A
Rocklin Road	Pacific Street and Granite Drive	Four-lane Undivided Arterial	30,000	17,056	0.57	A	12,963	0.43	A	17,831	0.59	A	13,988	0.47	A
	I-80 and Sierra College Boulevard	Four-lane Undivided Arterial	30,000	14,795	0.49	A	11,787	0.39	A	14,950	0.50	A	11,992	0.40	A
	Sierra College Boulevard and Barton Road [1] (Loomis)	Two-lane Collector	15,000	6,228	0.42	A	5,029	0.34	A	6,848	0.46	A	5,859	0.39	A
Barton Road	Rocklin Road and Brace Road [1] (Loomis)	Two-lane Collector	15,000	1,755	0.12	A	1,456	0.10	A	1,755	0.12	A	1,456	0.10	A
Horseshoe Bar Road	I-80 and Brace Road [1] (Loomis)	Two-lane Collector	15,000	7,194	0.48	A	6,327	0.42	A	7,404	0.49	A	6,597	0.44	A
Brace Road	I-80 and Barton Road [1] (Loomis)	Two-lane Collector	15,000	2,397	0.16	A	1,867	0.12	A	2,647	0.18	A	2,207	0.15	A
	I-80 and Sierra College Boulevard [1] (Loomis)	Two-lane Collector	15,000	2,757	0.18	A	2,523	0.17	A	2,887	0.19	A	2,693	0.18	A
Sierra College Boulevard	English Colony Way and King Road [1] (Placer County)	Two-lane Collector	15,000	9,861	0.66	B	8,215	0.55	A	11,251	0.75	C	10,075	0.67	B
	King Road and Taylor Road [1] (Loomis)	Two-lane Collector	15,000	9,618	0.64	B	8,288	0.55	A	11,398	0.76	C	10,663	0.71	B
	Taylor Road and I-80	Two-lane Collector	15,000	16,150	1.08	F	13,510	0.90	E	19,450	1.30	F	17,915	1.19	F
	I-80 and Dominguez Road [2]	Four-lane Undivided Arterial	30,000	17,320	0.58	A	12,682	0.42	A	20,495	0.68	B	16,952	0.57	A
	Dominguez Road [2] and Rocklin Road [1]	Two-lane Collector	15,000	17,467	1.16	F	12,716	0.85	D	20,252	1.35	F	16,431	1.10	F
Granite Drive	Dominguez Road and Sierra College Boulevard [1]	Four-lane Undivided Arterial	30,000	7,462	0.25	A	5,973	0.20	A	7,612	0.25	A	6,173	0.21	A
	Dominguez Road and Rocklin Road [1]	Four-lane Undivided Arterial	30,000	5,547	0.18	A	4,668	0.16	A	5,622	0.19	A	4,768	0.16	A
Dominguez Road	Pacific Street and Granite Drive [1]	Two-lane Collector	15,000	1,958	0.13	A	737	0.05	A	1,958	0.13	A	737	0.05	A
King Road	Sierra College Boulevard and Taylor Road [1] (Loomis)	Two-lane Collector	15,000	2,980	0.20	A	2,501	0.17	A	3,060	0.20	A	2,601	0.17	A

Notes:

[1] LOS C required for these segments. LOS D acceptable for all other segments.

[2] Proposed location of the future extension of Dominguez Road.

Table 4.2-7: Existing plus Project Peak-Hour Roadway Segment Level of Service Summary

Roadway	Segment	Capacity	Existing			Existing + Project		
			Volume	V/C	LOS	Volume	V/C	LOS
Taylor Road	King Rd and Horseshoe Bar Rd (Loomis)							
	A.M. Peak Hour Northbound	1,650	660	0.40	A	664	0.40	A
	A.M. Peak Hour Southbound	1,650	724	0.44	A	731	0.44	A
	P.M Peak Hour Northbound	1,650	781	0.47	A	797	0.48	A
	P.M Peak Hour Southbound	1,650	703	0.43	A	719	0.44	A
	Saturday Peak Hour Northbound	1,650	627	0.38	A	647	0.39	A
	Saturday Peak Hour Southbound	1,650	585	0.35	A	606	0.37	A
Sierra College Boulevard	Taylor Rd and I-80							
	A.M. Peak Hour Northbound	1,650	423	0.26	A	476	0.29	A
	A.M. Peak Hour Southbound	1,650	685	0.42	A	756	0.46	A
	P.M Peak Hour Northbound	1,650	748	0.45	A	917	0.56	A
	P.M Peak Hour Southbound	1,650	539	0.33	A	700	0.42	A
	Saturday Peak Hour Northbound	1,650	552	0.33	A	769	0.47	A
	Saturday Peak Hour Southbound	1,650	450	0.27	A	674	0.41	A
Sierra College Boulevard	Dominguez Rd and Rocklin Rd							
	A.M. Peak Hour Northbound	1,650	508	0.31	A	561	0.34	A
	A.M. Peak Hour Southbound	1,650	633	0.38	A	673	0.41	A
	P.M Peak Hour Northbound	1,650	837	0.51	A	958	0.58	A
	P.M Peak Hour Southbound	1,650	616	0.37	A	743	0.45	A
	Saturday Peak Hour Northbound	1,650	584	0.35	A	752	0.46	A
	Saturday Peak Hour Southbound	1,650	487	0.30	A	650	0.39	A

4.2.7 EXISTING PLUS APPROVED PROJECTS (BASELINE)

EXISTING PLUS APPROVED PROJECTS (BASELINE) TRAFFIC VOLUMES

To identify traffic conditions that could be expected at the time of the project's opening, an existing plus approved projects (baseline) scenario was developed. For example, the Clover Valley project, though not yet constructed, is an approved residential development project in the City that includes construction of a new roadway (Valley View Parkway) to connect Park Drive and Sierra College Boulevard. More importantly, the Rocklin City Council approved the Rocklin Commons project, a major shopping center on the northwestern side of the new I-80/Sierra College Boulevard Interchange, on December 8, 2009.

The widening of Sierra College Boulevard between Taylor Road and El Don Drive is a planned improvement. The overall Sierra College Boulevard Widening project is broken into two phases: Phase I, south of the I-80 interchange to El Don Drive (in Rocklin); and Phase II, north of the I-80 interchange from Granite Drive to Taylor Road (which includes segments in both Rocklin and Loomis). City staff indicated that Phase I (the widening of Sierra College Boulevard to four lanes between I-80 and El Don Drive) is currently under construction. Construction on Phases I and II is anticipated to be completed by the end of 2010, and by spring 2011, respectively, per City of Rocklin staff. Sources of funding for this widening project will include the City of Rocklin, the Town of Loomis, and the South Placer Regional Transportation Authority (SPRTA). Hence the roadway segment analysis for Existing Plus Approved Projects includes widening of Sierra College Boulevard to four lanes between Taylor Road and El Don Drive.

As a part of the Sierra College Boulevard widening project,[6] which is currently under construction, the lane configuration for the following intersections will be improved. The improvements to the intersections are listed below.

Sierra College Boulevard/Rocklin Road Intersection

- **Northbound:** Addition of an exclusive right-turn lane
- **Southbound:** Addition of a third through lane, and exclusive right-turn lane

Sierra College Boulevard/Brace Road Intersection

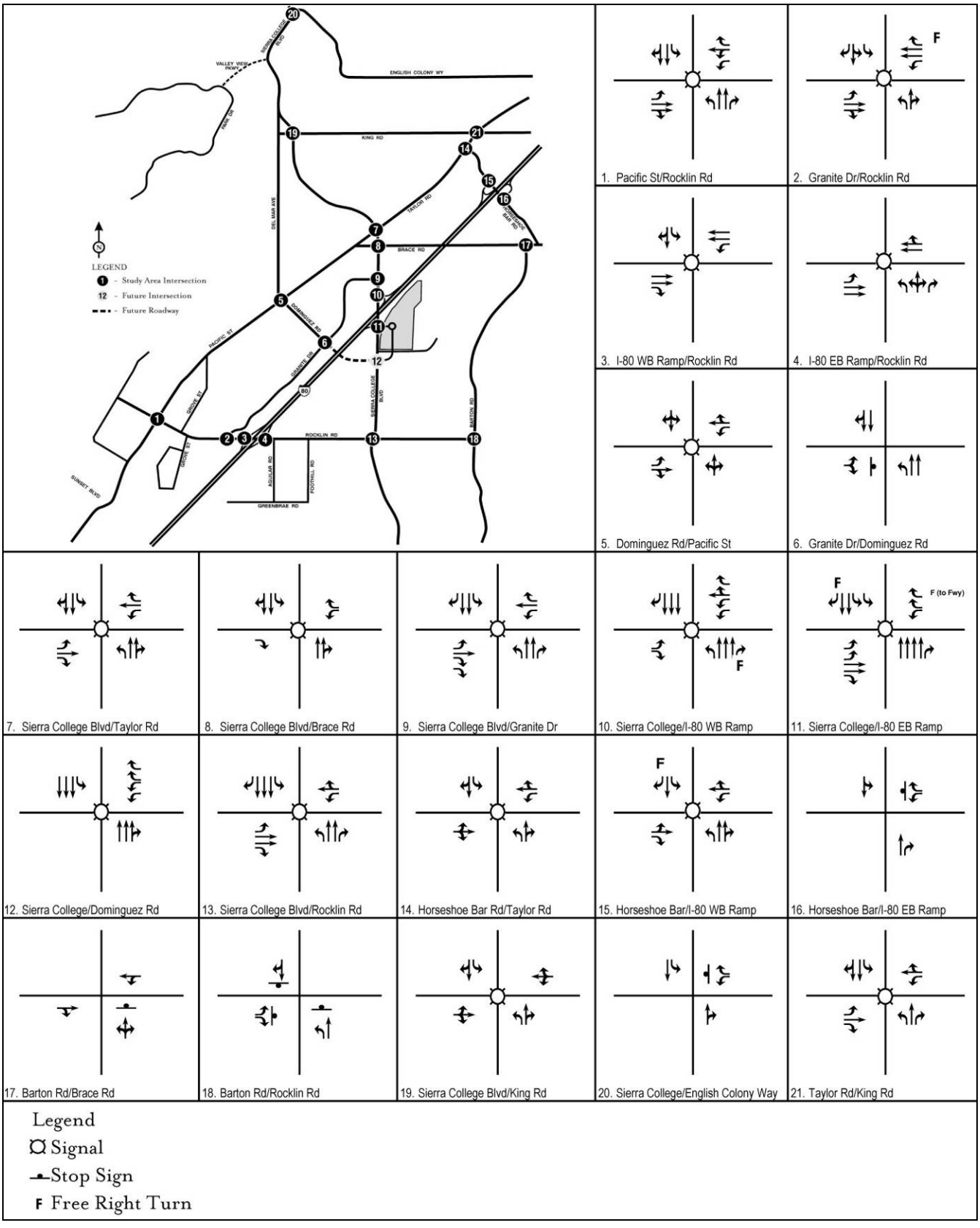
- **Northbound:** Addition of a second through lane
- **Southbound:** Addition of a second through lane

Sierra College Boulevard/Taylor Road Intersection

- **Northbound:** Addition of a second through lane by converting the existing exclusive right-turn lane to a shared through/right-turn lane
- **Southbound:** Addition of a second through lane by converting the existing exclusive right-turn lane to a shared through/right-turn lane

The short-term geometrics and traffic control for project scenarios are illustrated on Exhibit 4.2-11.

[6] October 12, 2010, Declaration of David Mohlenbrok of City of Rocklin regarding September 23, 2010, personal communication with David Palmer, City of Rocklin Senior Engineer, regarding the Sierra College Boulevard widening project.



Source: LSA Associates 2010

Short-Term Geometrics and Traffic Control **Exhibit 4.2-11**

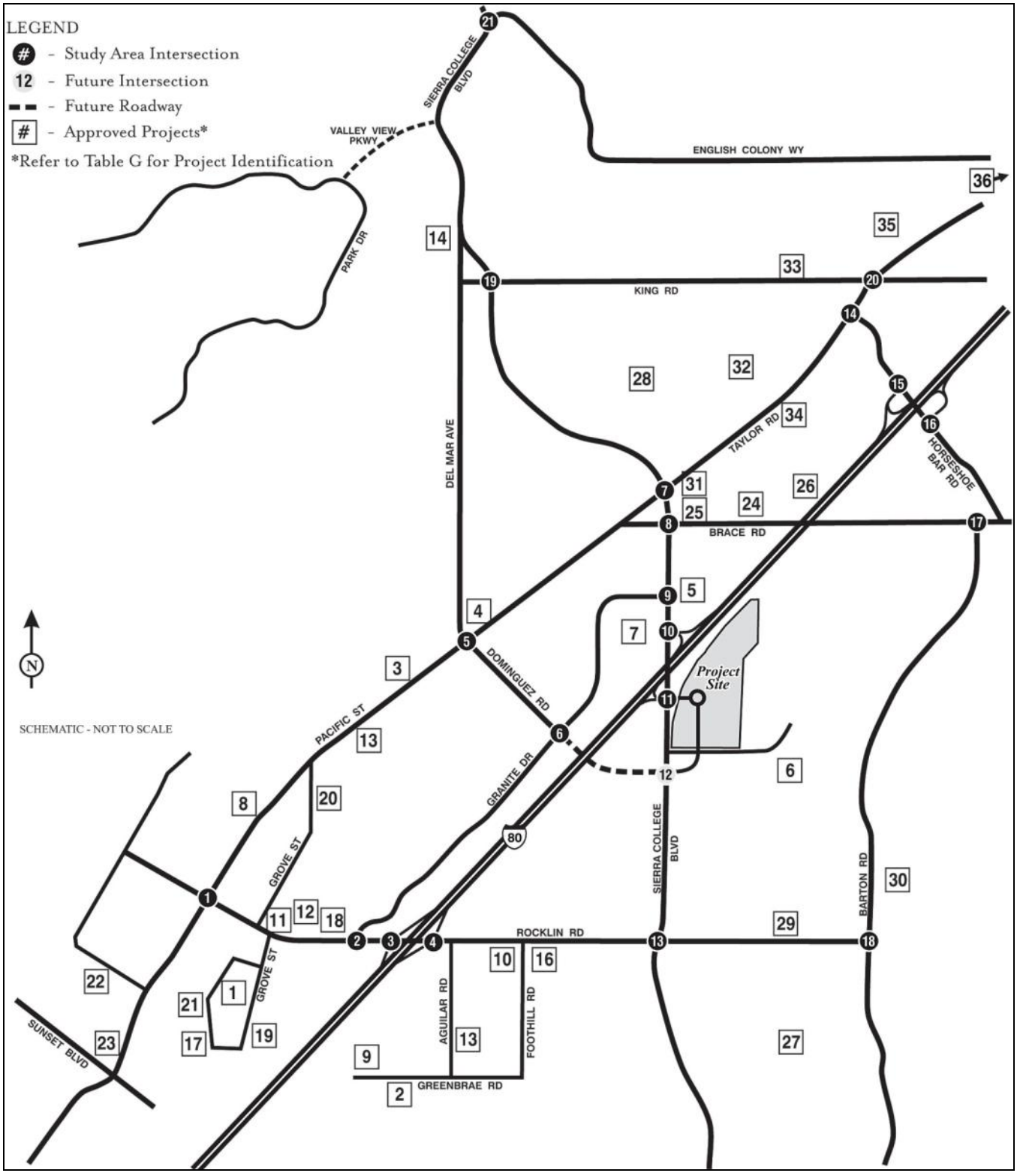
A list of approved projects was requested from the City of Rocklin, the City of Roseville, the Town of Loomis, and Placer County. All the jurisdictions provided their lists of approved projects. The approved projects list obtained from all the jurisdictions is provided in Appendix B. The locations of the approved projects are illustrated on Exhibits 4.2-12 and 4.2-13. Based on the locations of the projects submitted by each jurisdiction, the projects were divided into two categories. The first category includes projects located in the study area (in the vicinity of the proposed project) that would contribute trips to the study area intersections and roadway segments. The second category includes projects located outside the study area that would not contribute significant trips to the study area intersections and roadway segments but that would contribute trips (regional traffic) to freeway segments analyzed in this traffic study. The approved projects list under Category 1 is provided in Table 4.2-8, while the approved projects list under Category 2 is provided in Table 4.2-9.

The traffic volumes for approved projects were determined by applying the trip generation rates from the ITE's *Trip Generation*, 8th Edition, to the approved land uses. The approved projects and their respective trip generation rates are shown in Table 4.2-8. The traffic generated by the approved projects in Category 1 (Table 4.2-8) was assigned to the study area intersections and roadway segments. Since the proposed Dominguez Road extension is not an approved project, it was not included in the list of approved projects.

As discussed earlier, the projects listed in Category 2 (Table 4.2-9) are located outside the study area and would generate regional trips that would be assigned to the freeways. Even though all these projects are approved, their actual years of completion (construction) are not known. Thus, it is difficult to estimate the regional distribution of the traffic generated by these projects. Due to these unknowns, the City's travel demand model, which includes all these projects (in 2030 conditions), is used to calculate the regional traffic on freeways. Based on the current market conditions, and for reasons discussed immediately below, the developer's best estimate of the complete build out of the project is 2017. The entire project will be constructed in three phases. Phase I is planned to be completed by Spring 2013; Phase II is planned to be completed by Spring 2015; and the final phase is planned to be completed in Spring 2017. Even though the economic impact and urban decay analysis, for reasons its author characterized as being "conservative," assumes an opening year of 2016, the traffic impact analysis assumed an opening year of 2017. Though different from what the economic impact and urban decay analysis assumed, this is a conservative assumption for the purpose of analyzing traffic impacts, as the background traffic will be higher in 2017 as compared to 2016. Hence, the growth in traffic between travel demand model base year 2008 and future year (2030) model volumes is calculated and a portion of this growth [between 2008 and 2017 (complete build out of project)] is added to the 2008 freeway counts to develop the traffic volumes that would be used for analyzing the existing plus approved projects condition.

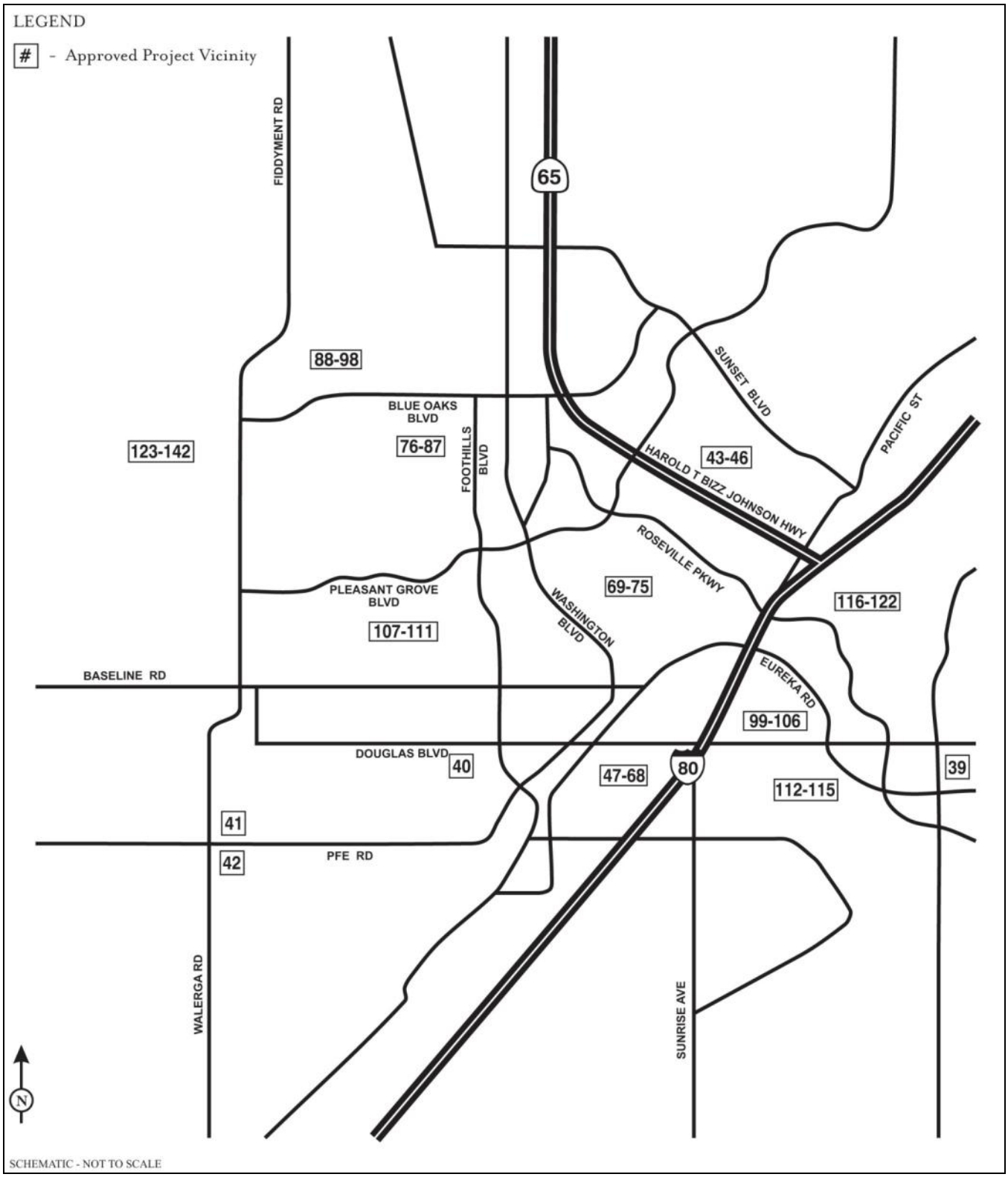
EXISTING PLUS APPROVED PROJECTS (BASELINE) LEVELS OF SERVICE

Traffic from the approved projects was added to the redistributed existing (2010) traffic volumes and LOS were calculated for the existing plus approved projects scenario. Existing plus approved projects weekday peak-hour and Saturday traffic volumes are illustrated on Exhibits 4.2-14 and 4.2-15, respectively. The LOS for study area intersections and roadway segments in the existing plus approved projects scenario are shown in Tables 4.2-10 and 4.2-11. The existing plus approved projects LOS worksheets are provided in Appendix B.



Source: LSA Associates 2010

Location of Study Area Approved Projects **Exhibit 4.2-12**



Source: LSA Associates 2010

Location of Regional Approved Projects **Exhibit 4.2-13**

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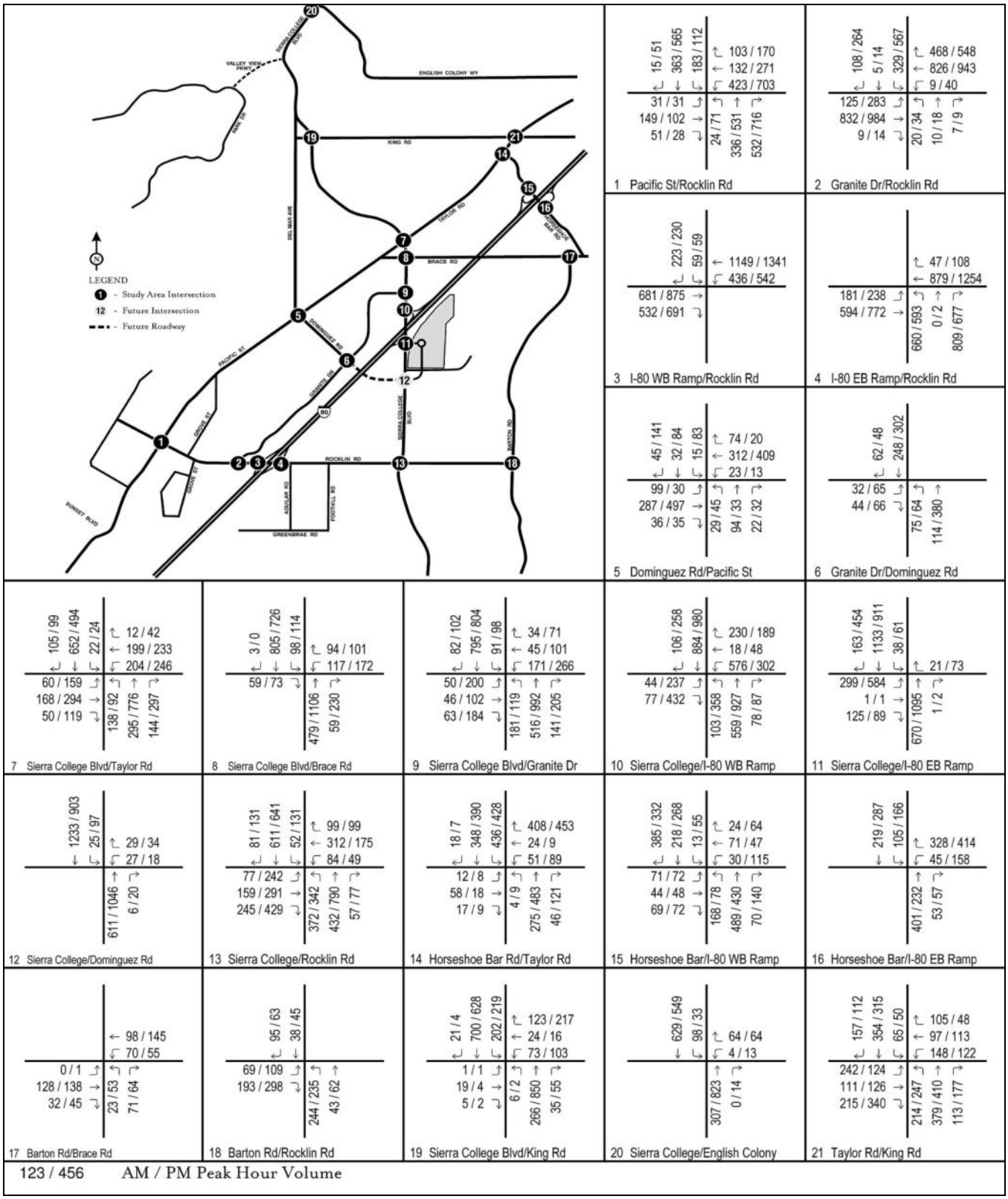
Table 4.2-8: Trip Generation of Study Area Approved Projects

Project No.	Description	Landuse (ITE Code)	Size	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
				In	Out	Total	In	Out	Total	In	Out	Total
City of Rocklin												
1	Winding Lane Estates	Single Family Detached Housing (210)	27 du	7	21	28	20	12	32	13	11	24
2	Granite Lake Estates	Single Family Detached Housing (210)	119 du	23	70	93	79	46	125	60	51	112
3	Del Mar Business Park Parcel 4	Business Park (770) and Mini-Warehouse	200.7 ksf	136	29	165	42	134	176	34	30	65
4	Rocklin Boat Hotel	Mini-Warehouse (151)	27.3 ksf	2	2	4	4	3	7	5	5	11
5	Granite Marketplace	Shopping Center (820)	138 ksf	87	55	142	248	269	518	357	329	686
6	Croftwood, Unit 1	Single Family Detached Housing (210)	156 du	29	88	117	99	58	158	79	67	147
7	Rocklin Commons	Shopping Center (820)	415.0 ksf	202	192	331	692	749	1,441	1,022	943	1,965
8	ZL Rocklin	Mixed Use Retail/Residential	154.8 ksf	24	63	87	83	59	142	75	72	146
9	Bender Insurance Office Building	Bender Insurance Office Building	14.7 ksf	10	31	41	60	35	95	3	3	6
10	Rocklin Sierra Plaza	Shopping Center (820)	31.60 ksf	78	30	108	140	153	293	82	75	157
11	Grove Street Subdivision Map	Single Family Detached Housing (210)	7 du	1	4	5	4	3	7	4	3	7
12	Meyers Court Subdivision	Single Family Detached Housing (210)	9 du	2	5	7	6	3	9	5	4	8
13	Circuit Place	Single Family Detached Housing (210)	11 du	2	6	8	7	4	11	6	5	10
14	Clover Valley	Single Family Detached Housing (210)	558 du	105	314	419	355	209	564	283	241	525
15	Bramblewood Estates	Single Family Detached Housing (210)	2 du	3	8	11	2	1	3	1	1	2
16	Rocklin Executive Office Park	Office Park (710)	21 ksf	27	27	54	51	51	102	5	4	9
17	Villages	Single Family Detached Housing (210)	65 du	14	41	55	46	27	73	33	28	61
18	Granite Business Center	General Office Building (710)	16.60 ksf	39	6	45	17	80	97	4	3	7
19	Rocklin Mobile Home Park Additi	Mobile Home Park (240)	21 du	4	14	18	9	5	14	6	5	11
20	Holy Cross Lutheran Church	Church (560)	40.63 ksf	16	13	29	14	13	27	102	42	144
21	Samoylovich Estates	Single Family Detached Housing (210)	4 du	7	5	12	3	3	6	2	2	4
22	Colish Subdivision	Single Family Detached Housing (210)	8 du	4	11	15	7	4	11	4	3	8
23	Pacific Center Retail Center	Shopping Center (820)	32.2 ksf	48	31	79	142	154	296	83	77	160
Town Of Loomis												
24	Del Oro Vistas	Single Family Detached Housing (210)	12 du	2	7	9	8	4	12	6	5	11
25	Brace Ranch Estates	Single Family Detached Housing (210)	8 du	2	5	6	5	3	8	4	3	8
26	Heritage Park Estates	Single Family Detached Housing (210)	68 du	13	38	51	43	25	69	35	29	64
27	Monte Clair Unit 2	Single Family Detached Housing (210)	8 du	2	5	6	5	3	8	4	3	8
28	Morgan Estates	Single Family Detached Housing (210)	8 du	2	5	6	5	3	8	4	3	8
29	Poppy Ridge	Single Family Detached Housing (210)	7 du	1	4	5	4	3	7	4	3	7
30	Sierra de Montserrat	Single Family Detached Housing (210)	62 du	12	35	47	39	23	63	31	27	58
31	Taylor Road Mixed-Use	Mixed Use Retail/Residential		17	26	43	53	47	100	61	57	118
32	Nejadian Subdivision	Single Family Detached Housing (210)	8 du	2	5	6	5	3	8	4	3	8
33	Minor Land Division (King)	Single Family Detached Housing (210)	2 du	0	1	2	1	1	2	1	1	2
34	Alley Loomis Retail	Shopping Center (820)	5 ksf	3	2	5	9	10	19	13	12	25
35	Swetzer Road Business Park	Business Park (770)	42.26 ksf	51	10	60	13	42	55	10	9	19
36	Lugo Classic Car Restoration	Automobile Care Center (942)	8 stall	8	4	12	9	9	17	16	16	32
	Total			983	1,210	2,131	2,330	2,252	4,582	2,461	2,179	4,640

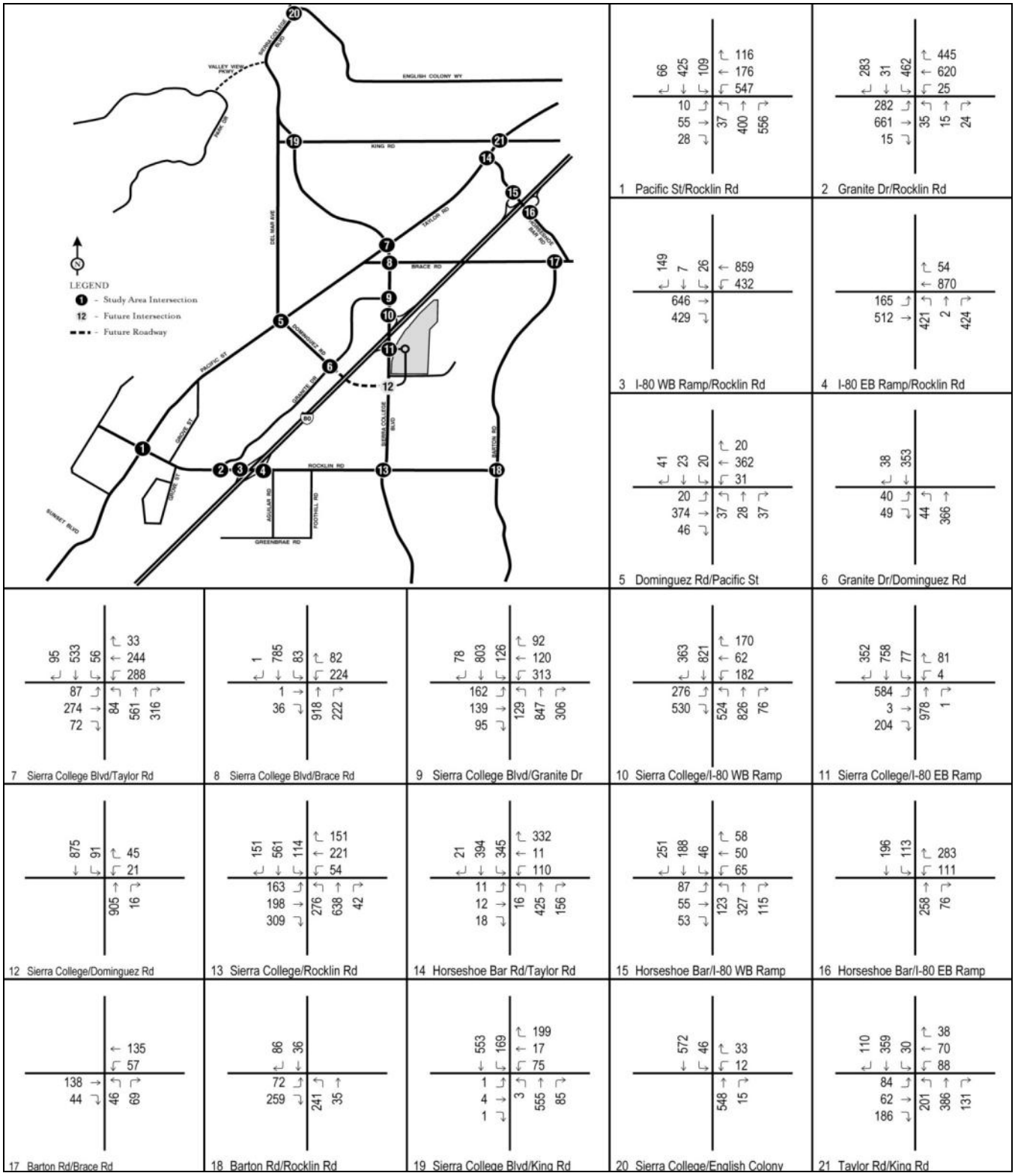
Table 4.2-9: Trip Generation of Regional Approved Projects

Project No.	Description	Land Use (ITE Code)	Size	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
				In	Out	Total	In	Out	Total	In	Out	Total
Placer County												
37	Saint Joseph Church	Church (560)	25 ksf	9	5	14	7	7	14	63	26	89
38	Granite Bay Plaza	Mixed Use Retail/Residential		9	17	25	29	24	53	31	29	60
39	Granite Bay Retail and Car Wash	Shopping Center (820)	20.78 ksf	13	8	21	37	41	78	54	50	103
40	American Vinyard Village	Single Family Detached Housing (210)	140 du	26	79	105	89	52	141	71	61	132
41	Silver Creek	Single Family Detached Housing (210)	78 du	15	44	59	50	29	79	40	34	73
42	Morgan Place	Single Family Detached Housing (210)	91 du	17	51	68	58	34	92	46	39	86
City of Roseville												
43	Highland Park (10550 Fairway Dr)	High-Rise Residentail Condominium (232)	7 du	0	2	2	2	1	3	1	1	2
44	Fairway Commons (10221 Fairway Dr)	Shopping Center (820)	5.68 ksf	4	2	6	10	11	21	15	14	28
45	Roseville Crossings (10551 Fairway Dr)	Shopping Center (820)	39.56 ksf	25	16	41	71	77	148	102	94	197
46	Adventure Christian Church	Church (560)	28.50 ksf	10	6	16	8	8	16	72	29	101
47	Alta Manor (930 Oak Ridge)	Assisted Living (254)	9.62 ksf	1	0	1	1	1	2	1	2	3
48	Darling Way (1007 Darling Way)	Single Family Detached Housing (210)	3 du	1	2	2	2	1	3	2	1	3
49	Old Auburn Ranch (3170 Old Auburn Road)	Single Family Detached Housing (210)	32 du	6	18	24	20	12	32	16	14	30
50	West Colonial Estates (1412 W Colonial)	Single Family Detached Housing (210)	14 du	3	8	11	9	5	14	7	6	13
51	Hooper Estates (1011 Main St)	Single Family Detached Housing (210)	4 du	1	2	3	3	1	4	2	2	4
52	Country Estates	Single Family Detached Housing (210)	2 du	0	1	2	1	1	2	1	1	2
53	Sierra Oaks (shasta st and diamond oaks rd)	Single Family Detached Housing (210)	1 du	0	1	1	1	0	1	1	0	1
54	Hidden Creek Residential Homes (1995 Rocky Ridge Dr)	Residential Condominium/Townhouse (230	9 du	1	3	4	3	2	5	2	2	4
55	Church Street Station (1200 Church St)	High-Rise Residentail Condominium (232)	34 du	2	9	12	8	5	13	5	7	12
56	Tabernacle Baptist Church (1220 Melody Ln)	Church (560)	36.10 ksf	13	8	20	10	10	20	91	37	128
57	Vinyards at Foothills (2990 Foothills Blvd)	Shopping Center (820)	26.00 ksf	16	10	27	47	51	97	67	62	129
58	Vinyard Pointe Garden Offices (1590 Vineyard Rd)	General Office Building (710)	23.50 ksf	32	4	36	6	29	35	5	4	10
59	Granite Bay Ventures Office (3975 Doublas Blvd)	General Office Building (710)	8.53 ksf	12	2	13	2	11	13	2	2	3
60	ARCO (1139 Douglas Blvd)	Gasoline/Service Station (945)	2.90 ksf	117	113	230	141	141	282	141	141	282
61	Rock of Roseville (775 Vernon St)	Church (560)	16.15 ksf	6	3	9	4	5	9	41	17	57
62	400 Sunrise Office (400 Sunrise Ave)	General Office Building (710)	55.80 ksf	76	10	86	14	69	83	12	11	23
63	Golden State Collision (601 Berry St)	Automobile Care Center (942)	17.71 ksf	34	18	52	30	30	60	56	56	111
64	Kemper Business park (500 Derek Pl)	General Office Building (710)	12.11 ksf	17	2	19	3	15	18	3	2	5
65	Tradesman's Storage (800 Church)	Self Storage (151)	10.37 ksf	1	1	2	1	1	3	2	2	4
66	March Road Insustrial Park (1801 PFE Road)	Industrial Park (130)	96.09 ksf	66	15	81	17	65	83	11	23	34
67	Lincoln Street Lofts (331 Lincoln St)	Residential Condominium/Townhouse (230	4 du	0	1	2	1	1	2	1	1	2
68	Civic Plaza Project Option 2 (405 Vernon St)	General Office Building (710)	56.25 ksf	77	10	87	14	70	84	12	11	23
69	NCRSP Parcel 18C (950 Pleasant Grove Blvd)	Residential Condominium/Townhouse (230	100 du	7	37	44	35	17	52	25	22	47
70	Galleria Mall (1151 Galleria Blvd)	Shopping Center (820)	40.00 ksf	25	16	41	72	78	150	103	95	199
71	Shea Center Roseville (500 Gibson Dr)	General Office Building (710)	336.6 ksf	459	63	522	85	416	502	75	63	138
72	Highland Village (200 Gibson Dr)	Shopping Center (820)	130.7 ksf	82	52	135	235	255	490	338	312	649
73	The Fountains (1175 Roseville Parkway)	Shopping Center (820)	26.74 ksf	17	11	28	48	52	100	69	64	133
74	Conference Center (290 Conference Center Dr)	Hotel Conf Center	486.0 ksf	2,306	2,306	4,612	2,306	2,306	4,612	2,306	2,306	4,612
75	Rosefille Highlands (901 Pleasant Grove Blvd)	General Office Building (710)	115.0 ksf	157	21	178	29	142	171	25	22	47
76	Woodcreek (10300 Woodcreek Oaks)	Single Family Detached Housing (210)	1 du	0	1	1	1	0	1	1	0	1
77	Fiddyment Rezone (1470 Blue Oaks)	Single Family Detached Housing (210)	82 du	15	46	62	52	31	83	42	35	77
78	Longmeadow Subdivision (1478 Blue Oaks)	Residential Condominium/Townhouse (230	94 du	7	34	41	33	16	49	24	20	44
79	RC Pacific Building (7070 Galilee Road)	Shopping Center (820)	4.94 ksf	3	2	5	9	10	19	13	12	25
80	Firestone Building (8051 Washington)	Automobile Care Center (942)	8.14 ksf	16	8	24	14	14	28	26	26	51
81	NEC G-Line Expansion (7501 Foothills Blvd)	Manufacturing (140)	395.7 ksf	225	64	289	104	185	289	55	55	111
82	Hewlet Packard Master Plan (8000 Foothills Blvd)	Research and Development Center (760)	207 acre	2,922	557	3,479	384	2,819	3,203	350	350	699
83	Foothills Commerce Center Annex (2000 Winding Creek	Industrial Park (130)	161.7 ksf	111	24	136	29	110	139	18	38	57
84	Coastal Commercial Center (8250 Industrial Ave)	Industrial Park (130)	148.9 ksf	103	23	125	27	101	128	17	35	52
85	RSVL Commercial and Arizona Tile (10550 Industrial Ave	Industrial Park (130)	99.7 ksf	69	15	84	18	68	86	11	24	35
86	South Placer Justice (10800 Industrail Ave)	Courthouse	213.7 ksf	168	32	200	80	178	259	148	143	291
87	Corrections Facility (11901 Go For Broke Road)	Detention Facility	211.5 ksf	59	42	101	47	71	118	47	71	118
88	Crocker Ranch (10090 Crocker Ranch Road)	Single Family Detached Housing (210)	198 du	37	111	149	126	74	200	101	86	186
89	Crocker Ranch North (4805 Fiddyment Rd)	Single Family Detached Housing (210)	164 du	31	92	123	104	61	166	83	71	154
90	Diamond Creek Parcel 32 (1701 Parkside Way)	Single Family Detached Housing (210)	6 du	1	3	5	4	2	6	3	3	6
91	Eskaton Village (10001 Diamond Creek Blvd)	Residential Condominium/Townhouse (230	257 du	19	94	113	90	44	134	65	56	121
92	NRSP Tentative Subdivision (10000 Diamond Creek)	Residential Condominium/Townhouse (230	131 du	10	48	58	46	22	68	33	28	62
93	NRSP DC-7 (1501 Parkside Way)	Residential Condominium/Townhouse (230	24 du	2	9	11	8	4	12	6	5	11
94	Paseo Del Norte (1731 Pleasant Grove Blvd)	Residential Condominium/Townhouse (230	79 du	6	29	35	28	14	41	20	17	37
95	Diamond Creek Comm (10000 Diamond Creek)	High-Rise Residentail Condominium (232)	352 du	23	97	120	83	51	134	53	70	123
96	Eskaton Roseville Manor (1721 Pleasant Grove)	High-Rise Residentail Condominium (232)	49 du	3	13	17	12	7	19	7	10	17
97	Diamond Creek Commercial (10000 Diamond Creek Blv	Shopping Center (820)	90.70 ksf	57	36	93	163	177	340	234	216	451
98	St. Clare Church Expansion (1950 Junction Blvd)	Church (560)	3.69 ksf	1	1	2	1	1	2	9	4	13
99	Jack in the Box Remodel (1923 Douglas Blvd)	Fast Food Restaurant with Drive-Through (	0.79 ksf	20	19	39	14	13	27	24	23	47
100	Roseville Toyota Expansion (350 Automall Dr)	New Car Sales (841)	5.63 ksf	9	3	12	6	9	15	9	8	17
101	Roseville Chevrolet Expansion (700 Automall Dr)	New Car Sales (841)	13.00 ksf	20	7	27	13	21	34	20	19	39
102	Stone Point Lots 1-5 (1480 Stone Point Dr)	General Office Building (710)	212.2 ksf	289	39	329	54	262	316	47	40	87
103	Kaiser Expansion (1600 Eureka Road)	Hospital (610)	358.0 ksf	237	164	401	171	237	408	405	405	809
104	Parcel 7 Office Building (2223 Douglas Blvd)	General Office Building (710)	20.40 ksf	28	4	32	5	25	30	5	4	8
105	Marriott Clubsport (1460 Stone Point Dr)	Hotel (310)	115.0 ksf	39	25	64	36	32	68	46	36	83
106	Stone Point Lots 6-7 (1445 Eureka Rd)	General Office Building (710)	316.7 ksf	432	59	491	80	392	472	70	60	130
107	Roasepark (3050 Woodcreek Oaks Blvd)	Single Family Detached Housing (210)	1 du	0	1	1	1	0	1	1	0	1
108	Brenton Village (7500 Foothills Blvd)	Residential Condominium/Townhouse (230	53 du	4	19	23	18	9	28	13	11	25
109	Ladera Village (611 Barbara Way)	Residential Condominium/Townhouse (230	103 du	8	38	45	36	18	54	26	22	48
110	Sunrise Senior Living (3801 Country Club Dr)	Senior Adult Housing-Detached (251)	24.51 ksf	2	4	5	4	3	7	3	3	6
111	Breton Village (1260 Pleasant Brove Blvd)	Shopping Center (820)	28.31 ksf	18	11	29	51	55	106	73	68	141
112	Granite Bay Pavillions (9243 Sierra College Blvd)	General Office Building (710)	19.89 ksf	27	4	31	5	25	30	4	4	8
113	Stoneridge East Village (3850 Miners Ravine Dr)	Single Family Detached Housing (210)	196 du	37	110	147	125	73	198	99	85	184
114	Stoneridge Village Parcel 49 (7200 Sierra College Blvd)	Single Family Detached Housing (210)	95 du	18	53	71	60	36	96	48	41	89
115	Stoneridge Village Parcel 58 (3000 Miners Ravine Dr)	Single Family Detached Housing (210)	61 du	11	34	46	39	23	62	31	26	57
116	Stoneridge Village Parcel 59 (2650 Alexandra Dr)	Single Family Detached Housing (210)	12 du	2	7	9	8	4	12	6	5	11
117	Stoneridge Village Parcel 33 (1453 E Roseville Parkway)	Single Family Detached Housing (210)	23 du	4	13	17	15	9	23	12	10	22
118	Stoneridge East Village 4a (3850 Miners Ravine Dr)	Residential Condominium/Townhouse (230	149 du	11	54	66	52	26	77	38	32	70
119	Stoneridge Village Parcel 23 (1501 Secret Ravine Parkw	High-Rise Residentail Condominium (232)	152 du	10	42	52	36	22	58	23	30	53
120	Stoneridge Village Parcel 13 (1101 Secret Ravine Parkw	Nursing Home (620)	123.3 ksf	48	20	68	47	44	91	83	83	166
121	St. Anna Greek Orthodox Church (1001 Stone Canyon D	Church (560)	17.60 ksf	6	4	10	5	5	10	44	18	62
122	Fiddyment Ranch F-2 (4700 Bob Doyle Dr)	Single Family Detached Housing (210)	125 du	23	70	94	80	47	126	63	54	118
123	Westpark Village W-2 (4250 Bob Doyle Dr)	Single Family Detached Housing (210)	300 du	56	169	225	191	112	303	152	130	282
124	4821 Fiddyment Dr Tentative Map F-16	Single Family Detached Housing (210)	110 du	21	62	83	70	41	111	56	48	103
125	Fiddyment Ranch F-4 (2200 Hayden Parkway)	Single Family Detached Housing (210)	78 du	15	44	59	50	29	79	40	34	73
126	Fiddyment Ranch F-14 (4800 Fiddyment Rd)	Single Family Detached Housing (210)	422 du	79	237	317	269	158	426	214	182	397
127	4821 Fiddyment Dr Tentative Map F-15	Single Family Detached Housing (210)	167 du	31	94	125	106	62	169	85	72	157
128	Fiddyment Ranch F-5 (2500 Hayden Parkway)	Single Family Detached Housing (210)	69 du	13	39	52	44	26	70	35	30	65
129	Fiddyment Ranch F-3 (4701 Bob Doyle Dr)	Single Family Detached Housing (210)	15 du	3	8	11	10	6	15	8	6	14
130	Westpark W-1 (2000 Pleasant Grove Blvd)	Single Family Detached Housing (210)	98 du	18	55	74	62	37	99	50	42	92
131	Westpark Village W-12 (2600 Pleasant Grove Blvd)	Single Family Detached Housing (210)	19 du	4	11	14	12	7	19	10	8	18
132	Westpark Village W-11 (2601 Pleasant Grove Blvd)	Single Family Detached Housing (210)	83 du	16	47	62	53	31	84	42	36	78
133	Fiddyment Ranch F-1 (2101 Hayden Parkway)	Single Family Detached Housing (210)	33 du	6	19	25	21	12	33	17	14	31
134	Westpark Village W-10 (3251 Market St)	Single Family Detached Housing (210)	151 du	28	85	113	96	56	153	77	65	142
135	Westpark Village W-7 (4400 Bob Doyle Dr)	Single Family Detached Housing (210)	14 du	3	8	11	9	5	14	7	6	13
136	Westpark Village W-8 (2001 Pleasant Grove Blvd)	Single Family Detached Housing (210)	110 du	21	62	83	70	41	111	56	48	103
137	Westpark Village W-24 (2151 Pleasant Grove Blvd)	Residential Condominium/Townhouse (230	111 du	8	41	49	39	19	58	28	24	52
138	1850 Blue Oaks Blvd Tentative Map F-17	Residential Condominium/Townhouse (230	110 du	8	40	48	38	19	57	28	24	52
139	Village Center (2450 Pleasant Grove Blvd)	Residential Condominium/Townhouse (230	57 du	4	21	25	20	10	30	14	12	27
140	Westpark Village W-26 (4251 Bob Doyle Dr)	High-Rise Residentail Condominium (232)	165 du	11	45	56	39	24	63	25	33	58
141	Village Center Townhomes (3151 Market Street)	High-Rise Residentail Condominium (232)	80 du	5	22	27	19	12	30	12	16	28
142	St. John's Episcopal Church (2351 Pleasant Grove Blvd)	Church (560)	93.44 ksf	32	20	52	25	27	51	235	96	331
	Total			9,235	6,293	15,528	7,173	10,258	17,431	7,665	7,052	14,718



Source: LSA Associates 2010

Existing Plus Approved Projects (Baseline) Peak-Hour Traffic Volumes Exhibit 4.2-14



Source: LSA Associates 2010

Existing Plus Approved Projects (Baseline)
Saturday Peak-Hour Traffic Volumes **Exhibit 4.2-15**

Table 4.2-10: Existing plus Approved Projects (Baseline) Condition Intersection Level of Service Summary

	Intersection	Existing Plus Approved Condition					
		AM Peak Hour		PM Peak Hour		Saturday	
		V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS
1	Rocklin Road/Pacific Street [1]	0.810	D	1.029	F	0.797	C
2	Rocklin Road/Granite Drive	0.539	A	0.805	D	0.665	B
3	Rocklin Road/I-80 Westbound Ramps	21.9 sec	C	29.3 sec	C	20.2 sec	C
4	Rocklin Road/I-80 Eastbound Ramps	28.4 sec	C	40.4 sec	D	23.8 sec	C
5	Dominguez Road/Pacific Street [1]	0.437	A	0.531	A	0.376	A
6	Dominguez Road/Granite Drive* [1]	13.1 sec	B	16.0 sec	C	14.3 sec	B
7	Sierra College Boulevard/Taylor Road [1] (Loomis)	27.8 sec	C	31.0 sec	C	30.8 sec	C
8	Sierra College Boulevard/Brace Road [1] (Loomis)	18.0 sec	B	16.2 sec	B	16.6 sec	B
9	Sierra College Boulevard/Granite Drive	0.579	A	0.700	B	0.728	C
10	Sierra College Boulevard/I-80 Westbound Ramps	20.3 sec	C	27.0 sec	C	33.0 sec	C
11	Sierra College Boulevard/I-80 Eastbound Ramps	9.1 sec	A	12.9 sec	B	15.3 sec	B
12	Sierra College Boulevard/Dominguez Road	-	-	-	-	-	-
13	Sierra College Boulevard/Rocklin Road [1]	0.774	C	0.779	C	0.726	C
14	Taylor Road/Horseshoe Bar Road [1] (Loomis)	36.9 sec	D	43.4 sec	D	30.6 sec	C
15	Horseshoe Bar Road/I-80 Westbound Ramps [1] (Loomis)	19.1 sec	B	20.9 sec	C	22.3 sec	C
16	Horseshoe Bar Road/I-80 Eastbound Ramps* [1] (Loomis)	18.3 sec	C	22.0 sec	C	15.5 sec	C
17	Barton Road/Brace Road* [1] (Loomis)	10.7 sec	B	11.1 sec	B	11.3 sec	B
18	Barton Road/Rocklin Road* [1] (Loomis)	10.7 sec	B	12.0 sec	B	11.2 sec	B
19	Sierra College Boulevard/King Road [1] (Loomis)	22.8 sec	C	36.3 sec	D	25.3 sec	C
20	Sierra College Boulevard/English Colony Way* [1] (Placer County)	11.5 sec	B	21.3 sec	C	16.3 sec	C
21	Taylor Road/King Road [1] (Loomis)	35.1 sec	D	31.8 sec	C	27.5 sec	C

Notes:

ICU V/C ratio is used for signalized intersections in the City of Rocklin. HCM delay in seconds is used for unsignalized intersections and in the Town of Loomis.

* Indicates unsignalized intersection

[1] LOS C required for these intersections. LOS D acceptable for all other intersections.

Exceeds level of service criteria

Table 4.2-11: Existing plus Approved Projects (Baseline) Daily Roadway Segment Level of Service Summary

Roadway	Segment	Configuration	Capacity	Weekday			Saturday		
				Volume	V/C	LOS	Volume	V/C	LOS
Taylor Road	King Road and Horseshoe Bar Road [1] (Loomis)	Two-lane Collector	15,000	18,127	1.21	F	14,060	0.94	E
	Horseshoe Bar Road and Sierra College Boulevard [1] (Loomis)	Two-lane Collector	15,000	11,590	0.77	C	11,675	0.78	C
	Sierra College Boulevard and City Limits [1] (Loomis)	Two-lane Collector	15,000	11,540	0.77	C	9,610	0.64	B
Pacific Street	City Limits and Dominguez Road [1]	Two-lane Collector	15,000	11,438	0.76	C	9,524	0.63	B
	Dominguez Road and Rocklin Road [1]	Four-lane Undivided Arterial	30,000	13,780	0.46	A	11,150	0.37	A
Rocklin Road	Pacific Street and Granite Drive	Four-lane Undivided Arterial	30,000	23,465	0.78	C	18,848	0.63	B
	I-80 and Sierra College Boulevard	Four-lane Undivided Arterial	30,000	20,715	0.69	B	17,232	0.57	A
	Sierra College Boulevard and Barton Road [1] (Loomis)	Two-lane Collector	15,000	8,458	0.56	A	7,514	0.50	A
Barton Road	Rocklin Road and Brace Road [1] (Loomis)	Two-lane Collector	15,000	2,495	0.17	A	2,256	0.15	A
Horseshoe Bar Road	I-80 and Brace Road [1] (Loomis)	Two-lane Collector	15,000	7,882	0.53	A	6,974	0.46	A
Brace Road	I-80 and Barton Road [1] (Loomis)	Two-lane Collector	15,000	5,203	0.35	A	5,305	0.35	A
	I-80 and Sierra College Boulevard [1] (Loomis)	Two-lane Collector	15,000	4,695	0.31	A	4,649	0.31	A
Sierra College Boulevard	English Colony Way and King Road [1] (Placer County)	Two-lane Collector	15,000	17,403	1.16	F	15,628	1.04	F
	King Road and Taylor Road [1] (Loomis)	Two-lane Collector	15,000	18,052	1.20	F	16,556	1.10	F
	Taylor Road and I-80	Four-lane Undivided Arterial	30,000	26,372	0.88	D	25,350	0.85	D
	I-80 and Dominguez Road [2]	Four-lane Undivided Arterial	30,000	24,470	0.82	D	21,627	0.72	C
	Dominguez Road [2] and Rocklin Road [1]	Four-lane Undivided Arterial	30,000	23,447	0.78	C	20,341	0.68	B
Granite Drive	Dominguez Road and Sierra College Boulevard [1]	Four-lane Undivided Arterial	30,000	10,037	0.33	A	9,103	0.30	A
	Dominguez Road and Rocklin Road [1]	Four-lane Undivided Arterial	30,000	8,427	0.28	A	7,708	0.26	A
Dominguez Road	Pacific Street and Granite Drive [1]	Two-lane Collector	15,000	2,533	0.17	A	1,349	0.09	A
King Road	Sierra College Boulevard and Taylor Road [1] (Loomis)	Two-lane Collector	15,000	7,445	0.50	A	6,217	0.41	A

Notes:

[1] LOS C required for these segments. LOS D acceptable for all other segments.

[2] Proposed location of the future extension of Dominguez Road.

☐ Exceeds level of service criteria

As shown in Table 4.2-10, the following four intersections are projected to operate at unsatisfactory LOS in the existing plus approved projects condition:

- Rocklin Road/Pacific Street
- Taylor Road/Horseshoe Bar Road (Loomis)
- Sierra College Boulevard/King Road (Loomis)
- Taylor Road/King Road (Loomis)

For roadway segments, Tables 4.2-11 and 4.2-12 show that application of the two-step procedure, first evaluating daily volume to capacity and then, if necessary, peak hour directional volume to capacity, results in no exceedance of LOS standards. While three roadway segments exceeded daily capacities, the peak hour directional analysis confirmed that these three segments would operate at acceptable LOS.

4.2.8 IMPACTS AND MITIGATION MEASURES

EXISTING PLUS APPROVED PROJECTS (BASELINE) PLUS PROJECT LEVELS OF SERVICE

Traffic volumes generated by the proposed project were added to the existing plus approved projects (baseline) traffic volumes, and LOS were calculated for the existing plus approved projects (baseline) plus project scenario. The existing plus approved projects (baseline) plus project weekday and Saturday peak-hour traffic volumes are illustrated on Exhibits 4.2-16 and 4.2-17, respectively. The LOS for study area intersections and roadway segments in the existing plus approved projects plus project scenario are shown in Tables 4.2-13, 4.2-14, and 4.2-15. The existing plus approved projects plus project LOS worksheets are provided in Appendix B.

IMPACT 4.2-1 *Rocklin Road/Pacific Street. The addition of project-related traffic to baseline traffic volumes would degrade traffic operations at this intersection to an unacceptable level. This impact would be considered* ***significant****.*

The intersection of Rocklin Road/Pacific Street is projected to operate at LOS C in the no project condition during Saturday peak hour, as shown in Table 4.2-13. The addition of the project traffic deteriorates the operation of this intersection to LOS D (unacceptable). Because the LOS at this intersection changes from an acceptable LOS C (no project condition) to an unacceptable LOS D (with project condition), the project impact at this intersection is significant.

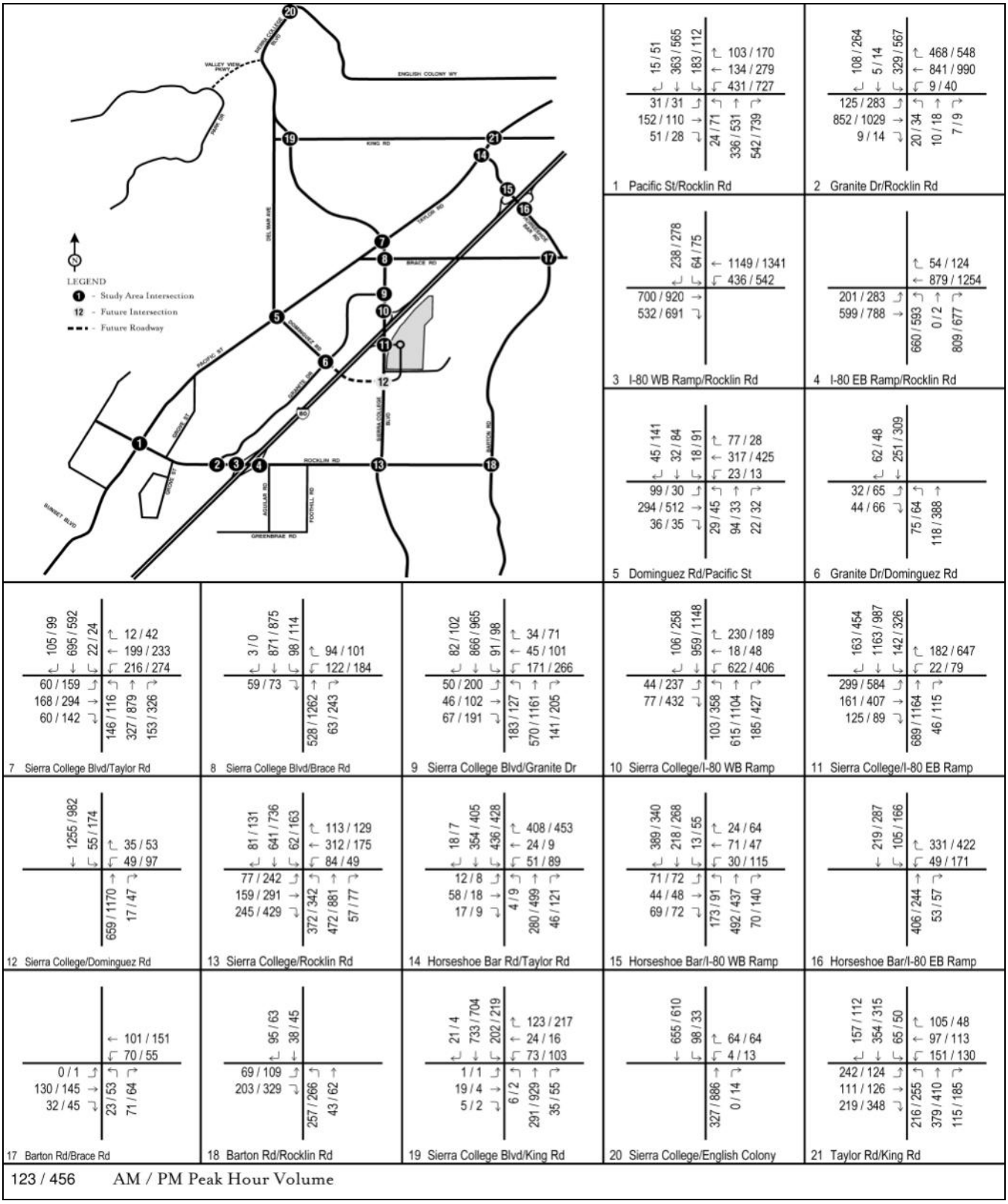
Mitigation Measure 4.2-1 Rocklin Road/Pacific Street Intersection

The project applicant shall be responsible for adding a northbound right-turn overlap phase (which includes modification of the signal phasing and addition of a new signal head that shows a "right-turn arrow") to this intersection to mitigate the project impact at this location.

Table 4.2-12: Existing plus Approved Projects (Baseline) Peak-Hour Roadway Segment Level of Service Summary

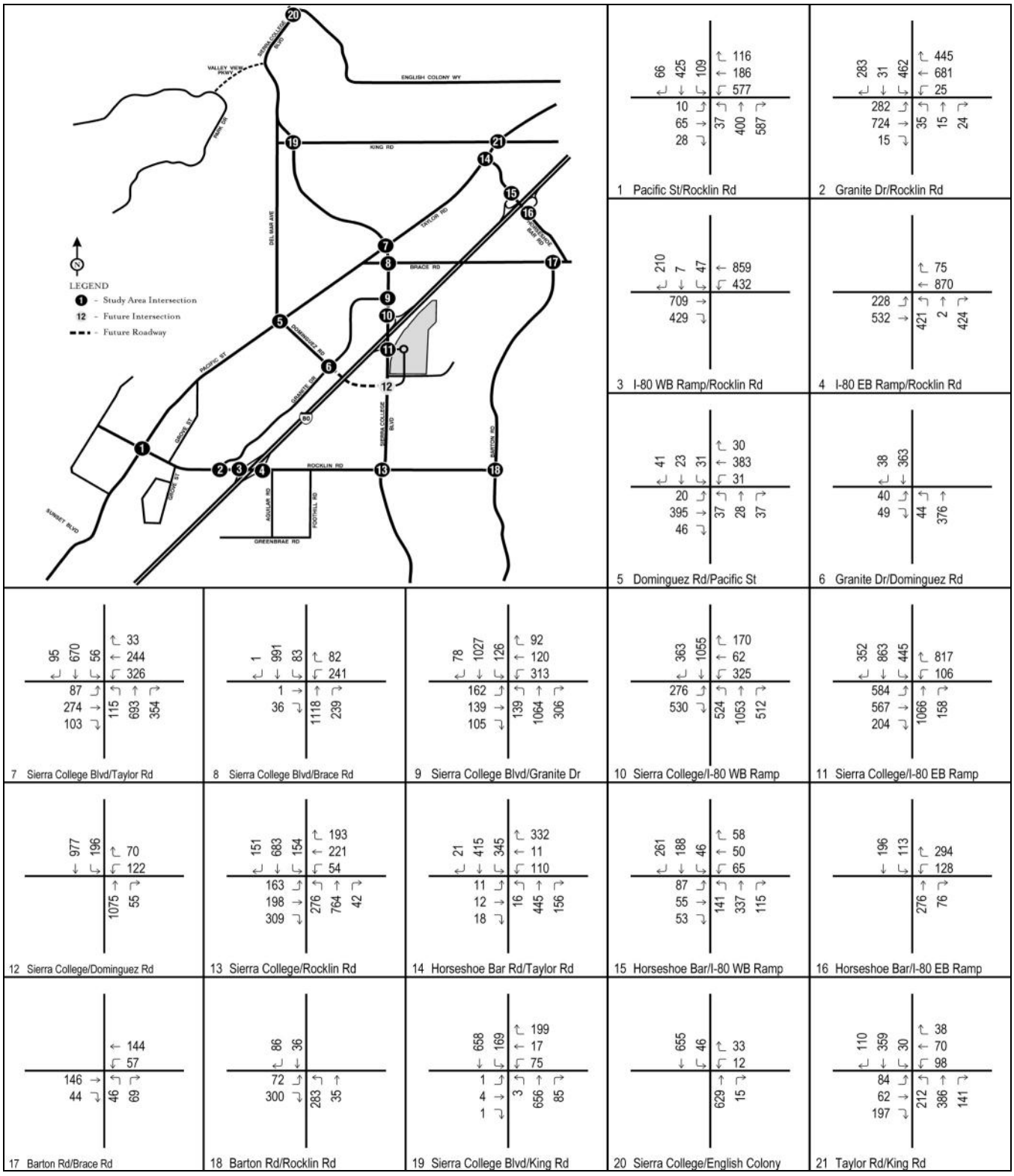
Roadway	Segment	Capacity	Existing + Approved		
			Volume	V/C	LOS
Taylor Road	King Rd and Horseshoe Bar Rd (Loomis)				
	A.M. Peak Hour Northbound	1,650	701	0.42	A
	A.M. Peak Hour Southbound	1,650	760	0.46	A
	P.M Peak Hour Northbound	1,650	889	0.54	A
	P.M Peak Hour Southbound	1,650	801	0.49	A
	Saturday Peak Hour Northbound	1,650	743	0.45	A
	Saturday Peak Hour Southbound	1,650	697	0.42	A
Sierra College Boulevard	English Colony Way and King Rd (Placer County)				
	A.M. Peak Hour Northbound	1,650	349	0.21	A
	A.M. Peak Hour Southbound	1,650	778	0.47	A
	P.M Peak Hour Northbound	1,650	953	0.58	A
	P.M Peak Hour Southbound	1,650	707	0.43	A
	Saturday Peak Hour Northbound	1,650	659	0.40	A
	Saturday Peak Hour Southbound	1,650	653	0.40	A
Sierra College Boulevard	King Rd and Taylor Rd (Loomis)				
	A.M. Peak Hour Northbound	1,650	337	0.20	A
	A.M. Peak Hour Southbound	1,650	779	0.47	A
	P.M Peak Hour Northbound	1,650	942	0.57	A
	P.M Peak Hour Southbound	1,650	675	0.41	A
	Saturday Peak Hour Northbound	1,650	662	0.40	A
	Saturday Peak Hour Southbound	1,650	657	0.40	A

Notes:
☐ Exceeds level of service criteria
Significant Impact



Source: LSA Associates 2010

Existing plus Approved Projects (Baseline) plus Project Peak-Hour Traffic Volumes **Exhibit 4.2-16**



Source: LSA Associates 2010

Existing plus Approved Projects (Baseline) plus Project Saturday Peak-Hour Traffic Volumes **Exhibit 4.2-17**

Table 4.2-13: Existing plus Approved Projects (Baseline) plus Project Condition Intersection Level of Service Summary

		Existing Plus Approved Condition						Existing Plus Approved Plus Project Condition					
		AM Peak Hour		PM Peak Hour		Saturday		AM Peak Hour		PM Peak Hour		Saturday	
	Intersection	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS
1	Rocklin Road/Pacific Street [1]	0.810	D	1.029	F	0.797	C	0.822	D [2]	1.061	F [2]	0.838	D
2	Rocklin Road/Granite Drive	0.539	A	0.805	D	0.665	B	0.545	A	0.822	D	0.687	B
3	Rocklin Road/I-80 Westbound Ramps	21.9 sec	C	29.3 sec	C	20.2 sec	C	22.7 sec	C	33.9 sec	C	23.4 sec	C
4	Rocklin Road/I-80 Eastbound Ramps	28.4 sec	C	40.4 sec	D	23.8 sec	C	29.4 sec	C	45.8 sec	D	25.5 sec	C
5	Dominguez Road/Pacific Street [1]	0.437	A	0.531	A	0.376	A	0.445	A	0.547	A	0.399	A
6	Dominguez Road/Granite Drive* [1]	13.1 sec	B	16.0 sec	C	14.3 sec	B	13.1 sec	B	16.3 sec	C	14.6 sec	B
7	Sierra College Boulevard/Taylor Road [1] (Loomis)	27.8 sec	C	31.0 sec	C	30.8 sec	C	28.0 sec	C	32.8 sec	C	32.7 sec	C
8	Sierra College Boulevard/Brace Road [1] (Loomis)	18.0 sec	B	16.2 sec	B	16.6 sec	B	18.1 sec	B	16.7 sec	B	16.8 sec	B
9	Sierra College Boulevard/Granite Drive	0.579	A	0.700	B	0.728	C	0.606	B	0.763	C	0.807	D
10	Sierra College Boulevard/I-80 Westbound Ramps	20.3 sec	C	27.0 sec	C	33.0 sec	C	20.0 sec	C	28.6 sec	C	34.7 sec	C
11	Sierra College Boulevard/I-80 Eastbound Ramps	9.1 sec	A	12.9 sec	B	15.3 sec	B	13.1 sec	B	26.2 sec	C	36.1 sec	D
12	Sierra College Boulevard/Dominguez Road	-	-	-	-	-	-	-	-	-	-	-	-
13	Sierra College Boulevard/Rocklin Road [1]	0.774	C	0.779	C	0.726	C	0.791	C	0.836	D	0.809	D
14	Taylor Road/Horseshoe Bar Road [1] (Loomis)	36.9 sec	D	43.4 sec	D	30.6 sec	C	37.2 sec	D [2]	44.5 sec	D [2]	31.1 sec	C
15	Horseshoe Bar Road/I-80 Westbound Ramps [1] (Loomis)	19.1 sec	B	20.9 sec	C	22.3 sec	C	19.1 sec	B	21.2 sec	C	22.4 sec	C
16	Horseshoe Bar Road/I-80 Eastbound Ramps* [1] (Loomis)	18.3 sec	C	22.0 sec	C	15.5 sec	C	18.7 sec	C	24.6 sec	C	16.9 sec	C
17	Barton Road/Brace Road* [1] (Loomis)	10.7 sec	B	11.1 sec	B	11.3 sec	B	10.7 sec	B	11.2 sec	B	11.5 sec	B
18	Barton Road/Rocklin Road* [1] (Loomis)	10.7 sec	B	12.0 sec	B	11.2 sec	B	11.0 sec	B	13.2 sec	B	12.7 sec	B
19	Sierra College Boulevard/King Road [1] (Loomis)	22.8 sec	C	36.3 sec	D	25.3 sec	C	23.1 sec	C	41.7 sec	D	26.8 sec	C
20	Sierra College Boulevard/English Colony Way* [1] (Placer County)	11.5 sec	B	21.3 sec	C	16.3 sec	C	11.7 sec	B	24.0 sec	C	18.8 sec	C
21	Taylor Road/King Road [1] (Loomis)	35.1 sec	D	31.8 sec	C	27.5 sec	C	35.2 sec	D [2]	32.1 sec	C	27.9 sec	C

Notes:

ICU V/C ratio is used for signalized intersections in the City of Rocklin. HCM delay in seconds is used for unsignalized intersections and in the Town of Loomis.

* Indicates unsignalized intersection

[1] LOS C required for these intersections. LOS D acceptable for all other intersections.

[2] Project-related increase is less than 0.05 in V/C ratio or less than 5% of the total traffic at the intersection, therefore not a significant impact.

☐ Exceeds level of service criteria

▒ (Shade) = Significant Impact

Table 4.2-14: Existing plus Approved Projects (Baseline) plus Project Daily Roadway Segment Level of Service Summary

Roadway	Segment	Configuration	Capacity	Existing Plus Approved						Existing Plus Approved Plus Project					
				Weekday			Saturday			Weekday			Saturday		
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS
Taylor Road	King Road and Horseshoe Bar Road [1] (Loomis)	Two-lane Collector	15,000	18,127	1.21	F	14,060	0.94	E	18,442	1.23	F	14,465	0.96	E
	Horseshoe Bar Road and Sierra College Boulevard[1] (Loomis)	Two-lane Collector	15,000	11,590	0.77	C	11,675	0.78	C	12,030	0.80	D	12,260	0.82	D
	Sierra College Boulevard and City Limits [1] (Loomis)	Two-lane Collector	15,000	11,540	0.77	C	9,610	0.64	B	12,010	0.80	D	10,230	0.68	B
Pacific Street	City Limits and Dominguez Road [1]	Two-lane Collector	15,000	11,438	0.76	C	9,524	0.63	B	11,908	0.79	C	10,144	0.68	B
	Dominguez Road and Rocklin Road [1]	Four-lane Undivided Arterial	30,000	13,780	0.46	A	11,150	0.37	A	13,935	0.46	A	11,355	0.38	A
Rocklin Road	Pacific Street and Granite Drive	Four-lane Undivided Arterial	30,000	23,465	0.78	C	18,848	0.63	B	24,240	0.81	D	19,873	0.66	B
	I-80 and Sierra College Boulevard	Four-lane Undivided Arterial	30,000	20,715	0.69	B	17,232	0.57	A	20,870	0.70	B	17,437	0.58	A
	Sierra College Boulevard and Barton Road [1] (Loomis)	Two-lane Collector	15,000	8,458	0.56	A	7,514	0.50	A	9,078	0.61	B	8,344	0.56	A
Barton Road	Rocklin Road and Brace Road [1] (Loomis)	Two-lane Collector	15,000	2,495	0.17	A	2,256	0.15	A	2,495	0.17	A	2,256	0.15	A
Horseshoe Bar Road	I-80 and Brace Road [1] (Loomis)	Two-lane Collector	15,000	7,882	0.53	A	6,974	0.46	A	8,092	0.54	A	7,244	0.48	A
Brace Road	I-80 and Barton Road [1] (Loomis)	Two-lane Collector	15,000	5,203	0.35	A	5,305	0.35	A	5,453	0.36	A	5,645	0.38	A
	I-80 and Sierra College Boulevard [1] (Loomis)	Two-lane Collector	15,000	4,695	0.31	A	4,649	0.31	A	4,825	0.32	A	4,819	0.32	A
Sierra College Boulevard	English Colony Way and King Road [1] (Placer County)	Two-lane Collector	15,000	17,403	1.16	F	15,628	1.04	F	18,793	1.25	F	17,488	1.17	F
	King Road and Taylor Road [1] (Loomis)	Two-lane Collector	15,000	18,052	1.20	F	16,556	1.10	F	19,832	1.32	F	18,931	1.26	F
	Taylor Road and I-80	Four-lane Undivided Arterial	30,000	26,372	0.88	D	25,350	0.85	D	29,672	0.99	E	29,755	0.99	E
	I-80 and Dominguez Road [2]	Four-lane Undivided Arterial	30,000	24,470	0.82	D	21,627	0.72	C	27,645	0.92	E	25,897	0.86	D
	Dominguez Road [2] and Rocklin Road [1]	Four-lane Undivided Arterial	30,000	23,447	0.78	C	20,341	0.68	B	26,232	0.87	D	24,056	0.80	D
Granite Drive	Dominguez Road and Sierra College Boulevard [1]	Four-lane Undivided Arterial	30,000	10,037	0.33	A	9,103	0.30	A	10,187	0.34	A	9,303	0.31	A
	Dominguez Road and Rocklin Road [1]	Four-lane Undivided Arterial	30,000	8,427	0.28	A	7,708	0.26	A	8,502	0.28	A	7,808	0.26	A
Dominguez Road	Pacific Street and Granite Drive [1]	Two-lane Collector	15,000	2,533	0.17	A	1,349	0.09	A	2,533	0.17	A	1,349	0.09	A
King Road	Sierra College Boulevard and Taylor Road [1] (Loomis)	Two-lane Collector	15,000	7,445	0.50	A	6,217	0.41	A	7,525	0.50	A	6,317	0.42	A

Notes:

[1] LOS C required for these segments. LOS D acceptable for all other segments.

[2] Proposed location of the future extension of Dominguez Road.

Exceeds level of service criteria

Table 4.2-15: Existing plus Approved Projects (Baseline) plus Project Peak-Hour Roadway Segment Level of Service Summary

Roadway	Segment	Capacity	Existing + Approved			Existing + Approved + Project		
			Volume	V/C	LOS	Volume	V/C	LOS
Taylor Road	King Rd and Horseshoe Bar Rd (Loomis)							
	A.M. Peak Hour Northbound	1,650	701	0.42	A	705	0.43	A
	A.M. Peak Hour Southbound	1,650	760	0.46	A	766	0.46	A
	P.M Peak Hour Northbound	1,650	889	0.54	A	905	0.55	A
	P.M Peak Hour Southbound	1,650	801	0.49	A	817	0.50	A
	Saturday Peak Hour Northbound	1,650	743	0.45	A	764	0.46	A
	Saturday Peak Hour Southbound	1,650	697	0.42	A	718	0.44	A
Taylor Road	Horseshoe Bar Rd and Sierra College Blvd (Loomis)							
	A.M. Peak Hour Eastbound	1,650	330	0.20	A	337	0.20	A
	A.M. Peak Hour Westbound	1,650	416	0.25	A	425	0.26	A
	P.M Peak Hour Eastbound	1,650	614	0.37	A	637	0.39	A
	P.M Peak Hour Westbound	1,650	505	0.31	A	526	0.32	A
	Saturday Peak Hour Eastbound	1,650	622	0.38	A	651	0.39	A
	Saturday Peak Hour Westbound	1,650	544	0.33	A	573	0.35	A
Taylor Road	Sierra College Blvd and City Limits (Loomis)							
	A.M. Peak Hour Eastbound	1,650	301	0.18	A	311	0.19	A
	A.M. Peak Hour Westbound	1,650	426	0.26	A	434	0.26	A
	P.M Peak Hour Eastbound	1,650	592	0.36	A	615	0.37	A
	P.M Peak Hour Westbound	1,650	433	0.26	A	457	0.28	A
	Saturday Peak Hour Eastbound	1,650	432	0.26	A	464	0.28	A
	Saturday Peak Hour Westbound	1,650	419	0.25	A	449	0.27	A
Sierra College Boulevard	English Colony Way and King Rd (Placer County)							
	A.M. Peak Hour Northbound	1,650	349	0.21	A	371	0.22	A
	A.M. Peak Hour Southbound	1,650	778	0.47	A	808	0.49	A
	P.M Peak Hour Northbound	1,650	953	0.58	A	1,024	0.62	B
	P.M Peak Hour Southbound	1,650	707	0.43	A	775	0.47	A
	Saturday Peak Hour Northbound	1,650	659	0.40	A	750	0.45	A
	Saturday Peak Hour Southbound	1,650	653	0.40	A	747	0.45	A
Sierra College Boulevard	King Rd and Taylor Rd (Loomis)							
	A.M. Peak Hour Northbound	1,650	337	0.20	A	366	0.22	A
	A.M. Peak Hour Southbound	1,650	779	0.47	A	817	0.50	A
	P.M Peak Hour Northbound	1,650	942	0.57	A	1,033	0.63	B
	P.M Peak Hour Southbound	1,650	675	0.41	A	762	0.46	A
	Saturday Peak Hour Northbound	1,650	662	0.40	A	779	0.47	A
	Saturday Peak Hour Southbound	1,650	657	0.40	A	778	0.47	A
Sierra College Boulevard	Taylor Rd and I-80							
	A.M. Peak Hour Northbound	3,300	569	0.17	A	623	0.19	A
	A.M. Peak Hour Southbound	3,300	975	0.30	A	1,046	0.32	A
	P.M Peak Hour Northbound	3,300	1,300	0.39	A	1,469	0.45	A
	P.M Peak Hour Southbound	3,300	988	0.30	A	1,149	0.35	A
	Saturday Peak Hour Northbound	3,300	1,121	0.34	A	1,338	0.41	A
	Saturday Peak Hour Southbound	3,300	1,026	0.31	A	1,250	0.38	A
Sierra College Boulevard	I-80 and Dominguez Rd							
	A.M. Peak Hour Northbound	3,300	671	0.20	A	735	0.22	A
	A.M. Peak Hour Southbound	3,300	1,258	0.38	A	1,310	0.40	A
	P.M Peak Hour Northbound	3,300	1,097	0.33	A	1,279	0.39	A
	P.M Peak Hour Southbound	3,300	1,000	0.30	A	1,155	0.35	A
	Saturday Peak Hour Northbound	3,300	979	0.30	A	1,224	0.37	A
	Saturday Peak Hour Southbound	3,300	966	0.29	A	1,173	0.36	A
Sierra College Boulevard	Dominguez Rd and Rocklin Rd							
	A.M. Peak Hour Northbound	3,300	608	0.18	A	662	0.20	A
	A.M. Peak Hour Southbound	3,300	744	0.23	A	784	0.24	A
	P.M Peak Hour Northbound	3,300	1,131	0.34	A	1,252	0.38	A
	P.M Peak Hour Southbound	3,300	903	0.27	A	1,030	0.31	A
	Saturday Peak Hour Northbound	3,300	952	0.29	A	1,120	0.34	A
	Saturday Peak Hour Southbound	3,300	826	0.25	A	988	0.30	A

Notes:
☐ Exceeds level of service criteria
Significant Impact

Level of Significance after Mitigation

With the implementation of the identified mitigation measure, the intersection would operate at an acceptable LOS and this impact would be considered less than significant. The number of vehicles turning right in the northbound direction are high (542 a.m., 739 p.m. and 587 Saturday mid-day peak) during the peak hours. The addition of the overlap phase provides additional time for the right turning vehicles to clear the intersection thus improving the overall LOS at this location. The proposed mitigation for the existing plus approved projects (baseline) plus project scenario are shown on Exhibit 4.2-18. The intersections where new improvements are proposed are highlighted.

IMPACT 4.2-2 *Sierra College Boulevard/Rocklin Road. The addition of project-related traffic to baseline traffic volumes would degrade traffic operations at this intersection to an unacceptable level. This impact would be considered* ***significant.***

The intersection of Sierra College Boulevard/Rocklin Road is projected to operate at LOS C during the p.m. peak hour and Saturday peak hour in the no project condition. The addition of the project traffic would deteriorate the operation of this intersection to LOS D (unacceptable). Because the LOS at this intersection changes from an acceptable LOS C (no project condition) to an unacceptable LOS D (with project condition), the project impact at this intersection is significant.

Mitigation Measure 4.2-2 Sierra College Boulevard/Rocklin Road Intersection

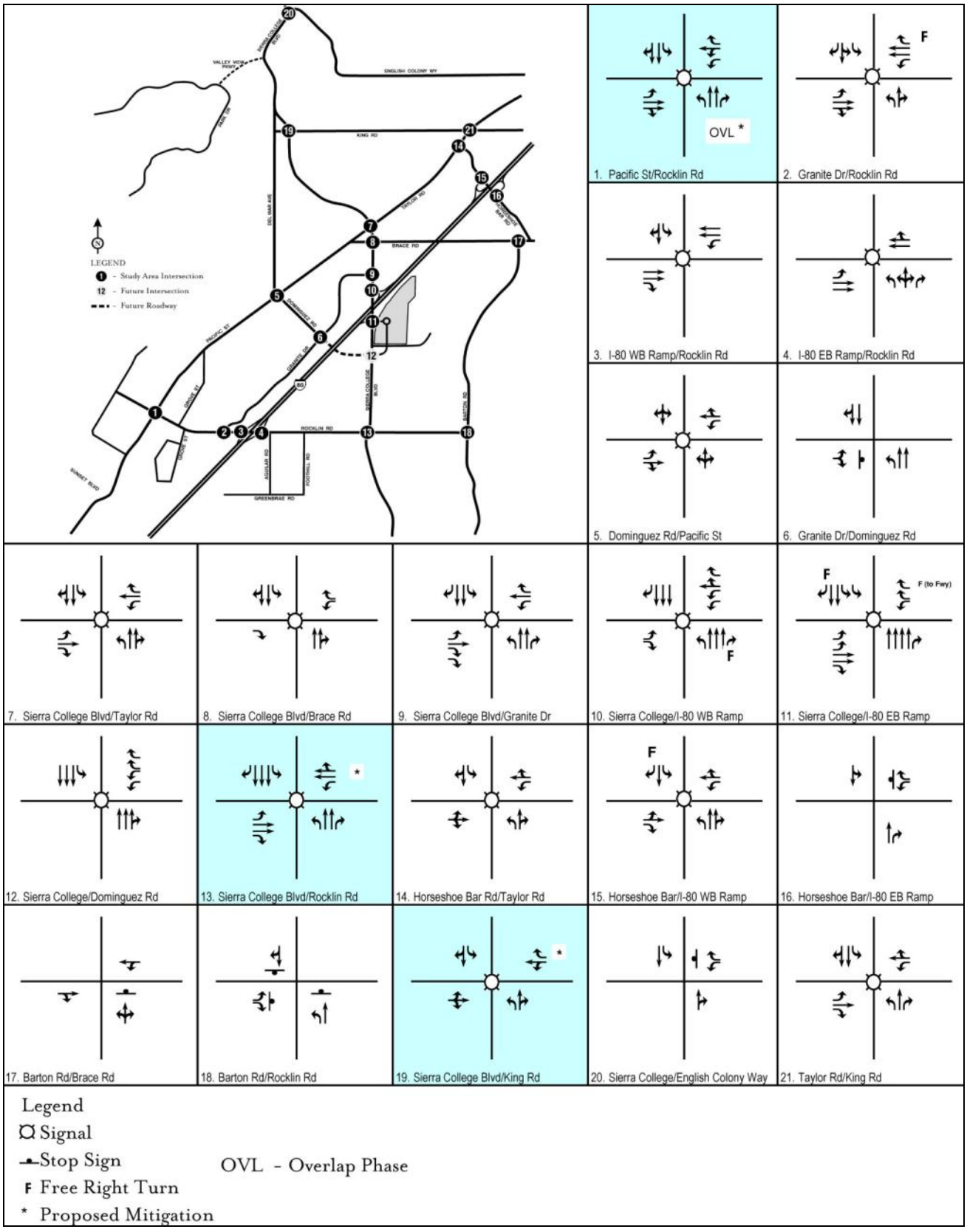
The project applicant shall be responsible for adding a westbound through lane (resulting in two through lanes) to this intersection to mitigate the project impact at this location.

Level of Significance after Mitigation

With the implementation of the identified mitigation measure, the intersection would operate at an acceptable LOS and this impact would be considered less than significant. The proposed mitigation will increase the overall capacity of the intersection thus improving the LOS at this location.

IMPACT 4.2-3 *Sierra College Boulevard/King Road (Loomis). The intersection is projected to operate unacceptably during the p.m. peak hour in the no project condition and the project would add more than 5 percent to the total traffic volume. Because this intersection already operates unacceptably and the project's contribution would be greater than 5 percent, this impact would be considered* ***significant.***

The intersection of Sierra College Boulevard/King Road (Loomis) is projected to operate at LOS D (unacceptable) during the p.m. peak hour in the no project condition. The project adds more than 5 percent of total traffic at this intersection. Because the LOS at this intersection is unacceptable LOS D (no project condition) and the project adds more than 5 percent of the total traffic at the intersection (with project condition), the project impact at this intersection is significant.



Source: LSA Associates 2010

Existing Plus Approved Projects (Baseline)
Plus Project Conditions - Mitigation **Exhibit 4.2-18**

Mitigation Measure 4.2-3 Sierra College Boulevard/King Road (Loomis) Intersection

The project applicant shall be responsible for adding a westbound right-turn lane by restriping the westbound approach to this intersection to mitigate the project impact at this location.

In order to implement this measure, the project applicant shall attempt, in good faith, to enter into an agreement with the Town of Loomis by which the applicant either shall be responsible for constructing the improvements at issue or shall provide the Town of Loomis with funding in an amount equal to the agreed upon estimated cost of the improvements.

Level of Significance after Mitigation

With the implementation of the identified mitigation measure, the intersection would operate at an acceptable level of service, as the proposed mitigation will increase the overall capacity of the intersection thus improving the LOS at this location. Because the Town of Loomis controls what occurs at the intersection, however, and because the City is uncertain as to whether the Town would be willing to cooperate in construction of the contemplated improvements within a reasonable period of time (i.e., prior to the issuance of occupancy permits), the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the Town of Loomis and this intersection and therefore cannot take for granted that the improvements contemplated by the mitigation will get implemented. Furthermore, although the mitigation measure requires the applicant to try and enter into an agreement with Loomis by which the applicant will be responsible for the improvements, the City has no way to ensure that Loomis will cooperate with the applicant pursuant to that measure. An agreement requires two cooperating parties, and the City cannot force Loomis to cooperate if it chooses not to do so. For these reasons, consistent with CEQA Guidelines section 15091, subdivision (a)(2), the City concludes, however, that Loomis can and should cooperate with the City in implementing the mitigation. With such action by Loomis, the impact of the project would be rendered less than significant, though at present, as noted above, the City considers the impact significant and unavoidable.

IMPACT 4.2-4 *Roadway Segments. All roadway segments currently operate satisfactorily and the proposed project would not degrade any roadway segment to an unsatisfactory condition. Therefore, this impact would be considered* ***less than significant****.*

All but eight of the study area roadway segments are forecast to operate within their daily roadway capacities, as shown in Table 4.2-14. A directional peak-hour roadway segment analysis was prepared for these eight segments and is shown in Table 4.2-15. In the a.m., p.m., and Saturday midday peak hours, all the roadway segments would operate with satisfactory v/c ratios with the addition of project traffic. Because these roadway segments are projected to operate at satisfactory v/c ratios during the peak hours of roadway traffic, they are not considered deficient and roadway segment impacts associated with the proposed project would be considered less than significant.

Mitigation Measure 4.2-4 Roadway Segments

No mitigation would be necessary.

Level of Significance after Mitigation

The project's impacts on roadway segments would be considered less than significant.

4.2.9 CUMULATIVE IMPACTS AND MITIGATION MEASURES

DEVELOPMENT OF FUTURE TRAFFIC VOLUMES

Traffic volume data for 2030 conditions were developed using forecasts from the City's most current travel demand model, updated in 2008. It should be noted that the current travel demand model includes land use and circulation system based on the City's proposed General Plan update. The cumulative analysis is based on the most current iteration of the City travel demand model. Funding for future circulation improvements will come from several sources, including, but not limited to, anticipated fee programs, new or updated fee programs and/or development exactions appropriate to the land uses proposed in the General Plan, City development fees, the SPRTA program, and other applicable funding programs. The 2030 projected traffic volumes for this analysis, as noted above, are based on the travel demand model, which itself is based on the proposed updated City of Rocklin General Plan and the existing Town of Loomis General Plan. The travel demand model also includes assumptions about the level of build out by 2030 under each General Plan. The current General Plan travel demand model takes into account the relatively limited growth provided for in the City of Rocklin General Plan Update. The City of Rocklin is largely built out and the new General Plan does not expand the City's footprint. The model allows for modest growth, as well as anticipated traffic growth in the region based on other new developments. The General Plan travel demand model is a detailed version (within Rocklin and the surrounding areas) of the Placer County Travel Demand Model.

The City employs a traffic consultant (DKS Associates, Inc.) that maintains a travel demand model for the region (including the Town of Loomis). This travel demand model is validated (i.e., verified for accuracy of the forecast volumes) for a base year (2008) and a future year (2030) for the p.m. peak hour and daily only. These base-year and future-year models were obtained from the City's traffic consultant. Base-year and future-year p.m. peak-hour arterial segment volumes were forecast using the City's travel demand model. The base-year and future-year models are only used to obtain the growth increment between 2008 and 2030. This growth is then added to the existing (2010) turning movement counts to generate the future 2030 turning movement volumes. Turn movements for the p.m. peak hour were post-processed according to the methodology described below.

INTERSECTION TURNING MOVEMENTS

For passenger vehicles, the base-year scenario in the City's travel demand model is 2008 and the future-year scenario is 2030. The following describes the methodology used to postprocess travel demand model volumes to develop a.m. and p.m. peak-hour intersection turn volumes for 2030 conditions:

1. The difference between the modeled 2008 and modeled 2030 peak-hour directional arterial traffic volumes (for each intersection approach and departure) was identified from loaded highway network plots. This difference defines growth in traffic over the 22-year period. The incremental growth in peak-period approach and departure volumes

between 2008 and 2030 was factored to develop the incremental change in peak-hour volumes.

2. The forecast growth in approach (toward the intersection) and departure (away from the intersection) volumes at an intersection from 2008 to 2030 was added to the existing approach and departure volumes, resulting in postprocessed 2030 approach and departure volumes. Volume development worksheets summarizing the steps are included in Appendix B.

3. Forecast 2030 turn volumes were developed using existing (2010) turn volumes and the future approach and departure volumes, based on the methodologies contained in the *National Cooperative Highway Research Program Report (NCHRP) 255: Highway Traffic Data for Urbanized Area Project Planning and Design* (Transportation Research Board, December 1982). NCHRP 255 worksheets are included in Appendix B.

The City's current travel demand model is not validated (verified for the accuracy of forecast volumes) for the a.m. peak hour and does not have forecasting capability for the Saturday peak hour. To validate the 2030 model a.m. peak-hour traffic volumes, the existing a.m. peak-hour traffic volumes were compared to the existing (2010) p.m. peak-hour traffic volumes and ratios between the existing (2010) a.m. and p.m. peak-hour volumes were calculated. In order to maintain the peak directionality, these ratios were then applied (multiplied) to the 2030 a.m. peak-hour model numbers. These adjusted 2030 a.m. peak-hour directional arterial traffic volumes were then used in the methodology described above in Step 1 to obtain the growth in traffic volumes during the a.m. peak hour. Similarly, to develop future intersection turn movements for the Saturday midday peak hour, the ratios of the existing p.m. peak-hour volumes to the Saturday peak-hour volumes were used. These ratios were applied (multiplied) to the post-processed 2030 no project p.m. peak-hour traffic volumes to determine the 2030 no project Saturday peak-hour traffic volumes. In summary, to validate the 2030 model data for a.m. and Saturday peak hour, the ratios between the a.m. and p.m. and Saturday peak hours were calculated for the observed data (existing 2010 conditions) and applied to the traffic model to develop the 2030 a.m. and Saturday peak hour model volumes. Project trips were then manually added to the study area intersections to determine the 2030 plus project traffic volumes.

The 2030 traffic volumes were forecast for two roadway networks. The network used for project impact analysis assumes that Dominguez Road terminates at Granite Drive, as in the existing condition, and is referred to as "without Dominguez Road." The alternative network assumes that Dominguez Road is extended east over the freeway (just an overcrossing) to Sierra College Boulevard to form the fourth leg at the intersection of Sierra College Boulevard/Southern Project Driveway. This alternative network is referred to as "with Dominguez Road" and is intended to provide a sensitivity analysis of the effects of extending Dominguez Road. The Dominguez Road extension is in the City's Traffic Impact Fee and CIP and is included in the City's current General Plan, although no schedule exists for construction of the new segment. The analysis of "with Dominguez Road" conditions is provided later in Section 4.2-10, Dominguez Road Sensitivity Analysis.

2030 No Project Without Dominguez Road

Weekday and Saturday peak-hour forecast traffic volumes for the 2030 no project without Dominguez Road scenario are shown on Exhibits 4.2-19 and 4.2-20, respectively. The LOS for

study area intersections and roadway segments are shown in Tables 4.2-16 and 4.2-17. The 2030 no project without Dominguez Road traffic volume development and LOS worksheets are provided in Appendix B. All 2030 LOS calculations include the roadway improvements assumed in the baseline condition as well as implementation of the City's proposed General Plan roadway system, as documented in the City's General Plan Circulation Element. Consistent with the City's General Plan, the Town of Loomis' General Plan, and the Horseshoe Bar/Community Plans, the traffic analysis for the cumulative conditions (2030) assumes that Sierra College Boulevard would be widened to a four-lane arterial between English Colony Way and just north of Taylor Road and to a six-lane arterial between just north of Taylor Road and El Don Drive.

The 2030 intersection geometrics and traffic control are shown on Exhibit 4.2-21. As shown in Table 4.2-16, the following 10 intersections are forecast to operate at unsatisfactory LOS in the 2030 no project without Dominguez Road condition:

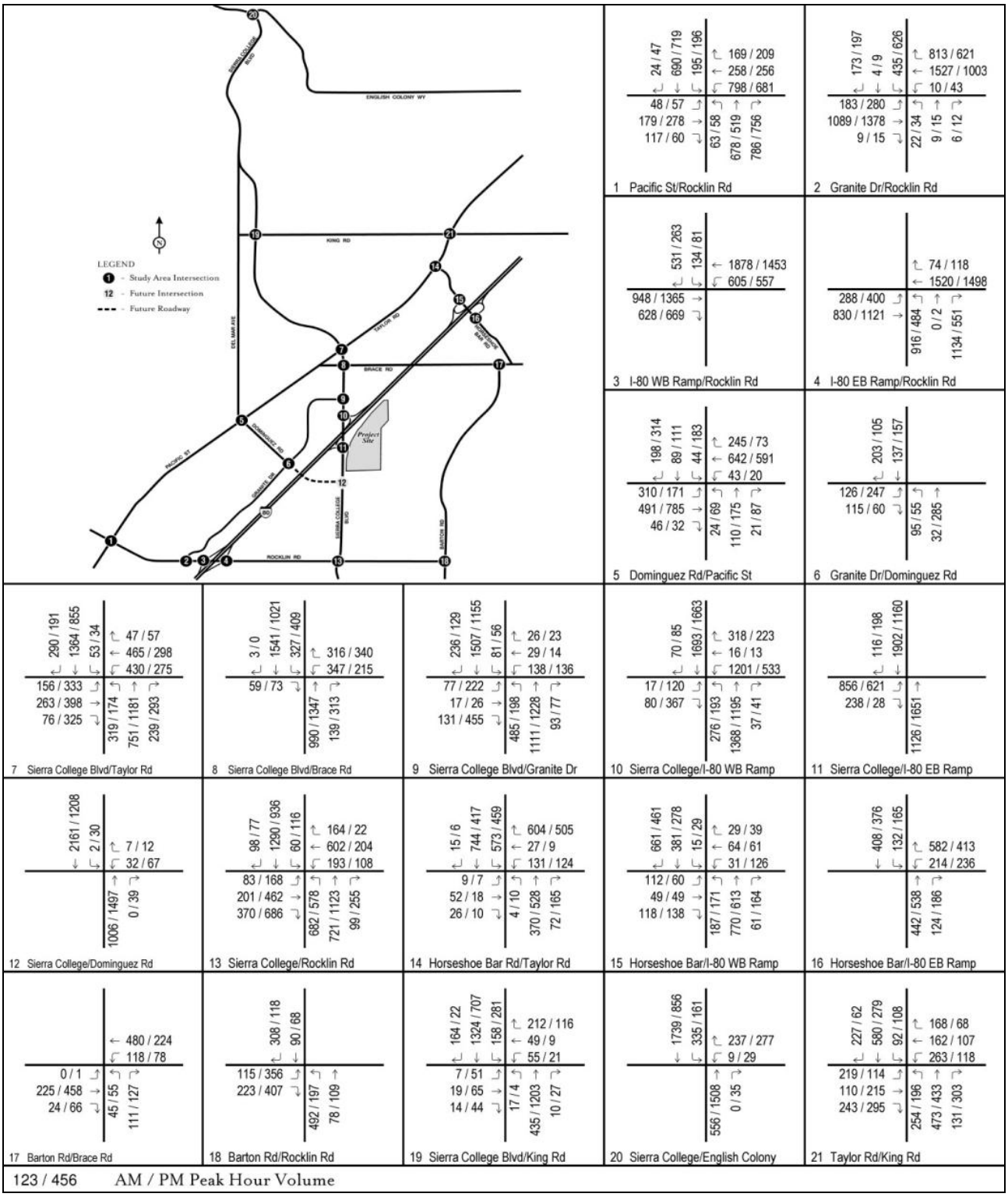
- Rocklin Road/Pacific Street
- Rocklin Road/I-80 eastbound ramps
- Dominguez Road/Pacific Street
- Sierra College Boulevard/Taylor Road (Loomis)
- Sierra College Boulevard/Granite Drive
- Sierra College Boulevard/Rocklin Road
- Taylor Road/Horseshoe Bar Road (Loomis)
- Horseshoe Bar Road/I-80 eastbound ramps (Loomis)
- Sierra College Boulevard/English Colony Way (Placer County)
- Taylor Road/King Road (Loomis)

For roadway segments Tables 4.2-17 and 4.2-18 show that application of the two-step procedure, first evaluating daily volume to capacity and then, if necessary, peak hour directional volume to capacity, results in no exceedances of LOS standards. While six roadway segments exceeded daily capacities, the peak hour directional analysis confirmed that these six segments would operate at acceptable LOS.

2030 PLUS PROJECT WITHOUT DOMINGUEZ ROAD

Traffic volumes generated by the proposed project were added to the 2030 no project traffic volumes, and LOS were calculated for the 2030 plus project scenario. Weekday and Saturday peak-hour forecast traffic volumes for the 2030 plus project without Dominguez Road scenario are shown on Exhibits 4.2-22 and 4.2-23. The LOS for study area intersections and roadway segments in the 2030 plus project without Dominguez Road scenario are shown in Tables 4.2-19 and 4.2-20. The 2030 plus project without Dominguez Road LOS worksheets are provided in Appendix B.[7]

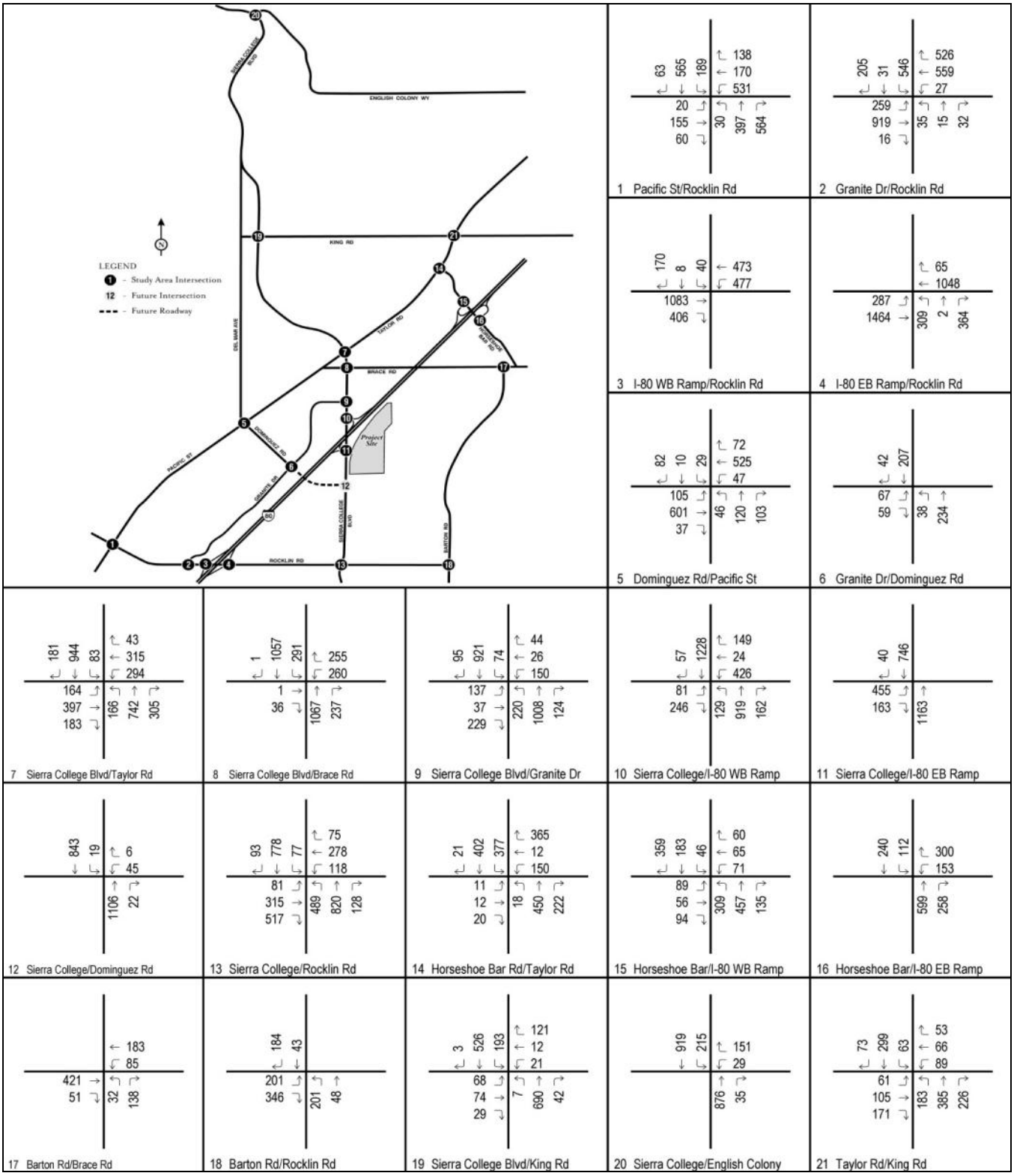
[7] / The 2030 No Project condition does not include the project but rather assumes vacant land. The volumes for the 2030 Plus Project conditions were developed directly from the model (the model included the proposed project). Then the traffic volumes for 2030 No Project conditions were calculated by removing the project only traffic from the 2030 with project traffic volumes.



Source: LSA Associates 2010

Year 2030 No Project
Peak-Hour Traffic Volumes - Without Dominguez Road

Exhibit 4.2-19



Source: LSA Associates 2010

Year 2030 No Project Saturday Peak-Hour Traffic Volumes - Without Dominguez Road **Exhibit 4.2-20**

Table 4.2-16: 2030 No Project Without Dominguez Road Peak-Hour Intersection Level of Service Summary

	Intersection	2030 No Project without Dominguez Road Condition					
		AM Peak Hour		PM Peak Hour		Saturday	
		V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS
1	Rocklin Road/Pacific Street [1]	1.234	F	1.181	F	0.900	E
2	Rocklin Road/Granite Drive	0.880	D	0.847	D	0.655	B
3	Rocklin Road/I-80 Westbound Ramps	54.5 sec	D	30.8 sec	C	24.1 sec	C
4	Rocklin Road/I-80 Eastbound Ramps	66.2 sec	E	47.0 sec	D	21.5 sec	C
5	Dominguez Road/Pacific Street [1]	0.996	E	0.855	D	0.591	A
6	Dominguez Road/Granite Drive* [1]	12.2 sec	B	16.5 sec	C	10.9 sec	B
7	Sierra College Boulevard/Taylor Road [1] (Loomis)	54.3 sec	D	34.9 sec	C	34.4 sec	C
8	Sierra College Boulevard/Brace Road [1] (Loomis)	23.9 sec	C	27.6 sec	C	22.2 sec	C
9	Sierra College Boulevard/Granite Drive	0.928	E	0.736	C	0.607	B
10	Sierra College Boulevard/I-80 Westbound Ramps	52.8 sec	D	50.6 sec	D	35.2 sec	D
11	Sierra College Boulevard/I-80 Eastbound Ramps	32.6 sec	C	16.1 sec	B	11.7 sec	B
12	Sierra College Boulevard/Dominguez Road	0.518	A	0.406	A	0.295	A
13	Sierra College Boulevard/Rocklin Road [1]	1.426	F	1.225	F	1.006	F
14	Taylor Road/Horseshoe Bar Road [1] (Loomis)	56.5 sec	E	55.9 sec	E	36.6 sec	D
15	Horseshoe Bar Road/I-80 Westbound Ramps [1] (Loomis)	18.9 sec	B	20.1 sec	C	21.7 sec	C
16	Horseshoe Bar Road/I-80 Eastbound Ramps* [1,2] (Loomis)	67.6 sec	F	121.1 sec	F	32.0 sec	D
17	Barton Road/Brace Road* [1,2] (Loomis)	15.1 sec	C	18.1 sec	C	14.9 sec	B
18	Barton Road/Rocklin Road* [1,2] (Loomis)	24.8 sec	C	15.3 sec	C	12.2 sec	B
19	Sierra College Boulevard/King Road [1] (Loomis)	20.3 sec	C	20.1 sec	C	20.3 sec	C
20	Sierra College Boulevard/English Colony Way* [1,2] (Placer County)	17.2 sec	C	86.1 sec	F	30.5 sec	D
21	Taylor Road/King Road [1] (Loomis)	37.0 sec	D	31.0 sec	C	28.1 sec	C

Notes:

ICU V/C ratio is used for signalized intersections in the City of Rocklin. HCM delay in seconds is used for unsignalized intersections and in the Town of Loomis.

* Indicates unsignalized intersection

[1] LOS C required for these intersections. LOS D acceptable for all other intersections.

[2] Peak Hour volumes meet Signal Warrant #3 of the MUTCD

☐ Exceeds level of service criteria

Table 4.2-17: 2030 No Project Without Dominguez Road Daily Roadway Segment Level of Service Summary

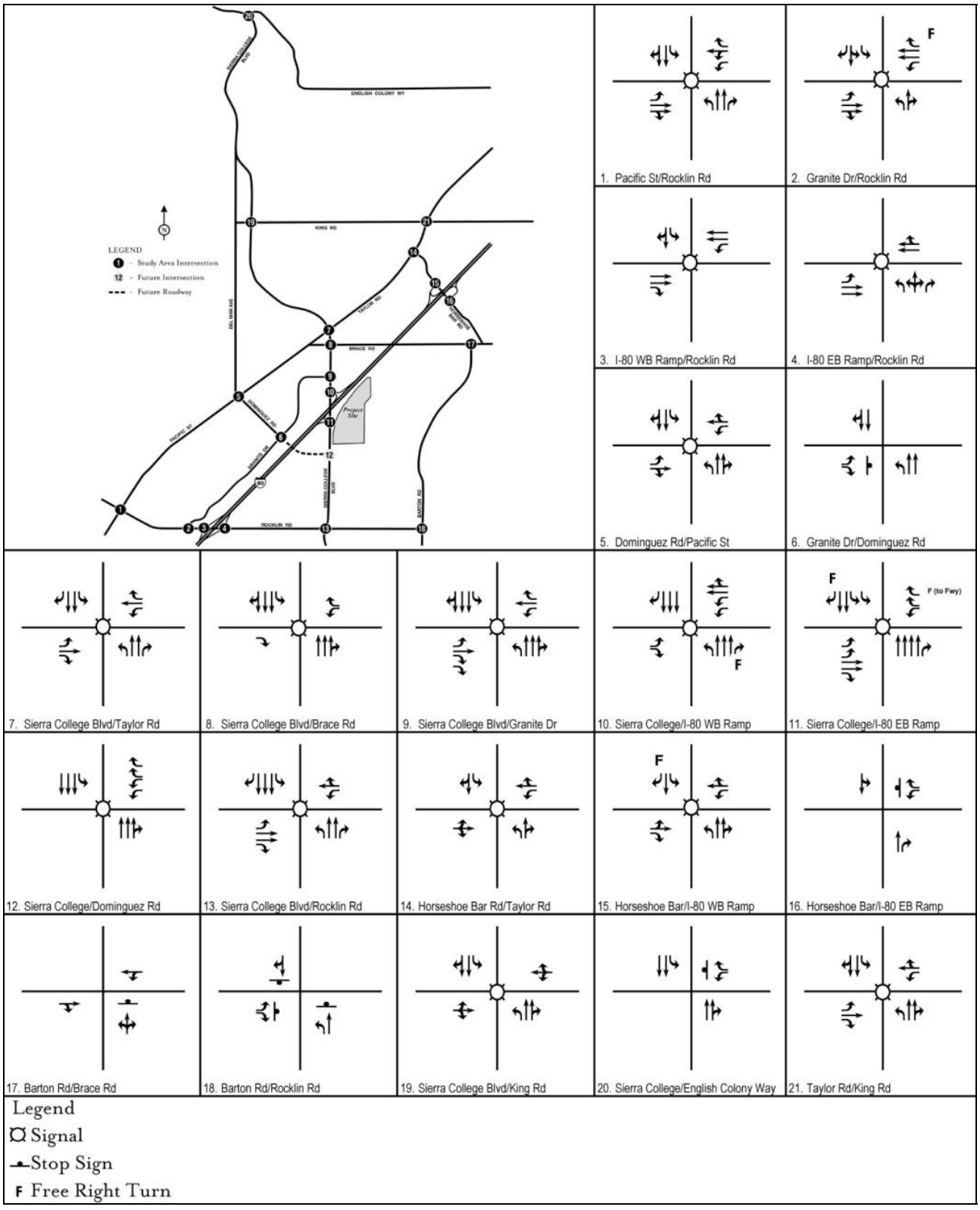
Roadway	Segment	Configuration	Capacity	Volume	V/C	LOS
Taylor Road	King Road and Horseshoe Bar Road [1] (Loomis)	Two-lane Collector	15,000	18,245	1.22	F
	Horseshoe Bar Road and Sierra College Boulevard[1] (Loomis)	Two-lane Collector	15,000	16,376	1.09	F
	Sierra College Boulevard and City Limits [1] (Loomis)	Two-lane Collector	15,000	20,873	1.39	F
Pacific Street	City Limits and Dominguez Road [1]	Four-lane Undivided Arterial	30,000	20,540	0.68	B
	Dominguez Road and Rocklin Road [1]	Four-lane Undivided Arterial	30,000	20,401	0.68	B
Rocklin Road	Pacific Street and Granite Drive	Four-lane Undivided Arterial	30,000	33,574	1.12	F
	I-80 and Sierra College Boulevard	Four-lane Undivided Arterial	30,000	24,356	0.81	D
	Sierra College Boulevard and Barton Road [1] (Loomis)	Four-lane Undivided Arterial	30,000	13,027	0.43	A
Barton Road	Rocklin Road and Brace Road [1] (Loomis)	Two-lane Collector	15,000	3,722	0.25	A
Horseshoe Bar Road	I-80 and Brace Road [1] (Loomis)	Two-lane Collector	15,000	10,317	0.69	B
Brace Road	I-80 and Barton Road [1] (Loomis)	Two-lane Collector	15,000	9,665	0.64	B
	I-80 and Sierra College Boulevard [1] (Loomis)	Two-lane Collector	15,000	10,226	0.68	B
Sierra College Boulevard	English Colony Way and King Road [1] (Placer County)	Four-lane Undivided Arterial	30,000	30,099	1.00	F
	King Road and Taylor Road [1] (Loomis)	Four-lane Undivided Arterial	30,000	24,229	0.81	D
	Taylor Road and I-80	Six-lane Arterial	50,525	38,869	0.77	C
	I-80 and Dominguez Road	Six-lane Arterial	50,525	37,914	0.75	C
	Dominguez Road and Rocklin Road [1]	Six-lane Arterial	50,525	36,704	0.73	C
Granite Drive	Dominguez Road and Sierra College Boulevard [1]	Four-lane Undivided Arterial	30,000	14,336	0.48	A
	Dominguez Road and Rocklin Road [1]	Four-lane Undivided Arterial	30,000	9,332	0.31	A
Dominguez Road	Pacific Street and Granite Drive [1]	Two-lane Collector	15,000	6,078	0.41	A
King Road	Sierra College Boulevard and Taylor Road [1] (Loomis)	Two-lane Collector	15,000	6,636	0.44	A

Notes:

[1] LOS C required for these segments. LOS D acceptable for all other segments.

☐ Exceeds level of service criteria

Roadway Improvements consistent with City of Rocklin General Plan, Town of Loomis General Plan, and the Horseshoe Bar/Penryn Community Plan.



Source: LSA Associates 2010

2030 Geometrics and Traffic Control **Exhibit 4.2-21**

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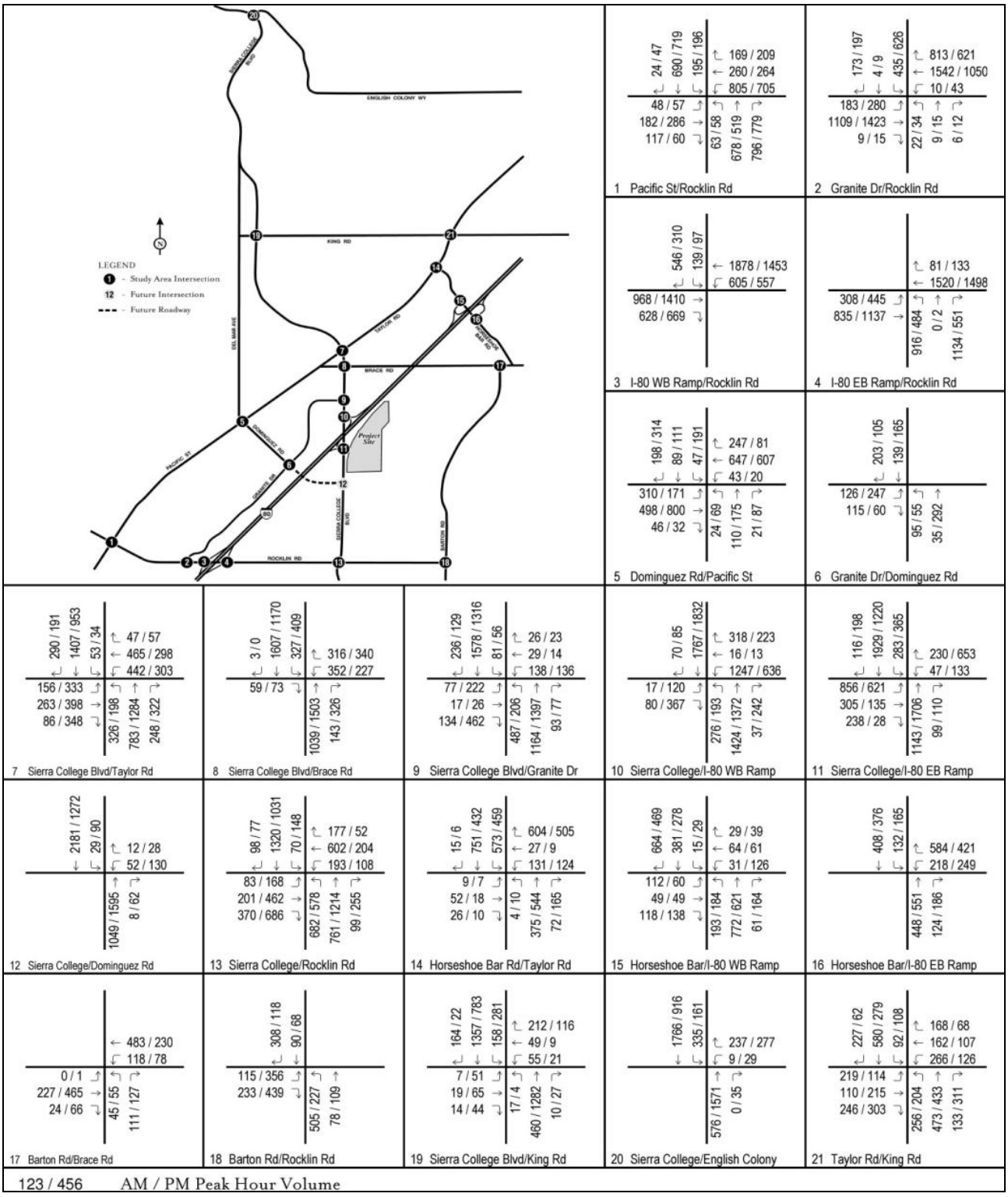
Table 4.2-18: 2030 No Project Without Dominguez Road Peak-Hour Roadway Segment Level of Service Summary

Roadway	Segment	Capacity	2030 No Project		
			Volume	V/C	LOS
Taylor Road	King Rd and Horseshoe Bar Rd (Loomis)				
	A.M. Peak Hour Northbound	1,650	921	0.56	A
	A.M. Peak Hour Southbound	1,650	1,209	0.73	C
	P.M Peak Hour Northbound	1,650	986	0.60	A
	P.M Peak Hour Southbound	1,650	787	0.48	A
	Saturday Peak Hour Northbound	1,650	810	0.49	A
	Saturday Peak Hour Southbound	1,650	680	0.41	A
Taylor Road	Horseshoe Bar Rd and Sierra College Blvd (Loomis)				
	A.M. Peak Hour Eastbound	1,650	500	0.30	A
	A.M. Peak Hour Westbound	1,650	922	0.56	A
	P.M Peak Hour Eastbound	1,650	709	0.43	A
	P.M Peak Hour Westbound	1,650	591	0.36	A
	Saturday Peak Hour Eastbound	1,650	738	0.45	A
	Saturday Peak Hour Westbound	1,650	600	0.36	A
Taylor Road	Sierra College Blvd and City Limits (Loomis)				
	A.M. Peak Hour Eastbound	1,650	526	0.32	A
	A.M. Peak Hour Westbound	1,650	1,002	0.61	B
	P.M Peak Hour Eastbound	1,650	1,056	0.64	B
	P.M Peak Hour Westbound	1,650	674	0.41	A
	Saturday Peak Hour Eastbound	1,650	739	0.45	A
	Saturday Peak Hour Westbound	1,650	653	0.40	A
Rocklin Road	Pacific St and Granite Dr				
	A.M. Peak Hour Eastbound	3,300	1,221	0.37	A
	A.M. Peak Hour Westbound	3,300	1,474	0.45	A
	P.M Peak Hour Eastbound	3,300	1,452	0.44	A
	P.M Peak Hour Westbound	3,300	1,190	0.36	A
	Saturday Peak Hour Eastbound	3,300	1,051	0.32	A
	Saturday Peak Hour Westbound	3,300	819	0.25	A
Sierra College Boulevard	English Colony Way and King Rd (Placer County)				
	A.M. Peak Hour Northbound	3,300	605	0.18	A
	A.M. Peak Hour Southbound	3,300	1,697	0.51	A
	P.M Peak Hour Northbound	3,300	1,457	0.44	A
	P.M Peak Hour Southbound	3,300	948	0.29	A
	Saturday Peak Hour Northbound	3,300	895	0.27	A
	Saturday Peak Hour Southbound	3,300	835	0.25	A
Sierra College Boulevard	King Rd and Taylor Rd (Loomis)				
	A.M. Peak Hour Northbound	3,300	708	0.21	A
	A.M. Peak Hour Southbound	3,300	1,550	0.47	A
	P.M Peak Hour Northbound	3,300	1,403	0.43	A
	P.M Peak Hour Southbound	3,300	926	0.28	A
	Saturday Peak Hour Northbound	3,300	844	0.26	A
	Saturday Peak Hour Southbound	3,300	892	0.27	A

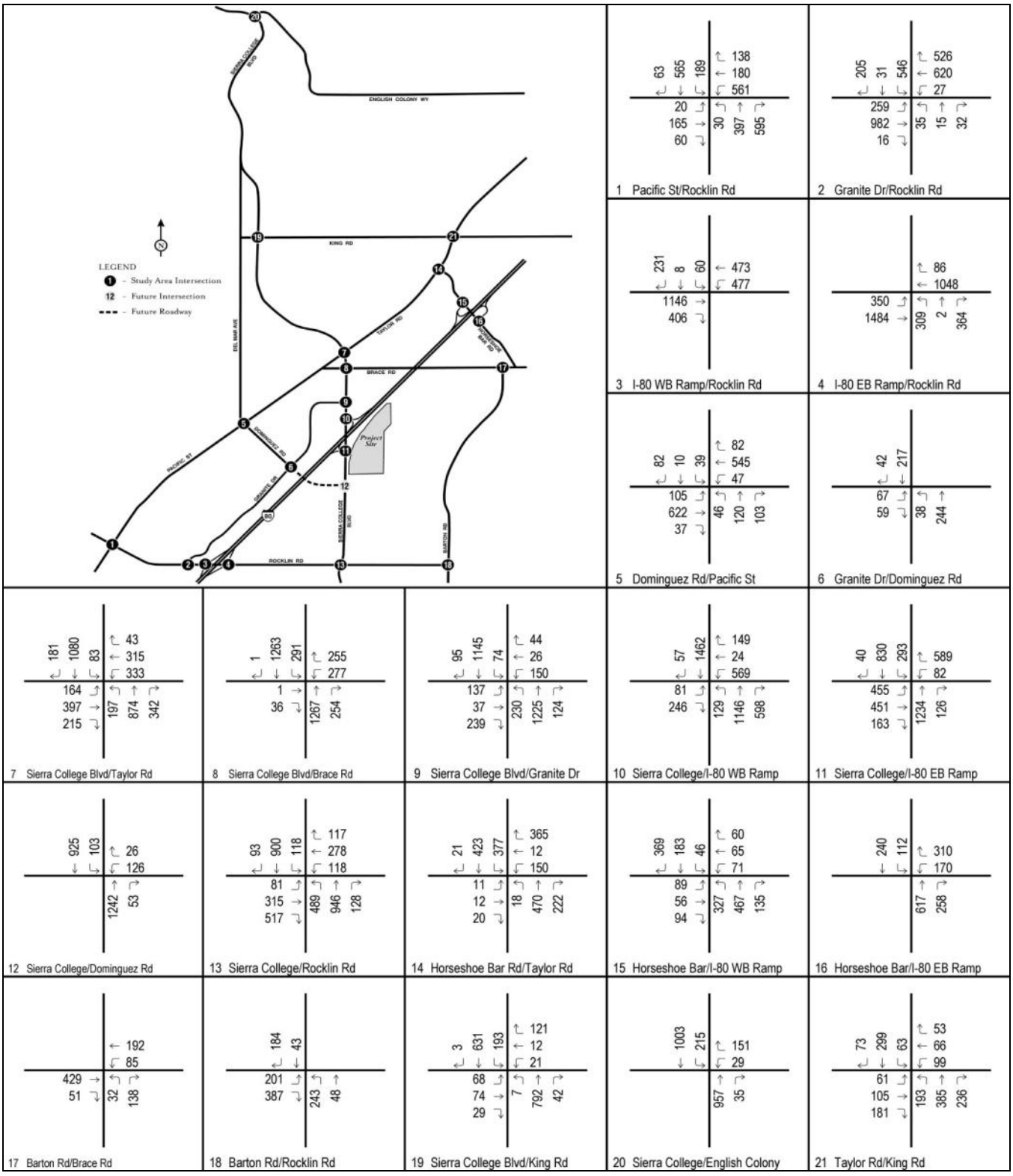
Notes:
☐ Exceeds level of service criteria
Significant Impact



Source: LSA Associates 2010

Year 2030 plus Project
Peak-Hour Traffic Volumes - Without Dominguez Road

Exhibit 4.2-22



Source: LSA Associates 2010

Year 2030 plus Project
Saturday Peak-Hour Traffic Volumes - Without Dominguez Road **Exhibit 4.2-23**

Table 4.2-19: 2030 plus Project Without Dominguez Road Peak-Hour Intersection Level of Service Summary

	Intersection	2030 No Project without Dominguez Road Condition						2030 Plus Project without Dominguez Road Condition					
		AM Peak Hour		PM Peak Hour		Saturday		AM Peak Hour		PM Peak Hour		Saturday	
		V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS
1	Rocklin Road/Pacific Street [1]	1.234	F	1.181	F	0.900	E	1.246	F [2]	1.213	F [2]	0.942	E [2]
2	Rocklin Road/Granite Drive	0.880	D	0.847	D	0.655	B	0.885	D	0.864	D	0.678	B
3	Rocklin Road/I-80 Westbound Ramps	54.5 sec	D	30.8 sec	C	24.1 sec	C	56.4 sec	E	35.9 sec	D	26.9 sec	C
4	Rocklin Road/I-80 Eastbound Ramps	66.2 sec	E	47.0 sec	D	21.5 sec	C	70.4 sec	E [2]	53.0 sec	D	22.4 sec	C
5	Dominguez Road/Pacific Street [1]	0.996	E	0.855	D	0.591	A	1.001	F [2]	0.872	D [2]	0.619	B
6	Dominguez Road/Granite Drive* [1]	12.2 sec	B	16.5 sec	C	10.9 sec	B	12.2 sec	B	16.8 sec	C	11.0 sec	B
7	Sierra College Boulevard/Taylor Road [1] (Loomis)	54.3 sec	D	34.9 sec	C	34.4 sec	C	57.9 sec	E [2]	37.6 sec	D	37.7 sec	D
8	Sierra College Boulevard/Brace Road [1] (Loomis)	23.9 sec	C	27.6 sec	C	22.2 sec	C	24.0 sec	C	28.3 sec	C	22.1 sec	C
9	Sierra College Boulevard/Granite Drive	0.928	E	0.736	C	0.607	B	0.948	E [2]	0.784	C	0.673	B
10	Sierra College Boulevard/I-80 Westbound Ramps	52.8 sec	D	50.6 sec	D	35.2 sec	D	54.9 sec	D	48.8 sec	D	45.5 sec	D
11	Sierra College Boulevard/I-80 Eastbound Ramps	32.6 sec	C	16.1 sec	B	11.7 sec	B	26.7 sec	C	52.7 sec	D	19.6 sec	B
12	Sierra College Boulevard/Dominguez Road	0.518	A	0.406	A	0.295	A	0.530	A	0.501	A	0.424	A
13	Sierra College Boulevard/Rocklin Road [1]	1.426	F	1.225	F	1.006	F	1.443	F [2]	1.248	F [2]	1.036	F [2]
14	Taylor Road/Horseshoe Bar Road [1] (Loomis)	56.5 sec	E	55.9 sec	E	36.6 sec	D	57.0 sec	E [2]	57.3 sec	E [2]	37.4 sec	D [2]
15	Horseshoe Bar Road/I-80 Westbound Ramps [1] (Loomis)	18.9 sec	B	20.1 sec	C	21.7 sec	C	19.0 sec	B	20.1 sec	C	21.6 sec	C
16	Horseshoe Bar Road/I-80 Eastbound Ramps* [1,3] (Loomis)	67.6 sec	F	121.1 sec	F	32.0 sec	D	71.9 sec	F [2]	141.9 sec	F [2]	38.5 sec	E [2]
17	Barton Road/Brace Road* [1,3] (Loomis)	15.1 sec	C	18.1 sec	C	14.9 sec	B	15.2 sec	C	18.3 sec	C	15.1 sec	C
18	Barton Road/Rocklin Road* [1,3] (Loomis)	24.8 sec	C	15.3 sec	C	12.2 sec	B	27.0 sec	D	16.5 sec	C	13.5 sec	B
19	Sierra College Boulevard/King Road [1] (Loomis)	20.3 sec	C	20.1 sec	C	20.3 sec	C	20.3 sec	C	19.9 sec	B	19.3 sec	B
20	Sierra College Boulevard/English Colony Way* [1,3] (Placer County)	17.2 sec	C	86.1 sec	F	30.5 sec	D	17.7 sec	C	105.3 sec	F [2]	38.7 sec	E
21	Taylor Road/King Road [1] (Loomis)	37.0 sec	D	31.0 sec	C	28.1 sec	C	37.2 sec	D [2]	31.3 sec	C	28.5 sec	C

Notes:

ICU V/C ratio is used for signalized intersections in the City of Rocklin. HCM delay in seconds is used for unsignalized intersections and in the Town of Loomis.

* Indicates unsignalized intersection

[1] LOS C required for these intersections. LOS D acceptable for all other intersections.

[2] Project-related increase is less than 0.05 in V/C ratio or less than 5% of the total traffic at the intersection, therefore not a significant impact.

[3] Peak Hour volumes meet Signal Warrant #3 of the MUTCD

* Delay exceeds 1000 seconds

Exceeds level of service criteria

(Shade) = Significant Impact

As seen in Table 4.2-19, although the intersections of Rocklin Road/Pacific Street, Rocklin Road/I-80 eastbound ramps, Dominguez Road/Pacific Street, Sierra College Boulevard/Granite Drive, Sierra College Boulevard/Rocklin Road, Taylor Road/Horseshoe Bar Road, Horseshoe Bar Road/-80 eastbound ramps, and Taylor Road/King Road operate at unsatisfactory LOS in the 2030 plus project without Dominguez Road scenario, the project would not increase the v/c ratio by 0.05 or more at the signalized intersections analyzed using Circular 212 methodology and would not add more than 5 percent of the total traffic at signalized and unsignalized intersections analyzed using HCM methodology. As a result, the project's contribution to traffic at these intersections is not considered a significant impact.

IMPACT 4.2-5 *Rocklin Road/I-80 Westbound Ramps Without Dominguez Road (Cumulative). The addition of project-related traffic to cumulative traffic volumes would degrade traffic operations at this intersection to an unacceptable level. This impact would be considered* ***significant****.*

The intersection of Rocklin Road/I-80 westbound ramps is projected to operate at LOS D (acceptable) in the cumulative no project condition during a.m. peak hour. Addition of the project traffic deteriorates the operation of this intersection to LOS E (unacceptable), as shown in Table 4.2-19. Because the LOS at this intersection changes from an acceptable LOS D (no project condition) to an unacceptable LOS E (with project condition), the project impact at this intersection is **significant**.

Mitigation Measure 4.2-5 Rocklin Road/I-80 Westbound Ramps Without Dominguez Road (Cumulative)

The project applicant shall pay the City's traffic fee and SPRTA fee as the means of funding the project's fair share of the costs for implementing one of the identified three alternatives included in the feasibility study completed by the City for improving the intersection of Rocklin Road/I-80 westbound ramps.

Explanation: The City has programmed the reconstruction of the Rocklin Road/I-80 interchange that includes a roundabout design option intended to mitigate traffic impacts at this location. The City recently evaluated the design options for improvements to this intersection through a contract with the traffic engineering and planning firm of Omni-Means, but a preferred alternative was not selected. However, recent direction by the Rocklin City Council in regards to resolving traffic and circulation conflicts along Rocklin Road has resulted in the identification of roundabouts as a possible solution to the conflicts in some locations. Although as noted above a preferred alternative was not selected, it is currently anticipated that the roundabout design option may be selected as the preferred alternative, consistent with recent City Council direction.

The City of Rocklin 2004 Traffic Impact Fee and Capital Improvement Program Update (May 23, 2007) identifies the Rocklin Road/Interstate 80 interchange for needed improvements; a total of $30 million is programmed for these improvements. Of the $30 million in fees for the improvements to the Rocklin Road/I-80 interchange, it is anticipated that $10 million are to be funded by the City's impact fees, $10 million by Caltrans, and $10 million by the South Placer Regional Transportation Authority (SPRTA) fees. The $30 million programmed for these improvements will cover the cost of the roundabout design option for mitigating traffic impacts at the Rocklin Road/I-80 interchange

The SPRTA is a Joint Powers Authority (JPA) comprised of the Cities of Lincoln, Rocklin, Roseville and the County of Placer. The SPRTA was formed for the purpose of implementing a

regional transportation and air quality mitigation fee to fund specified regional transportation projects. The Placer County Transportation Planning Agency (PCTPA) is designated as the entity to provide administrative, accounting, and staffing support for the SPRTA. PCTPA adopted a Regional Transportation Funding Strategy in August 2000, which included the development of a regional transportation impact fee program and a mechanism to implement the impact fee. The Rocklin Road/Interstate 80 interchange is one of the many improvement projects identified by SPRTA.

The proposed project would be conditioned to contribute its fair share to the cost of circulation improvements via the existing Citywide traffic impact mitigation (TIM) fee program that will be applied as a uniformly applied development policy and standard. The traffic impact mitigation fee program is one of the various methods that the City of Rocklin uses for financing improvements identified in the Capital Improvement Program (CIP). The CIP, which is overseen by the City's Engineering Division, is updated periodically to assure that growth in the City and surrounding jurisdictions does not degrade the Level of Service on the City's roadways.

The roadway improvements that are identified in the CIP in response to anticipated development and population growth are consistent with the City's Circulation Element. The traffic impact fee program collects funds from new development in the City to finance a portion of the roadway improvements that result from traffic generated by new development. Fees are calculated on a citywide basis, differentiated by type of development in relationship to their relative traffic impacts. The intent of the fee is to provide an equitable means of ensuring that future development contributes their fair share of roadway improvements, so that the City's General Plan Circulation policies and quality of life can be maintained.

Notably, the City's decision to fund and construct the improvements at the Rocklin Road/I-80 westbound ramps intersection is consistent with Caltrans policy that has encouraged local and private funding of state highway improvements for the past 20 years. (California Department of Transportation, Construction Manual, Chapter 9, Section 1 "Construction Contract Administration for Projects Funded by Others" p. 9-1.1 (July 2004).) Caltrans notes that projects constructed on the state highway system that are sponsored by a city, county, local transportation authority, local transit agency, or private entity generally use local or private funding. (Id.) Thus, the City's CIP and the SPRTA fee program are consistent with Caltrans policy, which encourages local agencies to develop and implement local funding programs that supplement federal and state funding programs to meet their current and future transportation needs. (Id.)

The City's decision to implement the improvements is also consistent with Caltrans policy that compels the local or private entities sponsoring state highway system projects to be responsible for the construction contract administration when such projects are financed with local and private funds. (Id.) Moreover, cooperation with local agencies in identifying and implementing mitigation is a general Caltrans policy and a responsibility for the Caltrans Deputy District Directors of Planning. The Caltrans Deputy Directive Number DD-25-R1 "Local Development—Intergovernmental Review" (June 2005) notes that the Deputy District Directors of Planning must: (1) ensure potential significant impacts to state highway facilities are fully identified evaluated and articulated and that reasonable measures that avoid or adequately mitigate identified potential impacts are recommended consisted with state planning priorities; and (2) work with local jurisdictions to identify mitigation measures that adequately address development impacts. Caltrans has previously cooperated with local agencies in Placer County to construct a

number of highway improvement projects funded largely by developer impact fees. For instance, the recently completed Sierra College Boulevard at I-80 interchange reconstruction project was advanced in its timing due to the City of Rocklin's work with Caltrans, the California Transportation Commission, the Placer County Transportation and Planning Agency (PCTPA), and local developers in putting together a creative financing plan. The City advanced $5 million and worked with local developers to have them advance $20 million in order to build the project sooner than Caltrans had scheduled delivery of the project. As another example, Caltrans cooperated with PCTPA and the City of Roseville to construct the $35 million Douglas/I-80 interchange improvement project, where over $24 million of the cost was funded from development-paid traffic impact mitigation fees collected by the City of Roseville; only about $11 million came from federal and state highway monies.

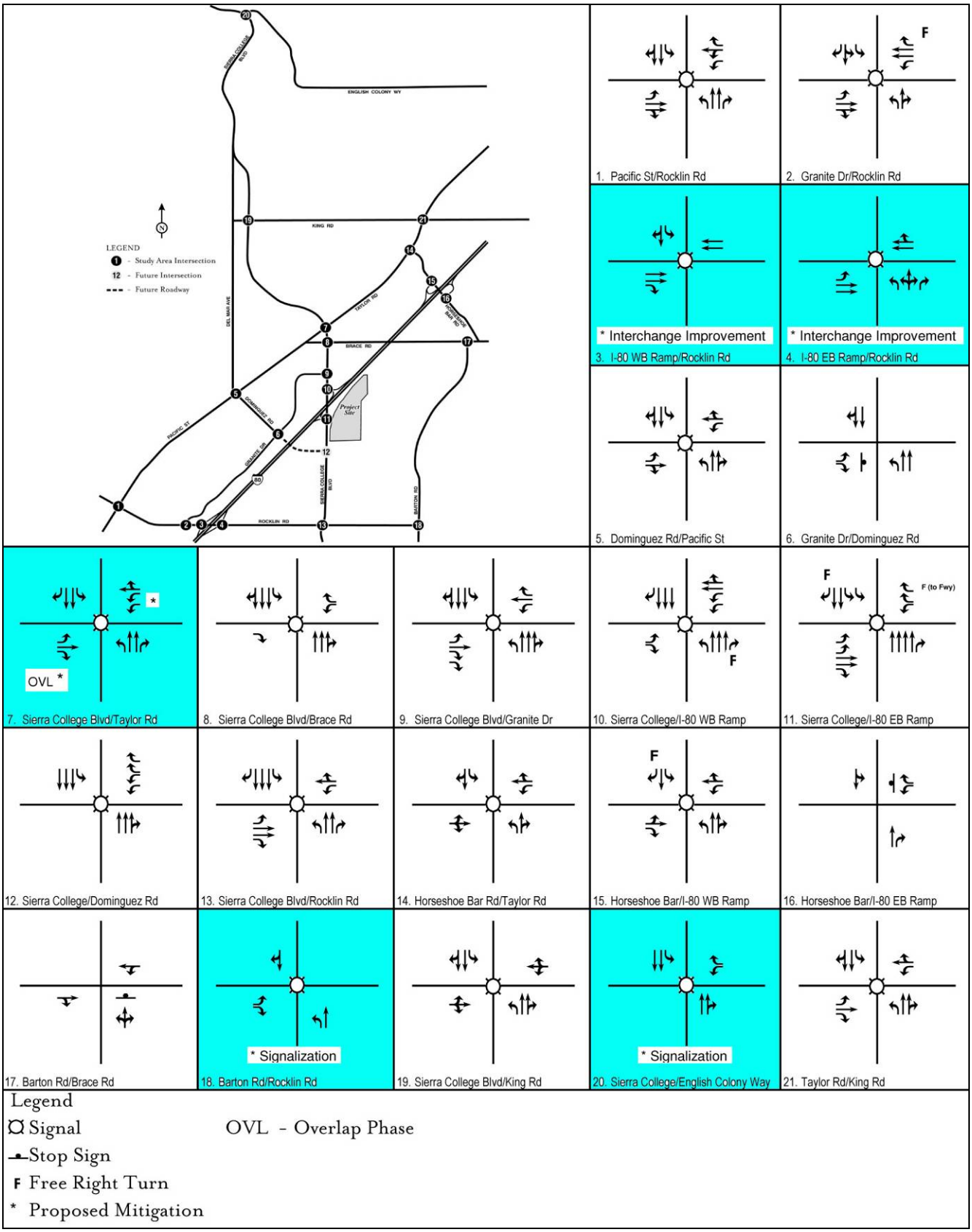
Level of Significance after Mitigation

With implementation of the interchange improvements project, the Rocklin Road/I-80 westbound ramps intersection is anticipated to operate at an acceptable level of service. The City has completed a feasibility study that identified three alternatives for improving the intersection of Rocklin Road/I-80 westbound ramps. One of the alternatives provides for a roundabout design option where the freeway ramps intersect with Rocklin Road. Another option examined was a flyover structure from westbound Rocklin Road to the I-80 westbound on ramp. Once the selected (preferred) interchange design is implemented it is anticipated to mitigate the impact at this location. However, implementation requires the selection of a final design option, review and approval of Caltrans of the improvement plans, acquisition of right-of-way, and construction of the project improvements. Until such time as the improvement design process is complete, and a substantial portion of the necessary traffic impact fees have been collected, the City cannot construct the Rocklin Road/I-80 interchange improvements.

Nor would it be lawful for the City to require Rocklin Crossings to fund the full costs of these improvements, which are necessitated by other projects as well as Rocklin Crossings. CEQA Guidelines section 15126.4, subdivision (a)(4), requires mitigation measures to be consistent with applicable constitutional principles and mandates that the mitigation measure must be "roughly proportional" to the project's impact. In this case, imposition of a $30 million interchange reconstruction project to mitigate this project's traffic impacts at an intersection already operating at a generally unacceptable level of service, cannot be considered roughly proportional and cannot be legally imposed. Though the project applicant must pay the City's traffic impact fee in an amount that constitutes the project's fair share contribution to the construction of the Rocklin Road / I-80 interchange improvements necessitated in part by project impacts, the City cannot place the entire burden of the interchange reconstruction on this project.

Until such time as the improvement design selection process is complete and Caltrans has approved the interchange reconstruction improvements and the improvements are in place, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable.**

The cumulative mitigation measures for the 2030 plus project without Dominguez Road scenario are shown on Exhibit 4.2-24.



Source: LSA Associates 2010

2030 plus Project Without Dominguez Road - Mitigation **Exhibit 4.2-24**

IMPACT 4.2-6 *Sierra College Boulevard/Taylor Road (Loomis) Without Dominguez Road (Cumulative). The addition of project-related traffic to cumulative traffic volumes would degrade traffic operations at this intersection to an unacceptable level. This impact would be considered* ***significant****.*

The intersection of Sierra College Boulevard/Taylor Road (Loomis) is projected to operate at LOS C during p.m. peak hour and Saturday peak hour in the cumulative no project condition. Addition of the project traffic deteriorates the operation of this intersection to LOS D (unacceptable), as shown in Table 4.2-19. Because the LOS at this intersection changes from an acceptable LOS C (no project condition) to an unacceptable LOS D (with project condition), the project impact at this intersection is **significant**.

Mitigation Measure 4.2-6 Sierra College Boulevard/Taylor Road (Loomis) Without Dominguez Road (Cumulative)

The project applicant shall be responsible for paying the Town of Loomis its fair share of the costs of constructing a westbound left-turn lane (resulting in a dual left-turn lane) and an eastbound right-turn overlap phase for this intersection.

In order to implement this measure, the project applicant shall attempt, in good faith, to enter into an agreement with the Town of Loomis by which the applicant shall be responsible for providing to Loomis funds representing the project's fair share of the estimated cost of constructing the improvements at issue as agreed to by Loomis, but only in the event that the Town of Loomis can demonstrate within a reasonable period of time (i.e., prior to the issuance of occupancy permits) that Loomis has a fee collection system such that a fair share payment from the project applicant will actually result in construction of the contemplated improvements.

Level of Significance after Mitigation

Adding a westbound left-turn lane (resulting in a dual left-turn lane) and an eastbound right-turn overlap phase would mitigate the projected significant cumulative impact at this intersection. The addition of a second westbound left turn lane would provide additional capacity at the intersection which will then be able to accommodate the high traffic demand (over 300 vehicles in a.m., p.m. and Saturday peak hour). The addition of a right turn overlap phase in the eastbound direction would provide additional green time for the right turning vehicles to clear the intersection thus reducing the average delay at the intersection. A combination of these improvements results in the reduction of average delay at the intersection thus improving the LOS at this location to acceptable levels. The payment of fees representing the project's incremental contribution to the need for this mitigation mitigates the project's contribution to a less than cumulatively considerable level. The dual westbound left-turn lanes can be accommodated within the existing right-of-way by restriping the exclusive westbound through and right-turn lanes to a through right lane. A fair share payment would be considered as mitigation only if the Town is able to demonstrate to the City's satisfaction that the Town's Capital Improvement Program covers or will cover the contemplated improvements such that a fair share payment will actually result in construction of the contemplated improvement within a reasonable period of time. Because the Town of Loomis controls what occurs at the intersection, however, and because the City is uncertain as to whether the Town would be willing to cooperate in the construction of the contemplated improvements within a reasonable period of time (i.e., prior to the issuance of occupancy permits), the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as ***significant and unavoidable***, given that the City has no control over Loomis and this

intersection and therefore cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), however, the City concludes that Loomis can and should cooperate with the City in implementing the mitigation. With such action by Loomis, the impact of the project would be rendered less than significant, though at present, as noted above, the City concludes the impact is ***significant and unavoidable***.

IMPACT 4.2-7 *Barton Road/Rocklin Road (Loomis) Without Dominguez Road (Cumulative). The addition of project-related traffic to cumulative traffic volumes would degrade traffic operations at this intersection to an unacceptable level. This impact would be considered* ***significant****.*

The intersection of Barton Road/Rocklin Road (Loomis) is projected to operate at LOS C in the cumulative no project condition during a.m. peak hour. Addition of the project traffic deteriorates the operation of this intersection to LOS D (unacceptable), as shown in Table 4.2-19. Because the LOS at this intersection changes from an acceptable LOS C (no project condition) to an unacceptable LOS D (with project condition), the project impact at this intersection is **significant**.

Mitigation Measure 4.2-7 Barton Road/Rocklin Road (Loomis) Without Dominguez Road (Cumulative)

The project applicant shall be responsible for paying the Town of Loomis its fair share of the costs of constructing the signalization of this intersection.

In order to implement this measure, the project applicant shall attempt, in good faith, to enter into an agreement with the Town of Loomis by which the applicant shall be responsible for providing to Loomis funds representing the project's fair share of the estimated cost of the signalization as agreed to by Loomis, but only in the event that the Town of Loomis can demonstrate within a reasonable period of time (i.e., prior to the issuance of occupancy permits) that Loomis has a fee collection system such that a fair share payment from the project applicant will actually result in such signalization.

Level of Significance after Mitigation

Signalizing this intersection would mitigate the project's impact at this intersection. Due to the reduction in available gaps, the delay experienced by vehicles at a stop sign along a minor street (Barton Road) increases as the volume along the major street (Rocklin Road) increases in the future. By installing a signal the delay experienced by the vehicles on the minor street is reduced as a fixed time is allocated for those vehicles to merge on the major street. Based on information obtained from Brian Fragio[8], the Town of Loomis has proposed a signal installation at the intersection of Barton Road/Road, which is estimated to occur by 2015. Assuming that Loomis can confirm that this expectation remains valid, Loomis should be able to provide the confirmation contemplated by Mitigation Measure 4.2-7. A fair share payment would be considered as mitigation only if the Town is able to demonstrate to the City's satisfaction that the Town's Capital Improvement Program covers or will cover the contemplated improvements such that a fair share payment will actually result in construction of the contemplated signalization within a reasonable period of time. However, because the Town of Loomis controls what occurs at the intersection, and because the City is uncertain as to whether the

[8] Brian Fragiao, Town of Loomis. Personal communication, August 17, 2010.

Town would be willing to cooperate in the contemplated signalization within a reasonable period of time (i.e., prior to the issuance of occupancy permits), the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the Town of Loomis and this intersection and therefore cannot take for granted that the signalization contemplated by the mitigation will get implemented. Furthermore, although the mitigation measure requires the applicant to try and enter into an agreement with Loomis by which the applicant will be responsible for the signalization, the City has no way to ensure that Loomis will cooperate with the applicant pursuant to that measure. An agreement requires two cooperating parties, and the City cannot force Loomis to cooperate if it chooses not to do so. For these reasons, consistent with CEQA Guidelines Section 15091, Subdivision (a)(2), the City concludes, however, that Loomis can and should cooperate with the City in implementing the mitigation. With such action by Loomis, the impact of the project would be rendered less than significant, though at present, as noted above, the City considers the impact significant and unavoidable.

IMPACT 4.2-8 *Sierra College Boulevard/English Colony Way (Placer County) Without Dominguez Road (Cumulative). The addition of project-related traffic to cumulative traffic volumes would further degrade unacceptable traffic operations at this intersection by adding more than 5 percent to the projected traffic volumes. This impact would be considered* ***significant****.*

The intersection of Sierra College Boulevard/English Colony Way (Placer County) is projected to operate at LOS D (unacceptable) during the Saturday peak hour in the cumulative no project condition. Addition of the project traffic would further deteriorate the condition of this intersection, as shown in Table 4.2-19. Because the intersection is already operating at unsatisfactory LOS and the project adds more than 5 percent of the total traffic at this unsignalized intersection, the project impact at this location is **significant**.

Mitigation Measure 4.2-8 Sierra College Boulevard/English Colony Way (Placer County) Without Dominguez Road (Cumulative)

The project applicant shall be responsible for paying to Placer County its fair share of the cost of the signalization of this intersection.

In order to implement this measure, the project applicant shall attempt, in good faith, to enter into an agreement with the County of Placer by which the applicant shall be responsible for providing to the County funds representing the project's fair share of the estimated cost of the signalization as agreed to by the County, but only in the event that the County can demonstrate within a reasonable period of time (i.e., prior to the issuance of occupancy permits) that the County has a fee collection system such that a fair share payment from the project applicant will actually result in such signalization.

Level of Significance after Mitigation

Signalizing this intersection would mitigate the project's impact at this intersection. Due to the reduction in available gaps, the delay experienced by vehicles at a stop sign along a minor street (English Colony Way) increases as the volume along the major street (Sierra College Boulevard) increases in the future. By installing a signal the delay experienced by the vehicles on the minor street is reduced as a fixed time is allocated for those vehicles to merge on the major street. A fair share payment would be considered as mitigation only if the County is able to demonstrate to the City's satisfaction that the County's Capital Improvement Program

covers or will cover the contemplated signalization such that a fair share payment will actually result in construction of the contemplated signalization within a reasonable period of time (i.e., prior to the issuance of building permits). Because the County of Placer controls what occurs at the intersection, however, and because the City is uncertain as to whether the County would be willing to cooperate in the contemplated signalization within a reasonable period of time, the City conservatively concludes that, at the time of action by the City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the County and this intersection and therefore cannot take for granted that the signalization contemplated by the mitigation will be implemented. Furthermore, although the mitigation measure requires the applicant to try and enter into an agreement with the County by which the applicant will be responsible for the signalization, the City has no way to ensure that the County will cooperate with the applicant pursuant to that measure. An agreement requires two cooperating parties, and the City cannot force the County to cooperate if it chooses not to do so. For these reasons, consistent with CEQA Guidelines Section 15091, Subdivision (a)(2), the City concludes, however, that the County can and should cooperate with the City in implementing the mitigation. With such action by the County, the impact of the project would be rendered less than significant, though at present, as noted above, the City considers the impact significant and unavoidable.

IMPACT 4.2-9 *Roadway Segments Without Dominguez Road (Cumulative). All roadway segments affected by the project are projected to operate at acceptable LOS. Therefore, this impact would be considered less than significant.*

All but six of the study area roadway segments are forecast to operate within their daily roadway capacities in the cumulative without Dominguez Road scenario, as shown in Table 4.2-20. A directional peak-hour roadway segment analysis was prepared for these six segments and is shown in Table 4.2-21. In the cumulative a.m., p.m., and Saturday midday peak hours, all the roadway segments would operate with satisfactory v/c ratios with the addition of project traffic. Because these roadway segments are projected to operate at satisfactory v/c ratios during the peak hours of roadway traffic, they are not considered deficient and roadway segment impacts in the cumulative without Dominguez Road scenario associated with the proposed project would be considered less than significant.

Mitigation Measure 4.2-9 Roadway Segments Without Dominguez Road (Cumulative)

No mitigation would be necessary.

Level of Significance after Mitigation

Because the cumulative impacts on roadway segments in the cumulative without Dominguez Road scenario would be less than significant, the project will not cause a cumulatively considerable incremental contribution to any significant cumulative impact on roadway segments in the cumulative without Dominguez Road scenario.

Table 4.2-20: 2030 plus Project Without Dominguez Road Daily Roadway Segment Level of Service Summary

Roadway	Segment	Configuration	Capacity	2030 No Project			2030 Plus Project		
				Volume	V/C	LOS	Volume	V/C	LOS
Taylor Road	King Road and Horseshoe Bar Road [1] (Loomis)	Two-lane Collector	15,000	18,245	1.22	F	18,560	1.24	F
	Horseshoe Bar Road and Sierra College Boulevard[1] (Loomis)	Two-lane Collector	15,000	16,376	1.09	F	16,816	1.12	F
	Sierra College Boulevard and City Limits [1] (Loomis)	Two-lane Collector	15,000	20,873	1.39	F	21,343	1.42	F
Pacific Street	City Limits and Dominguez Road [1]	Four-lane Undivided Arterial	30,000	20,540	0.68	B	21,010	0.70	B
	Dominguez Road and Rocklin Road [1]	Four-lane Undivided Arterial	30,000	20,401	0.68	B	20,556	0.69	B
Rocklin Road	Pacific Street and Granite Drive	Four-lane Undivided Arterial	30,000	33,574	1.12	F	34,349	1.14	F
	I-80 and Sierra College Boulevard	Four-lane Undivided Arterial	30,000	24,356	0.81	D	24,511	0.82	D
	Sierra College Boulevard and Barton Road [1] (Loomis)	Four-lane Undivided Arterial	30,000	13,027	0.43	A	13,647	0.45	A
Barton Road	Rocklin Road and Brace Road [1] (Loomis)	Two-lane Collector	15,000	3,722	0.25	A	3,722	0.25	A
Horseshoe Bar Road	I-80 and Brace Road [1] (Loomis)	Two-lane Collector	15,000	10,317	0.69	B	10,527	0.70	B
Brace Road	I-80 and Barton Road [1] (Loomis)	Two-lane Collector	15,000	9,665	0.64	B	9,915	0.66	B
	I-80 and Sierra College Boulevard [1] (Loomis)	Two-lane Collector	15,000	10,226	0.68	B	10,356	0.69	B
Sierra College Boulevard	English Colony Way and King Road [1] (Placer County)	Four-lane Undivided Arterial	30,000	30,099	1.00	F	31,489	1.05	F
	King Road and Taylor Road [1] (Loomis)	Four-lane Undivided Arterial	30,000	24,229	0.81	D	26,009	0.87	D
	Taylor Road and I-80	Six-lane Arterial	50,525	38,869	0.77	C	42,169	0.83	D
	I-80 and Dominguez Road	Six-lane Arterial	50,525	37,914	0.75	C	41,089	0.81	D
	Dominguez Road and Rocklin Road [1]	Six-lane Arterial	50,525	36,704	0.73	C	39,489	0.78	C
Granite Drive	Dominguez Road and Sierra College Boulevard [1]	Four-lane Undivided Arterial	30,000	14,336	0.48	A	14,486	0.48	A
	Dominguez Road and Rocklin Road [1]	Four-lane Undivided Arterial	30,000	9,332	0.31	A	9,407	0.31	A
Dominguez Road	Pacific Street and Granite Drive [1]	Two-lane Collector	15,000	6,078	0.41	A	6,078	0.41	A
King Road	Sierra College Boulevard and Taylor Road [1] (Loomis)	Two-lane Collector	15,000	6,636	0.44	A	6,716	0.45	A

Notes:

[1] LOS C required for these segments. LOS D acceptable for all other segments.

Exceeds level of service criteria

Roadway Improvements consistent with City of Rocklin General Plan, Town of Loomis General Plan, and the Horseshoe Bar/Penryn Community Plan.

Table 4.2-21: 2030 plus Project Without Dominguez Road Peak-Hour Roadway Segment Level of Service Summary

Roadway	Segment	Capacity	2030 No Project			2030 Plus Project		
			Volume	V/C	LOS	Volume	V/C	LOS
Taylor Road	King Rd and Horseshoe Bar Rd (Loomis)							
	A.M. Peak Hour Northbound	1,650	921	0.56	A	925	0.56	A
	A.M. Peak Hour Southbound	1,650	1,209	0.73	C	1,216	0.74	C
	P.M Peak Hour Northbound	1,650	986	0.60	A	1,002	0.61	B
	P.M Peak Hour Southbound	1,650	787	0.48	A	803	0.49	A
	Saturday Peak Hour Northbound	1,650	810	0.49	A	829	0.50	A
	Saturday Peak Hour Southbound	1,650	680	0.41	A	700	0.42	A
Taylor Road	Horseshoe Bar Rd and Sierra College Blvd (Loomis)							
	A.M. Peak Hour Eastbound	1,650	500	0.30	A	508	0.31	A
	A.M. Peak Hour Westbound	1,650	922	0.56	A	931	0.56	A
	P.M Peak Hour Eastbound	1,650	709	0.43	A	737	0.45	A
	P.M Peak Hour Westbound	1,650	591	0.36	A	612	0.37	A
	Saturday Peak Hour Eastbound	1,650	738	0.45	A	766	0.46	A
	Saturday Peak Hour Westbound	1,650	600	0.36	A	642	0.39	A
Taylor Road	Sierra College Blvd and City Limits (Loomis)							
	A.M. Peak Hour Eastbound	1,650	526	0.32	A	536	0.32	A
	A.M. Peak Hour Westbound	1,650	1,002	0.61	B	1,009	0.61	B
	P.M Peak Hour Eastbound	1,650	1,056	0.64	B	1,079	0.65	B
	P.M Peak Hour Westbound	1,650	674	0.41	A	698	0.42	A
	Saturday Peak Hour Eastbound	1,650	739	0.45	A	770	0.47	A
	Saturday Peak Hour Westbound	1,650	653	0.40	A	684	0.41	A
Rocklin Road	Pacific St and Granite Dr							
	A.M. Peak Hour Eastbound	3,300	1,221	0.37	A	1,237	0.37	A
	A.M. Peak Hour Westbound	3,300	1,474	0.45	A	1,486	0.45	A
	P.M Peak Hour Eastbound	3,300	1,452	0.44	A	1,490	0.45	A
	P.M Peak Hour Westbound	3,300	1,190	0.36	A	1,230	0.37	A
	Saturday Peak Hour Eastbound	3,300	1,051	0.32	A	1,103	0.33	A
	Saturday Peak Hour Westbound	3,300	819	0.25	A	870	0.26	A
Sierra College Boulevard	English Colony Way and King Rd (Placer County)							
	A.M. Peak Hour Northbound	3,300	605	0.18	A	628	0.19	A
	A.M. Peak Hour Southbound	3,300	1,697	0.51	A	1,727	0.52	A
	P.M Peak Hour Northbound	3,300	1,457	0.44	A	1,528	0.46	A
	P.M Peak Hour Southbound	3,300	948	0.29	A	1,016	0.31	A
	Saturday Peak Hour Northbound	3,300	895	0.27	A	987	0.30	A
	Saturday Peak Hour Southbound	3,300	835	0.25	A	930	0.28	A
Sierra College Boulevard	King Rd and Taylor Rd (Loomis)							
	A.M. Peak Hour Northbound	3,300	708	0.21	A	737	0.22	A
	A.M. Peak Hour Southbound	3,300	1,550	0.47	A	1,588	0.48	A
	P.M Peak Hour Northbound	3,300	1,403	0.43	A	1,494	0.45	A
	P.M Peak Hour Southbound	3,300	926	0.28	A	1,013	0.31	A
	Saturday Peak Hour Northbound	3,300	844	0.26	A	961	0.29	A
	Saturday Peak Hour Southbound	3,300	892	0.27	A	1,013	0.31	A

Notes:
- ☐ Exceeds level of service criteria
- Significant Impact

4.2.10 DOMINGUEZ ROAD SENSITIVITY ANALYSIS

An analysis of forecast 2030 traffic volumes was prepared assuming the extension of Dominguez Road east to Sierra College Boulevard. This alternative network is referred to as "with Dominguez Road" and is intended to provide a sensitivity analysis of the effects of extending Dominguez Road. At the direction of the City, signalization of the intersection of Dominguez Road/Granite Drive is assumed to be part of the Dominguez Road Extension project, which extends Dominguez Road east over the freeway (just an overcrossing) to Sierra College Boulevard to form the fourth leg at the intersection of Sierra College Boulevard/Southern Project Driveway.

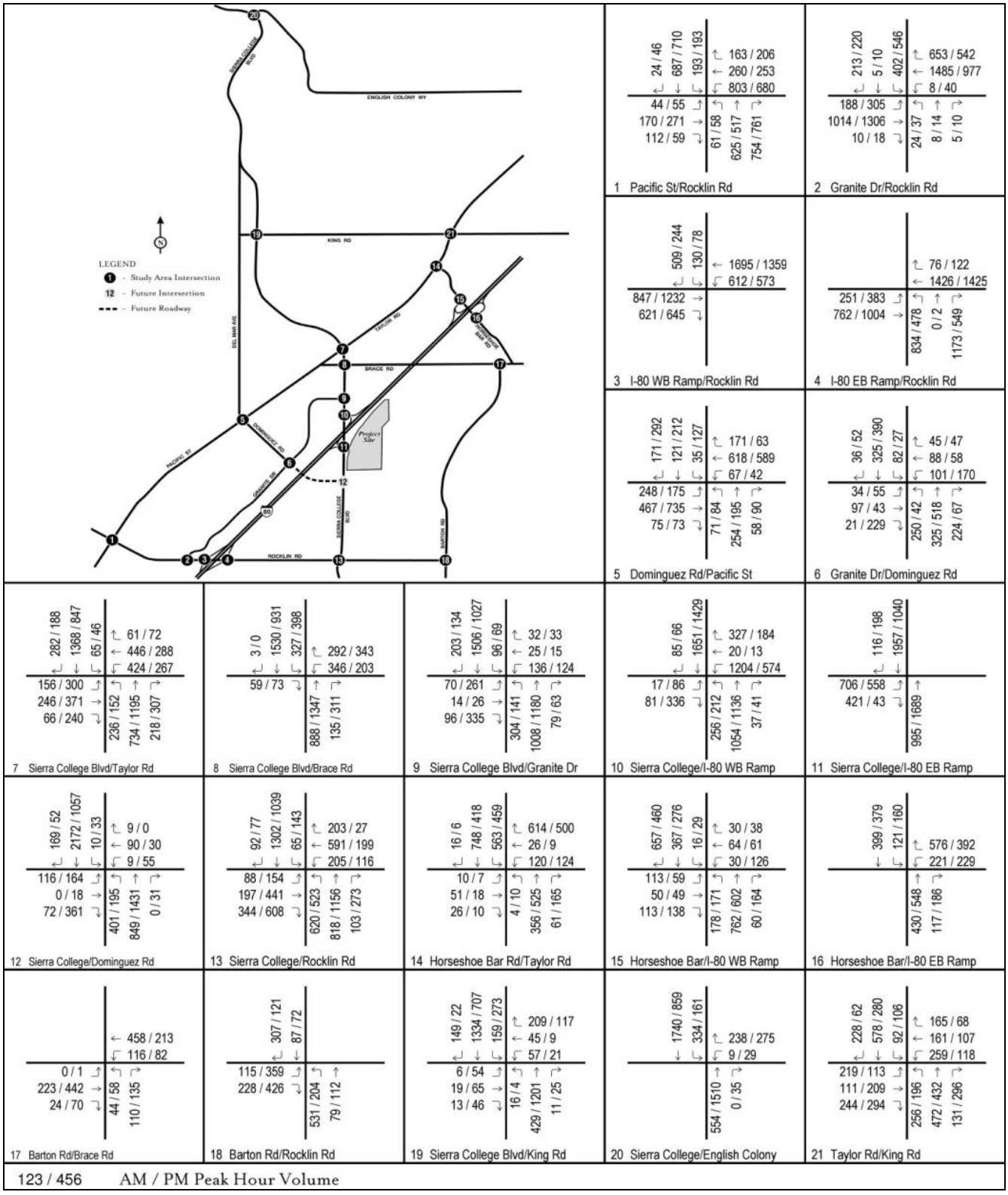
2030 NO PROJECT WITH DOMINGUEZ ROAD

Weekday and Saturday peak-hour forecast traffic volumes for the 2030 no project with Dominguez Road scenario are shown on Exhibits 4.2-25 and 4.2-26. The LOS for study area intersections and roadway segments are shown in Tables 4.2-22 and 4.2-23. The 2030 no project with Dominguez Road traffic volume development and LOS worksheets are provided in Appendix B.

As shown in Table 4.2-22, the following 11 intersections are forecast to operate at unsatisfactory LOS in the 2030 no project with Dominguez Road condition:

- Rocklin Road/Pacific Street
- Rocklin Road/I-80 eastbound ramps
- Dominguez Road/Pacific Street
- Sierra College Boulevard/Taylor Road (Loomis)
- Sierra College Boulevard/Dominguez Road
- Sierra College Boulevard/Rocklin Road
- Taylor Road/Horseshoe Bar Road (Loomis)
- Horseshoe Bar Road/I-80 eastbound ramps (Loomis)
- Barton Road/Rocklin Road (Loomis)
- Sierra College Boulevard/English Colony Way (Placer County)
- Taylor Road/King Road (Loomis)

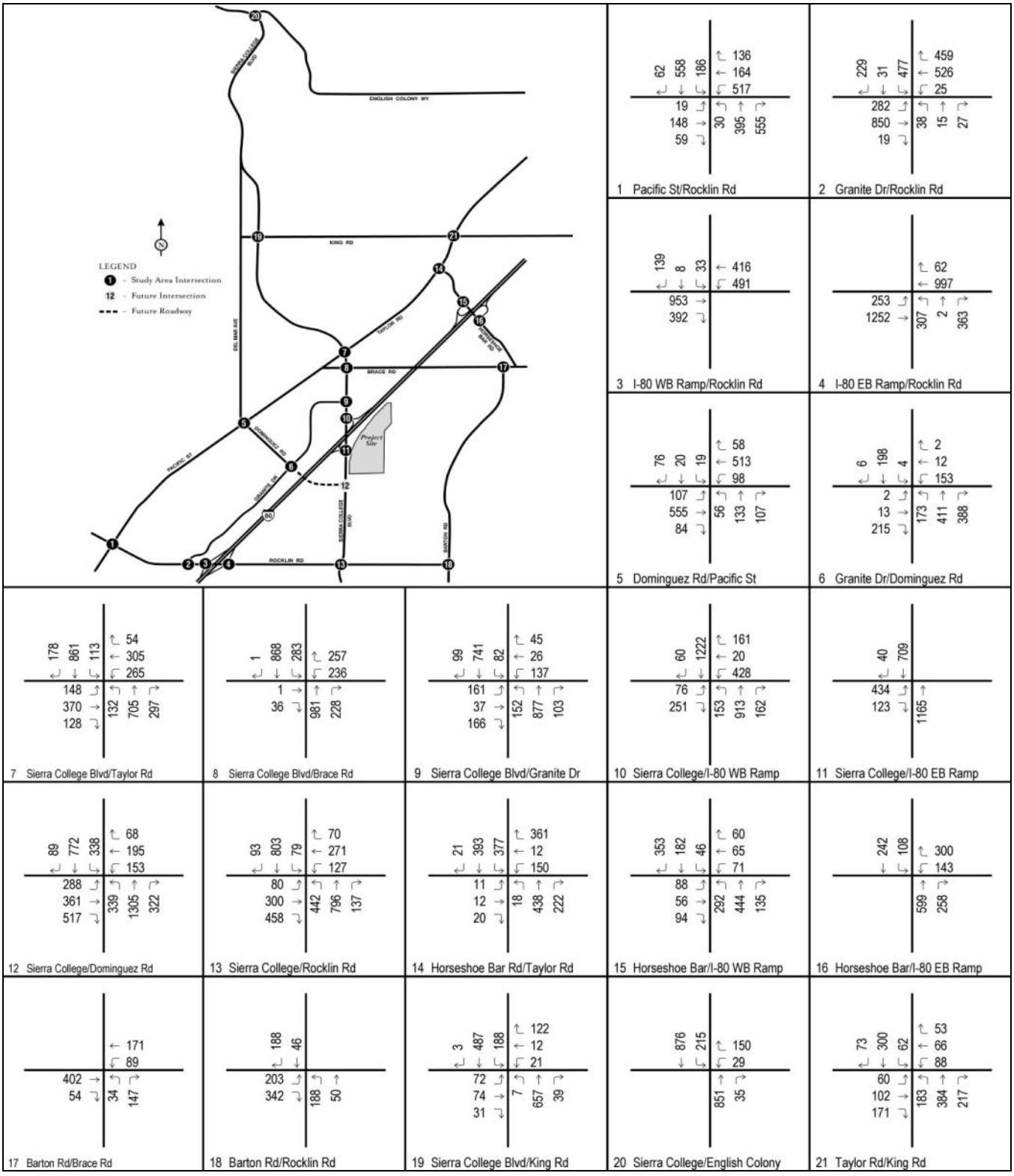
For roadway segments, Tables 4.2-23 and 4.2-24 show that application of the two-step procedure, first evaluating daily volume to capacity and then, if necessary, peak hour directional volume to capacity, results in no exceedances of LOS standards. While six roadway segments exceeded daily capacities, the peak hour directional analysis confirmed that these six segments would operate at acceptable LOS.



Source: LSA Associates 2010

2030 No Project Peak-Hour Traffic Volumes - With Dominguez Road

Exhibit 4.2-25



Source: LSA Associates 2010

2030 No Project Saturday Peak-Hour Traffic Volumes - With Dominguez Road **Exhibit 4.2-26**

Table 4.2-22: 2030 No Project with Dominguez Road Condition Peak-Hour Intersection Level of Service Summary

	Intersection	2030 No Project with Dominguez Road Condition					
		AM Peak Hour		PM Peak Hour		Saturday	
		V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS
1	Rocklin Road/Pacific Street [1]	1.207	F	1.178	F	0.881	D
2	Rocklin Road/Granite Drive	0.857	D	0.826	D	0.629	B
3	Rocklin Road/I-80 Westbound Ramps	52.8 sec	D	28.8 sec	C	23.5 sec	C
4	Rocklin Road/I-80 Eastbound Ramps	55.4 sec	E	42.4 sec	D	21.1 sec	C
5	Dominguez Road/Pacific Street [1]	0.898	D	0.860	D	0.615	B
6	Dominguez Road/Granite Drive [12]	0.472	A	0.529	A	0.562	A
7	Sierra College Boulevard/Taylor Road [1] (Loomis)	44.3 sec	D	33.1 sec	C	32.9 sec	C
8	Sierra College Boulevard/Brace Road [1] (Loomis)	23.7 sec	C	27.8 sec	C	22.2 sec	C
9	Sierra College Boulevard/Granite Drive	0.773	C	0.608	B	0.480	A
10	Sierra College Boulevard/I-80 Westbound Ramps	52.3 sec	D	45.9 sec	D	40.2 sec	D
11	Sierra College Boulevard/I-80 Eastbound Ramps	36.4 sec	D	9.8 sec	A	9.3 sec	A
12	Sierra College Boulevard/Dominguez Road	0.799	C	0.655	B	0.999	E
13	Sierra College Boulevard/Rocklin Road [1]	1.408	F	1.159	F	0.942	E
14	Taylor Road/Horseshoe Bar Road [1] (Loomis)	54.4 sec	D	55.0 sec	E	35.8 sec	D
15	Horseshoe Bar Road/I-80 Westbound Ramps [1] (Loomis)	19.0 sec	B	20.1 sec	C	21.8 sec	C
16	Horseshoe Bar Road/I-80 Eastbound Ramps* [1,2] (Loomis)	60.5 sec	F	114.9 sec	F	29.7 sec	D
17	Barton Road/Brace Road* [1,2] (Loomis)	14.7 sec	B	18.1 sec	C	14.9 sec	B
18	Barton Road/Rocklin Road* [1,2] (Loomis)	31.1 sec	D	16.0 sec	C	12.1 sec	B
19	Sierra College Boulevard/King Road [1] (Loomis)	20.1 sec	C	20.1 sec	C	20.7 sec	C
20	Sierra College Boulevard/English Colony Way* [1,2] (Placer County)	17.1 sec	C	86.4 sec	F	28.2 sec	D
21	Taylor Road/King Road [1] (Loomis)	37.0 sec	D	31.0 sec	C	28.0 sec	C

Notes:

ICU V/C ratio is used for signalized intersections in the City of Rocklin. HCM delay in seconds is used for unsignalized intersections and in the Town of Loomis.

* Indicates unsignalized intersection

[1] LOS C required for these intersections. LOS D acceptable for all other intersections.

[2] Peak Hour volumes meet Signal Warrant #3 of the MUTCD

* Delay exceeds 1000 seconds

☐ Exceeds level of service criteria

Table 4.2-23: 2030 No Project with Dominguez Road Daily Roadway Segment Level of Service Summary

Roadway	Segment	Configuration	Capacity	Volume	V/C	LOS
Taylor Road	King Road and Horseshoe Bar Road [1] (Loomis)	Two-lane Collector	15,000	18,161	1.21	F
	Horseshoe Bar Road and Sierra College Boulevard[1] (Loomis)	Two-lane Collector	15,000	15,972	1.06	F
	Sierra College Boulevard and City Limits [1] (Loomis)	Two-lane Collector	15,000	17,557	1.17	F
Pacific Street	City Limits and Dominguez Road [1]	Four-lane Undivided Arterial	30,000	18,362	0.61	B
	Dominguez Road and Rocklin Road [1]	Four-lane Undivided Arterial	30,000	20,041	0.67	B
Rocklin Road	Pacific Street and Granite Drive	Four-lane Undivided Arterial	30,000	33,366	1.11	F
	I-80 and Sierra College Boulevard	Four-lane Undivided Arterial	30,000	23,835	0.79	C
	Sierra College Boulevard and Barton Road [1] (Loomis)	Four-lane Undivided Arterial	30,000	13,720	0.46	A
Barton Road	Rocklin Road and Brace Road [1] (Loomis)	Two-lane Collector	15,000	3,531	0.24	A
Horseshoe Bar Road	I-80 and Brace Road [1] (Loomis)	Two-lane Collector	15,000	10,194	0.68	B
Brace Road	I-80 and Barton Road [1] (Loomis)	Two-lane Collector	15,000	8,981	0.60	A
	I-80 and Sierra College Boulevard [1] (Loomis)	Two-lane Collector	15,000	9,525	0.63	B
Sierra College Boulevard	English Colony Way and King Road [1] (Placer County)	Four-lane Undivided Arterial	30,000	30,116	1.00	F
	King Road and Taylor Road [1] (Loomis)	Four-lane Undivided Arterial	30,000	24,160	0.81	D
	Taylor Road and I-80	Six-lane Arterial	50,525	36,662	0.73	C
	I-80 and Dominguez Road	Six-lane Arterial	50,525	35,997	0.71	B
	Dominguez Road and Rocklin Road [1]	Six-lane Arterial	50,525	40,106	0.79	C
Granite Drive	Dominguez Road and Sierra College Boulevard [1]	Four-lane Undivided Arterial	30,000	10,373	0.35	A
	Dominguez Road and Rocklin Road [1]	Four-lane Undivided Arterial	30,000	7,422	0.25	A
Dominguez Road	Pacific Street and Granite Drive [1]	Two-lane Collector	15,000	10,417	0.69	B
King Road	Sierra College Boulevard and Taylor Road [1] (Loomis)	Two-lane Collector	15,000	6,631	0.44	A

Notes:

[1] LOS C required for these segments. LOS D acceptable for all other segments.

☐ Exceeds level of service criteria

Roadway Improvements consistent with City of Rocklin General Plan, Town of Loomis General Plan, and the Horseshoe Bar/Penryn Community Plan.

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Table 4.2-24: 2030 No Project with Dominguez Road Peak-Hour Roadway Segment Level of Service Summary

Roadway	Segment	Capacity	2030 No Project		
			Volume	V/C	LOS
Taylor Road	King Rd and Horseshoe Bar Rd (Loomis)				
	A.M. Peak Hour Northbound	1,650	920	0.56	A
	A.M. Peak Hour Southbound	1,650	1,204	0.73	C
	P.M Peak Hour Northbound	1,650	978	0.59	A
	P.M Peak Hour Southbound	1,650	788	0.48	A
	Saturday Peak Hour Northbound	1,650	797	0.48	A
	Saturday Peak Hour Southbound	1,650	675	0.41	A
Taylor Road	Horseshoe Bar Rd and Sierra College Blvd (Loomis)				
	A.M. Peak Hour Eastbound	1,650	475	0.29	A
	A.M. Peak Hour Westbound	1,650	913	0.55	A
	P.M Peak Hour Eastbound	1,650	712	0.43	A
	P.M Peak Hour Westbound	1,650	590	0.36	A
	Saturday Peak Hour Eastbound	1,650	729	0.44	A
	Saturday Peak Hour Westbound	1,650	594	0.36	A
Taylor Road	Sierra College Blvd and City Limits (Loomis)				
	A.M. Peak Hour Eastbound	1,650	514	0.31	A
	A.M. Peak Hour Westbound	1,650	910	0.55	A
	P.M Peak Hour Eastbound	1,650	932	0.56	A
	P.M Peak Hour Westbound	1,650	661	0.40	A
	Saturday Peak Hour Eastbound	1,650	664	0.40	A
	Saturday Peak Hour Westbound	1,650	642	0.39	A
Rocklin Road	Pacific St and Granite Dr				
	A.M. Peak Hour Eastbound	3,300	1,165	0.35	A
	A.M. Peak Hour Westbound	3,300	1,474	0.45	A
	P.M Peak Hour Eastbound	3,300	1,427	0.43	A
	P.M Peak Hour Westbound	3,300	1,187	0.36	A
	Saturday Peak Hour Eastbound	3,300	1,020	0.31	A
	Saturday Peak Hour Westbound	3,300	805	0.24	A
Sierra College Boulevard	English Colony Way and King Rd (Placer County)				
	A.M. Peak Hour Northbound	3,300	599	0.18	A
	A.M. Peak Hour Southbound	3,300	1,696	0.51	A
	P.M Peak Hour Northbound	3,300	1,459	0.44	A
	P.M Peak Hour Southbound	3,300	945	0.29	A
	Saturday Peak Hour Northbound	3,300	869	0.26	A
	Saturday Peak Hour Southbound	3,300	792	0.24	A
Sierra College Boulevard	King Rd and Taylor Rd (Loomis)				
	A.M. Peak Hour Northbound	3,300	704	0.21	A
	A.M. Peak Hour Southbound	3,300	1,560	0.47	A
	P.M Peak Hour Northbound	3,300	1,399	0.42	A
	P.M Peak Hour Southbound	3,300	928	0.28	A
	Saturday Peak Hour Northbound	3,300	805	0.24	A
	Saturday Peak Hour Southbound	3,300	846	0.26	A

Notes:
- ☐ Exceeds level of service criteria
- Significant Impact

2030 PLUS PROJECT WITH DOMINGUEZ ROAD

Traffic volumes generated by the proposed project were added to the 2030 no project traffic volumes, and LOS were calculated for the 2030 plus project with Dominguez Road scenario. Weekday and Saturday peak-hour forecast traffic volumes for the 2030 plus project with Dominguez Road scenario are shown on Exhibits 4.2-27 and 4.2-28. The LOS for study area intersections and roadway segments in the 2030 plus project with Dominguez Road scenario are shown in Tables 4.2-25 and 4.2-26. The 2030 plus project with Dominguez Road LOS worksheets are provided in Appendix B.

IMPACT 4.2-10 *Sierra College Boulevard/Dominguez Road With Dominguez Road (Cumulative). The addition of project-related traffic to cumulative traffic volumes would further degrade unacceptable traffic operations at this intersection by increasing the v/c ratio by more than 0.05. This impact would be considered* ***significant****.*

The intersection of Sierra College Boulevard/Dominguez Road is projected to operate at LOS E (unsatisfactory) during the Saturday peak hour in the cumulative no project condition. Addition of the project traffic would further deteriorate the condition of this signalized intersection to LOS F, as shown in Table 4.2-25. Because the intersection is already operating at unsatisfactory LOS and the project increases the v/c ratio by 0.127, which is more than 0.05, the project impact at this location is **significant**.

Mitigation Measure 4.2-10 Sierra College Boulevard/Dominguez Road With Dominguez Road (Cumulative)

The project applicant shall pay its fair share (in the form of its required traffic impact fees) for the striping of this intersection when it is constructed in order to accommodate dual left-turn lanes, two through lanes, and a shared through/right-turn lane in the southbound direction and a left turn lane, a shared through lane/right-turn lane, and an exclusive right turn lane in the eastbound direction.

Level of Significance after Mitigation

If the currently proposed lane configuration were striped as identified in the mitigation measure at the time of its construction, the project's contribution to traffic at this intersection would be mitigated, the intersection would operate at an acceptable LOS D, and this impact would be considered less than significant. The number of vehicles turning left in the southbound direction (422 vehicles) and turning right in the eastbound direction (517 vehicles) is high during the Saturday peak hour. The proposed striping will add capacity to the southbound left turn movement (dual left turn lanes) and eastbound right turn movement (shared through/right turn lane and an exclusive right turn lane). This will result in reduction of volume-to-capacity ratio at these critical movements, thus improving the overall LOS at this location. The identified striping configuration can exist in the same right-of-way currently planned for this intersection.

The cumulative mitigation measures for the 2030 plus project with Dominguez Road scenario are shown on Exhibit 4.2-29.

IMPACT 4.2-11 *Sierra College Boulevard/English Colony Way (Placer County) With Dominguez Road (Cumulative). The addition of project-related traffic to cumulative traffic volumes would further degrade unacceptable traffic operations at this intersection by adding more than 5 percent to the projected traffic volumes. This impact would be considered* ***significant****.*

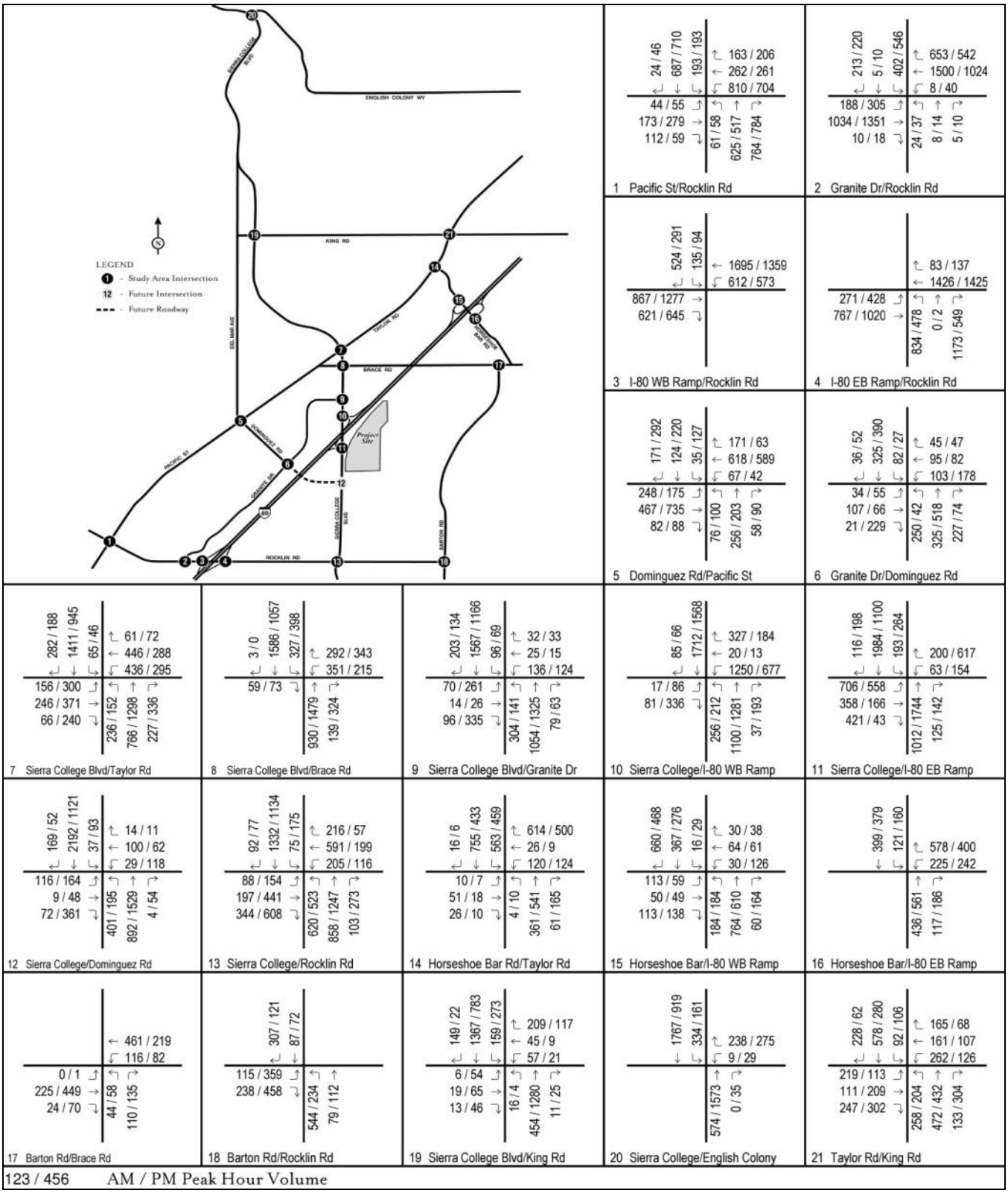
The intersection of Sierra College Boulevard/English Colony Way (Placer County) is projected to operate at LOS D (unsatisfactory LOS) during the Saturday peak hour in the no project condition. Addition of the project traffic would further deteriorate the condition of this intersection, as shown in Table 4.2-25. Because the intersection is already operating at unsatisfactory LOS and the project adds more than 5 percent of the total traffic at this unsignalized intersection, the project impact at this location is **significant**.

Mitigation Measure 4.2-11 Sierra College Boulevard/English Colony Way (Placer County) With Dominguez Road (Cumulative)

Implement Mitigation Measure 4.2-8.

Level of Significance after Mitigation

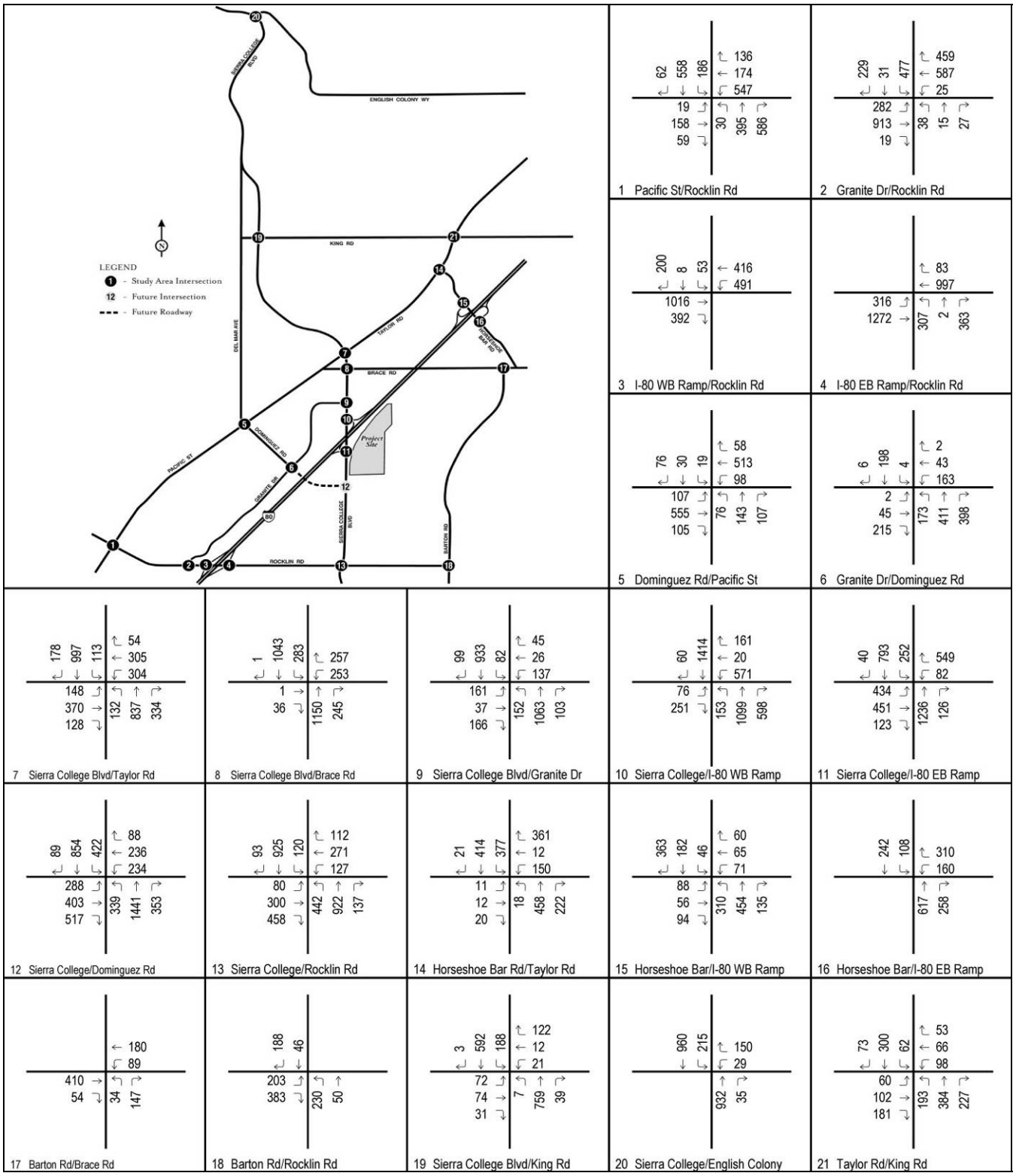
Signalizing this intersection would mitigate the project's impact at this intersection. Due to the reduction in available gaps, the delay experienced by vehicles at a stop sign along a minor street (English Colony Way) increases as the volume along the major street (Sierra College Boulevard) increases in the future. By installing a signal the delay experienced by the vehicles on the minor street is reduced as fixed time is allocated for those vehicles to merge on the major street. A fair share payment would be considered as mitigation only if the County is able to demonstrate to the City's satisfaction that the County's Capital Improvement Program covers or will cover the contemplated signalization such that a fair share payment will actually result in construction of the contemplated signalization within a reasonable period of time (i.e., prior to the issuance of building permits). Because the County of Placer controls what occurs at the intersection, however, and because the City is uncertain as to whether the County would be willing to cooperate in the contemplated signalization within a reasonable period of time, the City conservatively concludes that, at the time of action by the City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the County and thus cannot assume that the signalization contemplated by the mitigation will be implemented. Furthermore, although the mitigation measure requires the applicant to try and enter into an agreement with the County by which the applicant will be responsible for the signalization, the City has no way to ensure that the County will cooperate with the applicant pursuant to that measure. An agreement requires two cooperating parties, and the City cannot force the County to cooperate if it chooses not to do so. For these reasons, consistent with CEQA Guidelines Section 15091, Subdivision (a)(2), the City concludes, however, that the County can and should cooperate with the City in implementing the mitigation. With such action by the County, the impact of the project would be rendered less than significant, though at present, as noted above, the City considers the impact significant and unavoidable.



Source: LSA Associates 2010

2030 plus Project
Peak-Hour Traffic Volumes - With Dominguez Road

Exhibit 4.2-27



Source: LSA Associates 2010

2030 plus Project
Saturday Peak-Hour Traffic Volumes - With Dominguez Road **Exhibit 4.2-28**

Table 4.2-25: 2030 plus Project with Dominguez Road Condition Peak-Hour Intersection Level of Service Summary

		2030 No Project with Dominguez Road Condition						2030 Plus Project with Dominguez Road Condition					
		AM Peak Hour		PM Peak Hour		Saturday		AM Peak Hour		PM Peak Hour		Saturday	
	Intersection	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS
1	Rocklin Road/Pacific Street [1]	1.207	F	1.178	F	0.881	D	1.219	F [2]	1.210	F [2]	0.922	E [2]
2	Rocklin Road/Granite Drive	0.857	D	0.826	D	0.629	B	0.862	D	0.843	D	0.651	B
3	Rocklin Road/I-80 Westbound Ramps	52.8 sec	D	28.8 sec	C	23.5 sec	C	54.5 sec	D	32.9 sec	C	26.0 sec	C
4	Rocklin Road/I-80 Eastbound Ramps	55.4 sec	E	42.4 sec	D	21.1 sec	C	58.9 sec	E [2]	47.8 sec	D	22.0 sec	C
5	Dominguez Road/Pacific Street [1]	0.898	D	0.860	D	0.615	B	0.901	E [2]	0.882	D [2]	0.639	B
6	Dominguez Road/Granite Drive [1,3]	0.472	A	0.529	A	0.562	A	0.481	A	0.552	A	0.600	B
7	Sierra College Boulevard/Taylor Road [1] (Loomis)	44.3 sec	D	33.1 sec	C	32.9 sec	C	46.4 sec	D [2]	34.3 sec	C	34.1 sec	C
8	Sierra College Boulevard/Brace Road [1] (Loomis)	23.7 sec	C	27.8 sec	C	22.2 sec	C	23.8 sec	C	28.3 sec	C	22.0 sec	C
9	Sierra College Boulevard/Granite Drive	0.773	C	0.608	B	0.480	A	0.787	C	0.642	B	0.527	A
10	Sierra College Boulevard/I-80 Westbound Ramps	52.3 sec	D	45.9 sec	D	40.2 sec	D	51.7 sec	D	40.7 sec	D	45.9 sec	D
11	Sierra College Boulevard/I-80 Eastbound Ramps	36.4 sec	D	9.8 sec	A	9.3 sec	A	29.5 sec	C	50.1 sec	D	17.8 sec	B
12	Sierra College Boulevard/Dominguez Road	0.799	C	0.655	B	0.999	E	0.811	D	0.748	C	1.126	F
13	Sierra College Boulevard/Rocklin Road [1]	1.408	F	1.159	F	0.942	E	1.425	F [2]	1.182	F [2]	0.971	E [2]
14	Taylor Road/Horseshoe Bar Road [1] (Loomis)	54.4 sec	D	55.0 sec	E	35.8 sec	D	54.9 sec	D [2]	56.4 sec	E [2]	36.6 sec	D [2]
15	Horseshoe Bar Road/I-80 Westbound Ramps [1] (Loomis)	19.0 sec	B	20.1 sec	C	21.8 sec	C	19.0 sec	B	20.2 sec	C	21.7 sec	C
16	Horseshoe Bar Road/I-80 Eastbound Ramps* [1,3] (Loomis)	60.5 sec	F	114.9 sec	F	29.7 sec	D	64.3 sec	F [2]	135.3 sec	F [2]	35.1 sec	E [2]
17	Barton Road/Brace Road* [1,3] (Loomis)	14.7 sec	B	18.1 sec	C	14.9 sec	B	14.7 sec	B	18.4 sec	C	15.1 sec	C
18	Barton Road/Rocklin Road* [1,3] (Loomis)	31.1 sec	D	16.0 sec	C	12.1 sec	B	34.3 sec	D [2]	17.3 sec	C	13.3 sec	B
19	Sierra College Boulevard/King Road [1] (Loomis)	20.1 sec	C	20.1 sec	C	20.7 sec	C	20.1 sec	C	19.9 sec	B	19.7 sec	B
20	Sierra College Boulevard/English Colony Way* [1,3] (Placer County)	17.1 sec	C	86.4 sec	F	28.2 sec	D	17.6 sec	C	105.6 sec	F [2]	35.4 sec	E
21	Taylor Road/King Road [1] (Loomis)	37.0 sec	D	31.0 sec	C	28.0 sec	C	37.1 sec	D [2]	31.3 sec	C	28.5 sec	C

Notes:

ICU V/C ratio is used for signalized intersections in the City of Rocklin. HCM delay in seconds is used for unsignalized intersections and in the Town of Loomis.

* Indicates unsignalized intersection

[1] LOS C required for these intersections. LOS D acceptable for all other intersections.

[2] Project-related increase is less than 0.05 in V/C ratio or less than 5% of the total traffic at the intersection, therefore not a significant impact.

[3] Peak Hour volumes meet Signal Warrant #3 of the MUTCD

* Delay exceeds 1000 seconds

Exceeds level of service criteria

(Shade) = Significant Impact

Table 4.2-26: 2030 plus Project with Dominguez Road Daily Roadway Segment Level of Service Summary

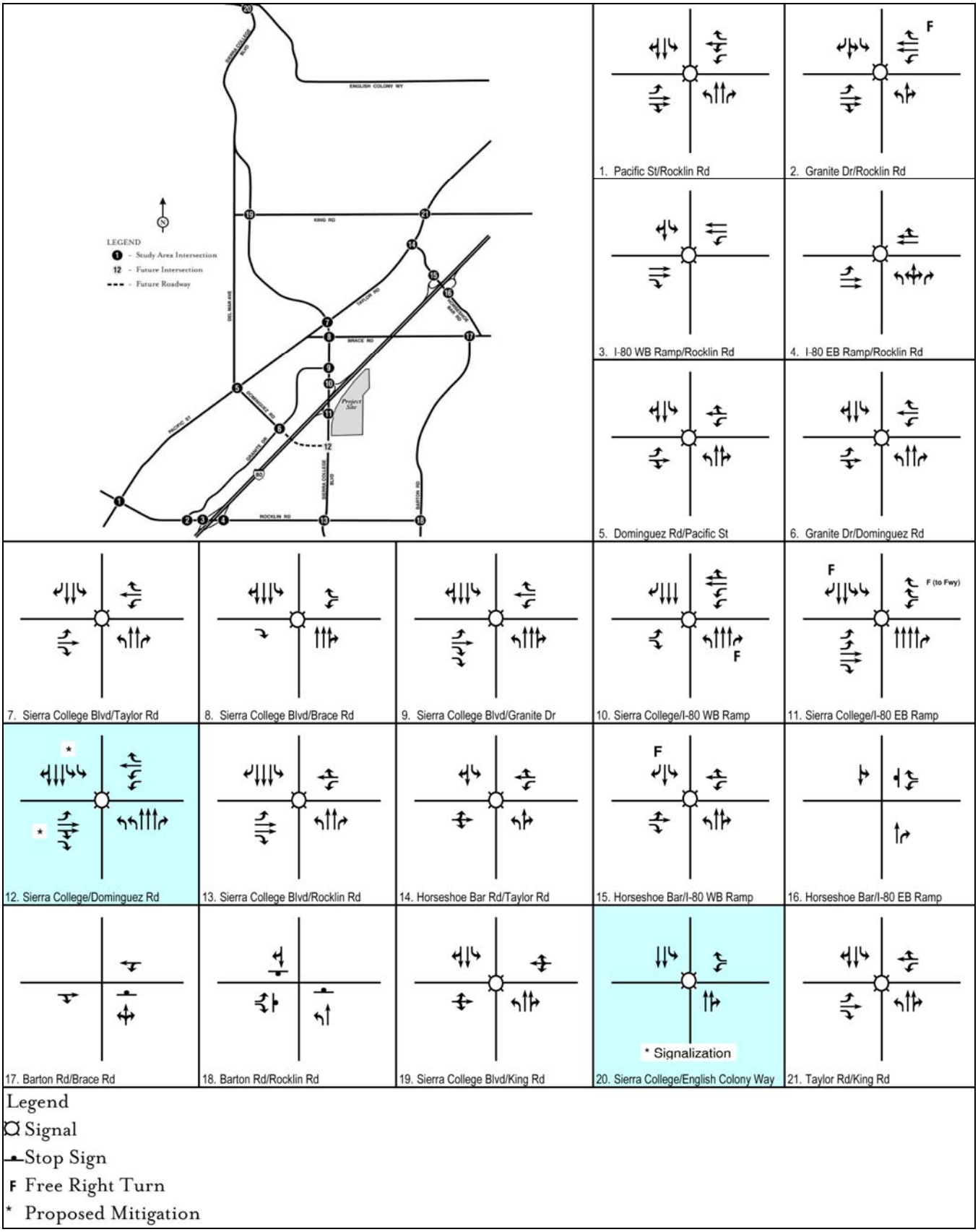
Roadway	Segment	Configuration	Capacity	2030 No Project			2030 Plus Project		
				Volume	V/C	LOS	Volume	V/C	LOS
Taylor Road	King Road and Horseshoe Bar Road [1] (Loomis)	Two-lane Collector	15,000	18,161	1.21	F	18,476	1.23	F
	Horseshoe Bar Road and Sierra College Boulevard[1] (Loomis)	Two-lane Collector	15,000	15,972	1.06	F	16,412	1.09	F
	Sierra College Boulevard and City Limits [1] (Loomis)	Two-lane Collector	15,000	17,557	1.17	F	18,027	1.20	F
Pacific Street	City Limits and Dominguez Road [1]	Four-lane Undivided Arterial	30,000	18,362	0.61	B	18,832	0.63	B
	Dominguez Road and Rocklin Road [1]	Four-lane Undivided Arterial	30,000	20,041	0.67	B	20,196	0.67	B
Rocklin Road	Pacific Street and Granite Drive	Four-lane Undivided Arterial	30,000	33,366	1.11	F	34,141	1.14	F
	I-80 and Sierra College Boulevard	Four-lane Undivided Arterial	30,000	23,835	0.79	C	23,990	0.80	C
	Sierra College Boulevard and Barton Road [1] (Loomis)	Four-lane Undivided Arterial	30,000	13,720	0.46	A	14,340	0.48	A
Barton Road	Rocklin Road and Brace Road [1] (Loomis)	Two-lane Collector	15,000	3,531	0.24	A	3,531	0.24	A
Horseshoe Bar Road	I-80 and Brace Road [1] (Loomis)	Two-lane Collector	15,000	10,194	0.68	B	10,404	0.69	B
Brace Road	I-80 and Barton Road [1] (Loomis)	Two-lane Collector	15,000	8,981	0.60	A	9,231	0.62	B
	I-80 and Sierra College Boulevard [1] (Loomis)	Two-lane Collector	15,000	9,525	0.63	B	9,655	0.64	B
Sierra College Boulevard	English Colony Way and King Road [1] (Placer County)	Four-lane Undivided Arterial	30,000	30,116	1.00	F	31,506	1.05	F
	King Road and Taylor Road [1] (Loomis)	Four-lane Undivided Arterial	30,000	24,160	0.81	D	25,940	0.86	D
	Taylor Road and I-80	Six-lane Arterial	50,525	36,662	0.73	C	39,962	0.79	C
	I-80 and Dominguez Road	Six-lane Arterial	50,525	35,997	0.71	B	39,172	0.78	C
	Dominguez Road and Rocklin Road [1]	Six-lane Arterial	50,525	40,106	0.79	C	42,891	0.85	D
Granite Drive	Dominguez Road and Sierra College Boulevard [1]	Four-lane Undivided Arterial	30,000	10,373	0.35	A	10,523	0.35	A
	Dominguez Road and Rocklin Road [1]	Four-lane Undivided Arterial	30,000	7,422	0.25	A	7,497	0.25	A
Dominguez Road	Pacific Street and Granite Drive [1]	Two-lane Collector	15,000	10,417	0.69	B	10,417	0.69	B
King Road	Sierra College Boulevard and Taylor Road [1] (Loomis)	Two-lane Collector	15,000	6,631	0.44	A	6,711	0.45	A

Notes:

[1] LOS C required for these segments. LOS D acceptable for all other segments.

Exceeds level of service criteria

Roadway Improvements consistent with City of Rocklin General Plan, Town of Loomis General Plan, and the Horseshoe Bar/Penryn Community Plan.



Source: LSA Associates 2010

2030 plus Project With Dominguez Road - Mitigation **Exhibit 4.2-29**

IMPACT 4.2-12 *Roadway Segments With Dominguez Road (Cumulative). All roadway segments affected by the project are projected to operate at acceptable LOS. Therefore, this impact would be considered less than significant.*

All but seven of the study area roadway segments are forecast to operate within their daily roadway capacities in the cumulative with Dominguez Road scenario, as shown in Table 4.2-26. A directional peak-hour roadway segment analysis was prepared for these seven segments and is shown in Table 4.2-27. In the cumulative a.m., p.m., and Saturday midday peak hours, all the roadway segments would operate with satisfactory v/c ratios with the addition of project traffic. Because these roadway segments are projected to operate at satisfactory v/c ratios during the peak hours of roadway traffic, they are not considered deficient and roadway segment impacts in the cumulative with Dominguez Road scenario associated with the proposed project would be considered less than significant.

Mitigation Measure 4.2-12 Roadway Segments With Dominguez Road (Cumulative)

No mitigation would be necessary.

Level of Significance after Mitigation

Because the cumulative impacts on roadway segments in the cumulative with Dominguez Road scenario would be less than significant, the project will not cause a cumulatively considerable incremental contribution to any significant cumulative impact on roadway segments in the cumulative with Dominguez Road scenario.

Tables 4.2-28, 4.2-29 and 4.2-30 identify the mitigated LOS at the study area locations for the different scenarios (i.e., Existing plus Approved Projects plus Project, Cumulative plus Project without Dominguez Road, and Cumulative plus Project with Dominguez Road).

Table 4.2-27: 2030 plus Project with Dominguez Road Peak-Hour Roadway Segment Level of Service Summary

Roadway	Segment	Capacity	2030 No Project			2030 Plus Project		
			Volume	V/C	LOS	Volume	V/C	LOS
Taylor Road	King Rd and Horseshoe Bar Rd (Loomis)							
	A.M. Peak Hour Northbound	1,650	920	0.56	A	924	0.56	A
	A.M. Peak Hour Southbound	1,650	1,204	0.73	C	1,211	0.73	C
	P.M Peak Hour Northbound	1,650	978	0.59	A	994	0.60	A
	P.M Peak Hour Southbound	1,650	788	0.48	A	803	0.49	A
	Saturday Peak Hour Northbound	1,650	797	0.48	A	817	0.50	A
	Saturday Peak Hour Southbound	1,650	675	0.41	A	696	0.42	A
Taylor Road	Horseshoe Bar Rd and Sierra College Blvd (Loomis)							
	A.M. Peak Hour Eastbound	1,650	475	0.29	A	482	0.29	A
	A.M. Peak Hour Westbound	1,650	913	0.55	A	922	0.56	A
	P.M Peak Hour Eastbound	1,650	712	0.43	A	735	0.45	A
	P.M Peak Hour Westbound	1,650	590	0.36	A	611	0.37	A
	Saturday Peak Hour Eastbound	1,650	729	0.44	A	758	0.46	A
	Saturday Peak Hour Westbound	1,650	594	0.36	A	624	0.38	A
Taylor Road	Sierra College Blvd and City Limits (Loomis)							
	A.M. Peak Hour Eastbound	1,650	514	0.31	A	514	0.31	A
	A.M. Peak Hour Westbound	1,650	910	0.55	A	910	0.55	A
	P.M Peak Hour Eastbound	1,650	932	0.56	A	932	0.56	A
	P.M Peak Hour Westbound	1,650	661	0.40	A	661	0.40	A
	Saturday Peak Hour Eastbound	1,650	664	0.40	A	664	0.40	A
	Saturday Peak Hour Westbound	1,650	642	0.39	A	662	0.40	A
Rocklin Road	Pacific St and Granite Dr							
	A.M. Peak Hour Eastbound	3,300	1,165	0.35	A	1,181	0.36	A
	A.M. Peak Hour Westbound	3,300	1,474	0.45	A	1,486	0.45	A
	P.M Peak Hour Eastbound	3,300	1,427	0.43	A	1,465	0.44	A
	P.M Peak Hour Westbound	3,300	1,187	0.36	A	1,226	0.37	A
	Saturday Peak Hour Eastbound	3,300	1,020	0.31	A	1,072	0.32	A
	Saturday Peak Hour Westbound	3,300	805	0.24	A	856	0.26	A
Sierra College Boulevard	English Colony Way and King Rd (Placer County)							
	A.M. Peak Hour Northbound	3,300	599	0.18	A	622	0.19	A
	A.M. Peak Hour Southbound	3,300	1,696	0.51	A	1,725	0.52	A
	P.M Peak Hour Northbound	3,300	1,459	0.44	A	1,530	0.46	A
	P.M Peak Hour Southbound	3,300	945	0.29	A	1,013	0.31	A
	Saturday Peak Hour Northbound	3,300	869	0.26	A	960	0.29	A
	Saturday Peak Hour Southbound	3,300	792	0.24	A	886	0.27	A
Sierra College Boulevard	King Rd and Taylor Rd (Loomis)							
	A.M. Peak Hour Northbound	3,300	704	0.21	A	732	0.22	A
	A.M. Peak Hour Southbound	3,300	1,560	0.47	A	1,598	0.48	A
	P.M Peak Hour Northbound	3,300	1,399	0.42	A	1,490	0.45	A
	P.M Peak Hour Southbound	3,300	928	0.28	A	1,015	0.31	A
	Saturday Peak Hour Northbound	3,300	805	0.24	A	922	0.28	A
	Saturday Peak Hour Southbound	3,300	846	0.26	A	966	0.29	A
Sierra College Boulevard	Dominguez Rd and Rocklin Rd							
	A.M. Peak Hour Northbound	4,950	1,109	0.22	A	1,162	0.23	A
	A.M. Peak Hour Southbound	4,950	1,459	0.29	A	1,499	0.30	A
	P.M Peak Hour Northbound	4,950	1,337	0.27	A	1,458	0.29	A
	P.M Peak Hour Southbound	4,950	1,259	0.25	A	1,386	0.28	A
	Saturday Peak Hour Northbound	4,950	946	0.19	A	1,114	0.23	A
	Saturday Peak Hour Southbound	4,950	975	0.20	A	1,138	0.23	A

Notes:
- ☐ Exceeds level of service criteria
- Significant Impact

Table 4.2-28: Existing plus Approved Projects plus Project Condition Peak-Hour Intersection Level of Service Summary – With Mitigation

	Intersection	Existing Plus Approved Plus Project Condition						Existing Plus Approved Plus Project Condition - With mitigation					
		AM Peak Hour		PM Peak Hour		Saturday		AM Peak Hour		PM Peak Hour		Saturday	
		V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS
1	Rocklin Road/Pacific Street [1]	0.822	D	1.061	F	0.838	D	0.601	B	0.718	C	0.557	A
2	Rocklin Road/Granite Drive	0.545	A	0.822	D	0.687	B	0.545	A	0.822	D	0.687	B
3	Rocklin Road/I-80 Westbound Ramps	22.7 sec	C	33.9 sec	C	23.4 sec	C	22.7 sec	C	33.9 sec	C	23.4 sec	C
4	Rocklin Road/I-80 Eastbound Ramps	29.4 sec	C	45.8 sec	D	25.5 sec	C	29.4 sec	C	45.8 sec	D	25.5 sec	C
5	Dominguez Road/Pacific Street [1]	0.445	A	0.547	A	0.399	A	0.445	A	0.547	A	0.399	A
6	Dominguez Road/Granite Drive* [1]	13.1 sec	B	16.3 sec	C	14.6 sec	B	13.1 sec	B	16.3 sec	C	14.6 sec	B
7	Sierra College Boulevard/Taylor Road [1] (Loomis)	28.0 sec	C	32.8 sec	C	32.7 sec	C	28.0 sec	C	32.8 sec	C	32.7 sec	C
8	Sierra College Boulevard/Brace Road [1] (Loomis)	18.1 sec	B	16.7 sec	B	16.8 sec	B	18.1 sec	B	16.7 sec	B	16.8 sec	B
9	Sierra College Boulevard/Granite Drive	0.606	B	0.763	C	0.807	D	0.606	B	0.763	C	0.807	D
10	Sierra College Boulevard/I-80 Westbound Ramps	20.0 sec	C	28.6 sec	C	34.7 sec	C	20.0 sec	C	28.6 sec	C	34.7 sec	C
11	Sierra College Boulevard/I-80 Eastbound Ramps	13.1 sec	B	26.2 sec	C	36.1 sec	D	13.1 sec	B	26.2 sec	C	36.1 sec	D
12	Sierra College Boulevard/Dominguez Road	-	-	-	-	-	-	-	-	-	-	-	-
13	Sierra College Boulevard/Rocklin Road [1]	0.791	C	0.836	D	0.809	D	0.665	B	0.787	C	0.659	B
14	Taylor Road/Horseshoe Bar Road [1] (Loomis)	37.2 sec	D	44.5 sec	D	31.1 sec	C	37.2 sec	D	44.5 sec	D	31.1 sec	C
15	Horseshoe Bar Road/I-80 Westbound Ramps [1] (Loomis)	19.1 sec	B	21.2 sec	C	22.4 sec	C	19.1 sec	B	21.2 sec	C	22.4 sec	C
16	Horseshoe Bar Road/I-80 Eastbound Ramps* [1] (Loomis)	18.7 sec	C	24.6 sec	C	16.9 sec	C	18.7 sec	C	24.6 sec	C	16.9 sec	C
17	Barton Road/Brace Road* [1] (Loomis)	10.7 sec	B	11.2 sec	B	11.5 sec	B	10.7 sec	B	11.2 sec	B	11.5 sec	B
18	Barton Road/Rocklin Road* [1] (Loomis)	11.0 sec	B	13.2 sec	B	12.7 sec	B	11.0 sec	B	13.2 sec	B	12.7 sec	B
19	Sierra College Boulevard/King Road [1] (Loomis)	23.1 sec	C	41.7 sec	D	26.8 sec	C	18.8 sec	B	27.7 sec	C	21.4 sec	C
20	Sierra College Boulevard/English Colony Way* [1] (Placer County)	11.7 sec	B	24.0 sec	C	18.8 sec	C	11.7 sec	B	24.0 sec	C	18.8 sec	C
21	Taylor Road/King Road [1] (Loomis)	35.2 sec	D	32.1 sec	C	27.9 sec	C	35.2 sec	D	32.1 sec	C	27.9 sec	C

Notes:
ICU V/C ratio is used for signalized intersections in the City of Rocklin. HCM delay in seconds is used for unsignalized intersections and in the Town of Loomis.
* Indicates unsignalized intersection
[1] LOS C required for these intersections. LOS D acceptable for all other intersections.
Mitigated condition
(Shade) = Significant Impact

Table 4.2-29: 2030 plus Project Without Dominguez Road Condition Peak-Hour Intersection Level of Service Summary – With Mitigation

	Intersection	2030 Plus Project without Dominguez Road Condition						2030 Plus Project without Dominguez Road Condition - With Mitigation					
		AM Peak Hour		PM Peak Hour		Saturday		AM Peak Hour		PM Peak Hour		Saturday	
		V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS
1	Rocklin Road/Pacific Street [1]	1.246	F	1.213	F	0.942	E	1.246	F	1.213	F	0.942	E
2	Rocklin Road/Granite Drive	0.885	D	0.864	D	0.678	B	0.885	D	0.864	D	0.678	B
3	Rocklin Road/I-80 Westbound Ramps	56.4 sec	E	35.9 sec	D	26.9 sec	C	24.4 sec	C	13.5 sec	B	11.5 sec	B
4	Rocklin Road/I-80 Eastbound Ramps	70.4 sec	E	53.0 sec	D	22.4 sec	C	35.2 sec	D	31.8 sec	C	22.7 sec	C
5	Dominguez Road/Pacific Street [1]	1.001	F	0.872	D	0.619	B	1.001	F	0.872	D	0.619	B
6	Dominguez Road/Granite Drive* [1]	12.2 sec	B	16.8 sec	C	11.0 sec	B	12.2 sec	B	16.8 sec	C	11.0 sec	B
7	Sierra College Boulevard/Taylor Road [1] (Loomis)	57.9 sec	E	37.6 sec	D	37.7 sec	D	50.5 sec	D	34.5 sec	C	32.2 sec	C
8	Sierra College Boulevard/Brace Road [1] (Loomis)	24.0 sec	C	28.3 sec	C	22.1 sec	C	24.0 sec	C	28.3 sec	C	22.1 sec	C
9	Sierra College Boulevard/Granite Drive	0.948	E	0.784	C	0.673	B	0.948	E	0.784	C	0.673	B
10	Sierra College Boulevard/I-80 Westbound Ramps	54.9 sec	D	48.8 sec	D	45.5 sec	D	54.9 sec	D	48.8 sec	D	45.5 sec	D
11	Sierra College Boulevard/I-80 Eastbound Ramps	26.7 sec	C	52.7 sec	D	19.6 sec	B	26.7 sec	C	52.7 sec	D	19.6 sec	B
12	Sierra College Boulevard/Dominguez Road	0.530	A	0.501	A	0.424	A	0.530	A	0.501	A	0.424	A
13	Sierra College Boulevard/Rocklin Road [1]	1.443	F	1.248	F	1.036	F	1.443	F	1.248	F	1.036	F
14	Taylor Road/Horseshoe Bar Road [1] (Loomis)	57.0 sec	E	57.3 sec	E	37.4 sec	D	57.0 sec	E	57.3 sec	E	37.4 sec	D
15	Horseshoe Bar Road/I-80 Westbound Ramps [1] (Loomis)	19.0 sec	B	20.1 sec	C	21.6 sec	C	19.0 sec	B	20.1 sec	C	21.6 sec	C
16	Horseshoe Bar Road/I-80 Eastbound Ramps* [1,2] (Loomis)	71.9 sec	F	141.9 sec	F	38.5 sec	E	71.9 sec	F	141.9 sec	F	38.5 sec	E
17	Barton Road/Brace Road* [1,2] (Loomis)	15.2 sec	C	18.3 sec	C	15.1 sec	C	15.2 sec	C	18.3 sec	C	15.1 sec	C
18	Barton Road/Rocklin Road* [1,2] (Loomis)	27.0 sec	D	16.5 sec	C	13.5 sec	B	31.3 sec	C	22.7 sec	C	25.6 sec	C
19	Sierra College Boulevard/King Road [1] (Loomis)	20.3 sec	C	19.9 sec	B	19.3 sec	B	20.3 sec	C	19.9 sec	B	19.3 sec	B
20	Sierra College Boulevard/English Colony Way* [1,2] (Placer County)	17.7 sec	C	105.3 sec	F	38.7 sec	E	16.3 sec	B	18.0 sec	B	14.1 sec	B
21	Taylor Road/King Road [1] (Loomis)	37.2 sec	D	31.3 sec	C	28.5 sec	C	37.2 sec	D	31.3 sec	C	28.5 sec	C

Notes:
ICU V/C ratio is used for signalized intersections in the City of Rocklin. HCM delay in seconds is used for unsignalized intersections and in the Town of Loomis.
* Indicates unsignalized intersection
[1] LOS C required for these intersections. LOS D acceptable for all other intersections.
[2] Peak Hour volumes meet Signal Warrant #3 of the MUTCD
* Delay exceeds 1000 seconds

Table 4.2-30: 2030 plus Project with Dominguez Road Condition Peak-Hour Intersection Level of Service Summary – With Mitigation

	Intersection	2030 Plus Project with Dominguez Road Condition						2030 Plus Project with Dominguez Road Condition - With Mitigation					
		AM Peak Hour		PM Peak Hour		Saturday		AM Peak Hour		PM Peak Hour		Saturday	
		V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS
1	Rocklin Road/Pacific Street [1]	1.219	F	1.210	F	0.922	E	1.219	F	1.210	F	0.922	E
2	Rocklin Road/Granite Drive	0.862	D	0.843	D	0.651	B	0.862	D	0.843	D	0.651	B
3	Rocklin Road/I-80 Westbound Ramps	54.5 sec	D	32.9 sec	C	26.0 sec	C	54.5 sec	D	32.9 sec	C	26.0 sec	C
4	Rocklin Road/I-80 Eastbound Ramps	58.9 sec	E	47.8 sec	D	22.0 sec	C	58.9 sec	E	47.8 sec	D	22.0 sec	C
5	Dominguez Road/Pacific Street [1]	0.901	E	0.882	D	0.639	B	0.901	E	0.882	D	0.639	B
6	Dominguez Road/Granite Drive* [1]	0.481	A	0.552	A	0.600	B	0.481	A	0.552	A	0.600	B
7	Sierra College Boulevard/Taylor Road [1] (Loomis)	46.4 sec	D	34.3 sec	C	34.1 sec	C	46.4 sec	D	34.3 sec	C	34.1 sec	C
8	Sierra College Boulevard/Brace Road [1] (Loomis)	23.8 sec	C	28.3 sec	C	22.0 sec	C	23.8 sec	C	28.3 sec	C	22.0 sec	C
9	Sierra College Boulevard/Granite Drive	0.787	C	0.642	B	0.527	A	0.787	C	0.642	B	0.527	A
10	Sierra College Boulevard/I-80 Westbound Ramps	51.7 sec	D	40.7 sec	D	45.9 sec	D	51.7 sec	D	40.7 sec	D	45.9 sec	D
11	Sierra College Boulevard/I-80 Eastbound Ramps	29.5 sec	C	50.1 sec	D	17.8 sec	B	29.5 sec	C	50.1 sec	D	17.8 sec	B
12	Sierra College Boulevard/Dominguez Road	0.811	D	0.748	C	1.126	F	0.890	D	0.599	A	0.899	D
13	Sierra College Boulevard/Rocklin Road [1]	1.425	F	1.182	F	0.971	E	1.425	F	1.182	F	0.971	E
14	Taylor Road/Horseshoe Bar Road [1] (Loomis)	54.9 sec	D	56.4 sec	E	36.6 sec	D	54.9 sec	D	56.4 sec	E	36.6 sec	D
15	Horseshoe Bar Road/I-80 Westbound Ramps [1] (Loomis)	19.0 sec	B	20.2 sec	C	21.7 sec	C	19.0 sec	B	20.2 sec	C	21.7 sec	C
16	Horseshoe Bar Road/I-80 Eastbound Ramps* [1,2] (Loomis)	64.3 sec	F	135.3 sec	F	35.1 sec	E	64.3 sec	F	135.3 sec	F	35.1 sec	E
17	Barton Road/Brace Road* [1,2] (Loomis)	14.7 sec	B	18.4 sec	C	15.1 sec	C	14.7 sec	B	18.4 sec	C	15.1 sec	C
18	Barton Road/Rocklin Road* [1,2] (Loomis)	34.3 sec	D	17.3 sec	C	13.3 sec	B	34.3 sec	D	17.3 sec	C	13.3 sec	B
19	Sierra College Boulevard/King Road [1] (Loomis)	20.1 sec	C	19.9 sec	B	19.7 sec	B	20.1 sec	C	19.9 sec	B	19.7 sec	B
20	Sierra College Boulevard/English Colony Way* [1,2] (Placer County)	17.6 sec	C	105.6 sec	F	35.4 sec	E	16.4 sec	B	17.9 sec	B	14.3 sec	B
21	Taylor Road/King Road [1] (Loomis)	37.1 sec	D	31.3 sec	C	28.5 sec	C	37.1 sec	D	31.3 sec	C	28.5 sec	C

Notes:

ICU V/C ratio is used for signalized intersections in the City of Rocklin. HCM delay in seconds is used for unsignalized intersections and in the Town of Loomis.

* Indicates unsignalized intersection

[1] LOS C required for these intersections. LOS D acceptable for all other intersections.

[2] Peak Hour volumes meet Signal Warrant #3 of the MUTCD

* Delay exceeds 1000 seconds

Mitigated condition

(Shade) = Significant Impact

4.2.11 SPECIAL ISSUES

IMPACT 4.2-13 *Freeway Mainline Impacts. The proposed project would contribute traffic to a freeway mainline (SR 65) segment that currently operates unacceptably for one segment under existing conditions and two segments under existing plus approved projects (baseline) conditions. In addition, in the cumulative condition, the project would contribute traffic to a freeway mainline segment (SR65) that is projected to operate unacceptably even with the construction of freeway improvements. Since the project contribution along these freeway segments that operate at unacceptable LOS in baseline, plus approved projects and cumulative conditions does not exceed 5 percent of the total traffic on the freeway mainline, the project's impacts on freeway mainline segments would be considered less than significant.*

Based on Caltrans' NOP comments, LSA included the mainline analysis of I-80 between the Horseshoe Bar interchange to the Atlantic Avenue/Interchange and mainline analysis of SR-65 between its junction with I-80 and the Blue Oak Boulevard/Interchange. Hence, the study area for the freeway mainline was developed based on Caltrans' comments on the NOP for the proposed project. To analyze the operation of the highway system in the vicinity of the project in the existing, existing plus approved projects, and 2030 without and with project conditions, the I-80 mainline between the Horseshoe Bar Road and Atlantic Street interchanges and the SR-65 mainline between the I-80 junction and Blue Oaks Boulevard were analyzed in the a.m. and p.m. peak hours. The existing volumes were obtained from Caltrans database[9] for 2008 conditions (the most recent data available). The volumes for Existing Plus Approved Projects Condition were calculated by adding the traffic generated by cumulative projects to the existing traffic volumes. The volumes for 2030 without and with Dominguez conditions were developed by adding the growth between 2008 and 2030 obtained from the travel demand model (2030 model volumes – 2008 model volumes) to the existing traffic volumes. The Caltrans LOS standard for its facilities is LOS E.

As shown in Table 4.2-31, in existing conditions, current capacity on SR-65 between I-80 and Galleria Boulevard/Stanford Ranch Road would not serve baseline demand at an acceptable LOS in the p.m. peak hour. For this segment, which operates at unacceptable LOS, the increase in traffic volume with the project would be less than 1.7 percent. Since the project contributes less than 5 percent of the total traffic the project does not have a significant impact along this segment of the freeway mainline.

Caltrans has long-term plans to increase capacity to accommodate impacts anticipated from cumulative regional traffic growth, including traffic coming from projects in Rocklin, and is collecting money from various sources to help fund required improvements. For example, the Caltrans I-80 freeway improvement project[10] between Riverside Avenue/Auburn Boulevard and SR-65 proposes to increase freeway capacity by adding a high-occupancy vehicle (HOV) lane and auxiliary lanes. Based on information provided on the Caltrans website,[11] the eastbound and westbound HOV lanes from the Sacramento County/Placer County line to Eureka Road is scheduled for completion in the fall 2010. The westbound HOV lane from Eureka Road to past SR-65 is scheduled for completion in the

[9] http://traffic-counts.dot.ca.gov/2008all/2008AADT.xls

[10] *Freeway Improvement Project on Interstate 80 from 1.1 km West of the Sacramento/Placer County Line to 1.56 km East of the Route 65 Connector in Placer County*, Caltrans, April 2003.

[11] http://www.dot.ca.gov/dist3/projects/SacPla80/

winter 2011. The eastbound HOV lane from past SR-65 to Eureka Road is currently not funded and therefore no construction timeline is given. Hence, for the Existing plus Approved Projects (Baseline) conditions, the I-80 mainline between Atlantic Street and SR-65 was analyzed as a ten-lane (mainline) freeway, and the freeway (I-80) mainline segment between SR-65 and Horseshoe Bar Road interchange was analyzed as a future six-lane freeway.

In the existing plus approved projects condition, the capacity on two segments along SR-65 between I-80 and Galleria Boulevard and between Galleria Boulevard and Pleasant Grove Boulevard would not serve baseline demand at an acceptable LOS in the a.m. and p.m. peak hour. Hence, the freeway segments at SR-65 between I-80 and Galleria Boulevard and SR-65 between Galleria Boulevard and Pleasant Grove Boulevard operate at unacceptable LOS without and with the project. For these segments, which operate at unacceptable LOS, the increase in traffic volume with the project would be less than 1.6 percent. Since the project contributes less than 5 percent of the total traffic, the project does not have a significant impact along these segments of the freeway mainline.

The 2030 without and with project conditions were analyzed for both the without and with Dominguez Road scenarios. All freeway mainline segments along I-80 are projected to operate at LOS E or better in 2030 (for both the without and with Dominguez Road extension scenarios) with the future ten-lane freeway for the segment between Atlantic Street and SR-65. Also, all freeway segments along SR-65 are projected to operate at LOS E or better in 2030 with the future six-lane freeway except for the northbound segment on SR-65 between I-80 and Galleria Boulevard/Stanford Ranch Road, which would not serve future demand at an acceptable LOS in both the a.m. and p.m. peak hours. In both, 2030 without Dominguez and 2030 with Dominguez conditions, the northbound segment of SR-65 between I-80 and Galleria Boulevard/Stanford Ranch Road is projected to operate at unacceptable LOS without the project. For these segments which operate at unacceptable LOS, the increase in traffic volume with the project would be less than 1.2 percent. Since the project contributes less than 5 percent of the total traffic, the project does not have a significant impact along these segments of the freeway mainline. The HCS Plus worksheets are provided in Appendix B.

Even though the segments of freeway mainline along SR-65 between I-80 and Galleria Boulevard/Stanford Ranch Road and between Galleria Boulevard and Pleasant Grove Boulevard are projected to operate at unacceptable LOS in baseline (both segments) and cumulative (one segment) conditions, for both without and with project scenarios, the project contributes less than 5 percent of the total traffic and hence the impacts associated with the project are considered to be **less than significant**.

Mitigation Measure 4.2-13 Freeway Mainline Impacts

No mitigation would be necessary.

Level of Significance after Mitigation

The project's impacts on the freeway mainline in the baseline and cumulative conditions would be considered less than significant.

Table 4.2-31: Freeway Segment Level of Service Summary

Freeway	Segment	Number of Lanes	Existing											
			Existing						Existing Plus Project					
			AM			PM			AM			PM		
			Volume	Density	LOS	Volume	Density	LOS	Volume	Density	LOS	Volume	Density	LOS
I-80 EB	Atlantic Street to Taylor Road	4	4,520	18.5	C	6,682	28.8	D	4,549	18.6	C	6,777	29.4	D
	Taylor Road to RTE 65	4	3,515	14.4	B	5,197	21.3	C	3,560	14.6	B	5,339	21.9	C
	RTE 65 to Rocklin Road	3	2,787	15.2	B	4,813	27.2	D	2,854	15.6	B	5,027	28.9	D
	Rocklin Road to Sierra College Boulevard	3	2,670	14.6	B	4,610	25.8	C	2,757	15.0	B	4,887	27.8	D
	Sierra College Boulevard to Horseshoe Bar Road	3	2,494	13.6	B	4,306	23.7	C	2,540	13.8	B	4,412	24.4	C
RTE 65 NB	I-80 to Galleria Boulevard	2	3,662	36.2	E	4,092	>45	F	3,684	36.6	E	4,163	>45	F
	Galleria Boulevard to Pleasant Grove Boulevard	2	3,083	27.3	D	3,446	32.3	D	3,101	27.5	D	3,501	33.2	D
	Pleasant Grove Boulevard to Blue Oaks Boulevard	2	2,544	21.8	C	2,843	24.7	C	2,554	21.9	C	2,875	25.0	C
I-80 WB	Atlantic Street to Taylor Road	4	5,930	24.7	C	5,405	22.2	C	5,970	24.8	C	5,496	22.6	C
	Taylor Road to RTE 65	4	4,612	18.9	C	4,204	17.2	B	4,672	19.1	C	4,340	17.7	B
	RTE 65 to Rocklin Road	3	4,433	24.6	C	3,746	20.4	C	4,523	25.1	C	3,951	21.6	C
	Rocklin Road to Sierra College Boulevard	3	4,246	23.4	C	3,589	19.6	C	4,363	24.1	C	3,853	21.0	C
	Sierra College Boulevard to Horseshoe Bar Road	3	3,966	21.7	C	3,352	18.3	C	4,001	21.9	C	3,463	18.9	C
RTE 65 SB	I-80 to Galleria Boulevard	3	3,207	18.2	C	3,280	18.7	C	3,237	18.4	C	3,348	19.0	C
	Galleria Boulevard to Pleasant Grove Boulevard	2	2,701	23.3	C	2,762	23.9	C	2,724	23.5	C	2,815	24.4	C
	Pleasant Grove Boulevard to Blue Oaks Boulevard	2	2,228	19.0	C	2,279	19.4	C	2,241	19.1	C	2,309	19.7	C

Freeway	Segment	Number of Lanes	Baseline											
			Existing Plus Approved						Existing Plus Approved Plus Project					
			AM			PM			AM			PM		
			Volume	Density	LOS	Volume	Density	LOS	Volume	Density	LOS	Volume	Density	LOS
I-80 EB	Atlantic Street to Taylor Road	5	5,850	24.3	C	6,947	30.5	D	5,880	24.4	C	7,042	31.2	D
	Taylor Road to RTE 65	5	4,710	19.3	C	5,197	21.3	C	4,755	19.4	C	5,339	21.9	C
	RTE 65 to Rocklin Road	3	3,663		C	5,113	29.7	D	3,730	20.3	C	5,327	31.6	D
	Rocklin Road to Sierra College Boulevard	3	3,458	18.8	C	5,053	29.2	D	3,546	19.3	C	5,330	31.7	D
	Sierra College Boulevard to Horseshoe Bar Road	3	2,916	15.9	B	4,802	27.1	D	2,962	16.1	B	4,907	28.0	D
RTE 65 NB	I-80 to Galleria Boulevard	2	4,776	>45	F	4,956	>45	F	4,798	>45	F	5,027	>45	F
	Galleria Boulevard to Pleasant Grove Boulevard	2	4,098	>45	F	4,385	>45	F	4,116	>45	F	4,440	>45	F
	Pleasant Grove Boulevard to Blue Oaks Boulevard	2	3,408	31.7	D	3,846	40.2	E	3,418	31.9	D	3,878	41.0	E
I-80 WB	Atlantic Street to Taylor Road	5	6,126	25.7	C	6,585	28.2	D	6,166	25.9	C	6,676	28.8	D
	Taylor Road to RTE 65	5	4,848	19.8	C	5,282	21.7	C	4,908	20.1	C	5,418	22.3	C
	RTE 65 to Rocklin Road	3	4,766	26.9	D	4,734	26.6	D	4,856	27.5	D	4,938	28.2	D
	Rocklin Road to Sierra College Boulevard	3	4,701	26.5	D	4,547	25.3	C	4,817	27.3	D	4,812	27.2	D
	Sierra College Boulevard to Horseshoe Bar Road	3	4,418	24.5	C	3,988	21.8	C	4,453	24.7	C	4,098	22.5	C
RTE 65 SB	I-80 to Galleria Boulevard	3	3,847	22.0	C	4,284	24.8	C	3,877	22.2	C	4,352	25.3	C
	Galleria Boulevard to Pleasant Grove Boulevard	2	3,588	34.8	D	3,859	40.6	E	3,612	35.2	E	3,912	41.9	E
	Pleasant Grove Boulevard to Blue Oaks Boulevard	2	3,132	27.9	D	3,184	28.6	D	3,145	28.1	D	3,215	29.0	D

Freeway	Segment	Number of Lanes	Without Dominguez Road Extension											
			2030 No Project						2030 With Project					
			AM			PM			AM			PM		
			Volume	Density	LOS	Volume	Density	LOS	Volume	Density	LOS	Volume	Density	LOS
I-80 EB	Atlantic Street to Taylor Road	5	7,736	26.0	C	7,235	24.0	C	7,766	26.1	D	7,330	24.3	C
	Taylor Road to RTE 65	5	6,385	20.9	C	4,886	16.0	B	6,430	21.1	C	5,029	16.4	B
	RTE 65 to Rocklin Road	3	4,856	27.5	D	5,331	31.7	D	4,923	28.1	D	5,545	33.9	D
	Rocklin Road to Sierra College Boulevard	3	4,506	25.0	C	5,414	32.5	D	4,594	25.7	C	5,690	35.6	E
	Sierra College Boulevard to Horseshoe Bar Road	3	3,477	18.9	C	5,409	32.5	D	3,524	19.2	C	5,514	33.6	D
RTE 65 NB	I-80 to Galleria Boulevard	3	6,356	>45	F	6,127	>45	F	6,379	>45	F	6,198	>45	F
	Galleria Boulevard to Pleasant Grove Boulevard	3	5,541	36.8	E	5,681	38.8	E	5,558	37.0	E	5,736	39.7	E
	Pleasant Grove Boulevard to Blue Oaks Boulevard	3	4,642	27.5	D	5,258	33.3	D	4,652	27.5	D	5,290	33.7	D
I-80 WB	Atlantic Street to Taylor Road	5	6,367	20.8	C	8,193	28.0	D	6,407	21.0	C	8,283	28.5	D
	Taylor Road to RTE 65	5	5,128	16.8	B	6,697	22.0	C	5,187	17.0	B	6,833	22.5	C
	RTE 65 to Rocklin Road	3	5,154	30.0	D	5,951	39.2	E	5,244	30.8	D	6,155	42.5	E
	Rocklin Road to Sierra College Boulevard	3	5,238	30.8	D	5,662	35.3	E	5,354	31.9	D	5,927	38.8	E
	Sierra College Boulevard to Horseshoe Bar Road	3	5,034	29.0	D	4,791	27.1	D	5,068	29.3	D	4,902	27.9	D
RTE 65 SB	I-80 to Galleria Boulevard	3	4,739	28.3	D	5,661	38.5	E	4,769	28.5	D	5,729	39.6	E
	Galleria Boulevard to Pleasant Grove Boulevard	3	4,842	29.2	D	5,384	34.8	D	4,866	29.4	D	5,437	35.4	E
	Pleasant Grove Boulevard to Blue Oaks Boulevard	3	4,419	25.8	C	4,457	26.1	D	4,432	25.9	C	4,488	26.3	C

Freeway	Segment	Number of Lanes	With Dominguez Road Extension											
			2030 No Project						2030 No Project					
			AM			PM			AM			PM		
			Volume	Density	LOS	Volume	Density	LOS	Volume	Density	LOS	Volume	Density	LOS
I-80 EB	Atlantic Street to Taylor Road	5	7,719	25.9	C	7,238	24.0	C	7,749	26.0	D	7,333	24.3	C
	Taylor Road to RTE 65	5	6,431	21.1	C	4,898	16.0	B	6,476	21.2	C	5,041	16.5	B
	RTE 65 to Rocklin Road	3	4,933	28.2	D	5,329	31.7	D	5,000	28.7	D	5,543	33.9	D
	Rocklin Road to Sierra College Boulevard	3	4,591	25.6	C	5,404	32.4	D	4,679	26.2	D	5,680	35.5	E
	Sierra College Boulevard to Horseshoe Bar Road	3	3,501	19.1	C	5,395	32.3	D	3,548	19.3	C	5,500	33.4	D
RTE 65 NB	I-80 to Galleria Boulevard	3	6,347	>45	F	6,117	>45	F	6,370	>45	F	6,188	>45	F
	Galleria Boulevard to Pleasant Grove Boulevard	3	5,535	36.7	E	5,674	38.7	E	5,552	37.0	E	5,729	39.6	E
	Pleasant Grove Boulevard to Blue Oaks Boulevard	3	4,643	27.5	D	5,250	33.2	D	4,653	27.6	D	5,282	33.6	D
I-80 WB	Atlantic Street to Taylor Road	5	6,365	20.8	C	8,194	28.0	D	6,405	21.0	C	8,284	28.5	D
	Taylor Road to RTE 65	5	5,126	16.8	B	6,696	22.0	C	5,185	17.0	B	6,832	22.5	C
	RTE 65 to Rocklin Road	3	5,150	30.0	D	5,940	39.0	D	5,240	30.8	D	6,144	42.3	E
	Rocklin Road to Sierra College Boulevard	3	5,207	30.5	D	5,633	34.9	D	5,323	31.6	D	5,898	38.4	E
	Sierra College Boulevard to Horseshoe Bar Road	3	5,028	28.9	D	4,790	27.1	D	5,062	29.2	D	4,901	27.9	D
RTE 65 SB	I-80 to Galleria Boulevard	3	4,772	28.5	D	5,650	38.4	E	4,802	28.8	D	5,718	39.4	E
	Galleria Boulevard to Pleasant Grove Boulevard	3	4,873	29.4	D	5,375	34.7	D	4,897	29.7	D	5,428	35.3	E
	Pleasant Grove Boulevard to Blue Oaks Boulevard	3	4,436	25.9	C	4,450	26.0	D	4,449	26.0	C	4,481	26.2	D

Notes:

Exceeds level of service criteria

(Shade) = Significant Impact

Existing: I-80 6 lanes, Rte 65 6 lanes

In 2025: I-80 8 lanes from Atlantic to Rte 65 then 6 lanes from Rte 65 to Horseshoe Bar Rd

Rte 65 6 lanes

IMPACT 4.2-14 *Entrance Vehicle Stacking. The project's main access roadway has adequate length to avoid entrance vehicle stacking. Therefore, the project's effects on entrance vehicle stacking would be considered* ***less than significant.***

The main project access driveway on Sierra College Boulevard would form the east leg of the I-80 eastbound off-ramp intersection. The main access drive would be approximately 300 feet in length and would terminate at a roundabout on the site. Vehicles entering the project could make a right turn into the Village 1 area from the access drive (approximately 250 feet from Sierra College Boulevard); however, left turns would be prohibited along the access drive.

Most of the inbound project traffic would use the roundabout to access the Home Depot and Walmart stores and the retail buildings located on the north end of the site. However, some traffic would make a right turn off the access drive into Village 1. To determine whether adequate throat distance is provided to ensure excessive vehicle stacking on the access drive does not occur, the *Access Management Manual*, published by the Transportation Research Board, was consulted. According to Table 10-8 in the *Access Management Manual*, the minimum throat length recommended for a driveway with three egress lanes is 200 feet. Approximately 250 feet is provided from Sierra College Boulevard to the first right-turn opportunity into the Village 1 area. This distance would exceed the recommendation in the *Access Management Manual*. As a result, minimal stacking of vehicles from the internal right turn to Sierra College Boulevard is expected and this impact would be considered **less than significant**.

Mitigation Measure 4.2-14 Entrance Vehicle Stacking

No mitigation is necessary.

Level of Significance after Mitigation

The proposed project would not cause excessive entrance vehicle stacking and the impact is considered less than significant.

IMPACT 4.2-15 *Right Turns from Unsignalized Driveway (Schriber Way). Northbound vehicles exiting from the project's unsignalized street (Schriber Way) would be required to cross two lanes of traffic. Sufficient gaps in the traffic stream would occur along Sierra College Boulevard to allow right turns from Schriber Way to the northbound through lanes. Therefore, this impact would be considered* ***less than significant.***

The geometrics shown on the project site plan for Sierra College Boulevard and the project entrance street (Schriber Way) include the recently completed improvements to the I-80/Sierra College Boulevard interchange as well as the improvements to Sierra College Boulevard along the project frontage. The project site plan includes one unsignalized driveway (Schriber Way), located approximately half way between the I-80 eastbound off-ramp and the Dominguez Road extension. The unsignalized Schriber Way would allow right turns in and out only onto Sierra College Boulevard. The northbound Sierra College Boulevard at the Schriber Way location is made up of five lanes. The number 1, 2, and 3 lanes provide northbound through-movement. The number 4 lane provides northbound movement through the I-80 eastbound off-ramp intersection and becomes a "trap" lane onto the I-80 eastbound on-ramp. The number 5 lane is

a right-turn-only lane into the proposed project at the Signalized I-80 eastbound off-ramp driveway (Crossings Drive).

Because of the width of Sierra College Boulevard at Schriber Way, outbound vehicles could have difficulty turning onto northbound Sierra College Boulevard through lanes, as those vehicles would need to cross both the right-turn lane into the proposed project and the freeway trap lane. To determine whether vehicles would be restricted from turning out of Schriber Way into the through lanes by heavy northbound through traffic, an operational analysis of this street location was prepared using Synchro 7. Synchro 7 allows the user to model the expected traffic operations of a corridor, rather than just a single intersection. The unsignalized street was modeled along with the two adjacent signalized intersections to determine whether adequate gaps would be caused by the traffic signals to allow egress from Schriber Way. The unsignalized operations analysis is provided in Appendix B.

Since a queuing analysis cannot be conducted at an unsignalized location, a gap analysis was conducted. The unsignalized LOS worksheets indicate the proportion of time that the westbound right-turn movement is not blocked by vehicles traveling northbound on Sierra College Boulevard as well as the capacity of the right-turn movement considering the total conflicting flow rate. In both the a.m. and p.m. peak hours, the capacity of the right-turn movement exceeds the demand for right turns (capacity of 723 vs. demand of 12 in the a.m. peak hour, capacity of 974 vs. demand of 40 in the p.m. peak hour, and capacity of 1007 vs. demand of 51 in the Saturday midday peak hour). According to the calculations, the westbound right turn would be unblocked 98 percent of the time during the a.m. peak hour, 96 percent of the time during the p.m. peak hour, and 95 percent of the time during the Saturday midday peak hour. As a result, sufficient gaps in the traffic stream would occur along Sierra College Boulevard to allow right turns from Schriber Way to the northbound through lanes and this impact would be considered **less than significant**.

Mitigation Measure 4.2-15 Right Turns from Unsignalized Driveway (Schriber Way)

No mitigation is necessary.

Level of Significance after Mitigation

The project's impacts on northbound vehicles turning right from the project's unsignalized entrance street (Schriber Way) would be considered less than significant.

IMPACT 4.2-16 *Bicycle/Pedestrian Circulation Policy Consistency. The proposed project would include design components that are intended to allow safe pedestrian/bicycle access and movement to and through the site consistent with City policies. Therefore, this impact would be considered less than significant.*

Policy 6 of the Circulation Element of the City of Rocklin General Plan (1991) requires projects to promote pedestrian convenience through development conditions requiring sidewalks, walking paths, or hiking trails that connect residential areas with commercial, shopping, and employment centers. The project design is intended to allow safe access and movement to, from and within the site for pedestrians, bicycles and automobiles. This would be accomplished through the use of designated pedestrian circulation routes/walkways within the proposed parking lots that are articulated with differential landscaping and pavement markings.

To provide access to the proposed Rocklin 60 residential subdivision to the east, a pedestrian/bicycle access point would be provided along the site's eastern boundary. These project components would be consistent with Policy 6 of the Circulation Element. Therefore, the proposed project would not be expected to conflict with adopted policies, plans, or program supporting alternative transportation and this impact would be **less than significant**.

Mitigation Measure 4.2-16 Bicycle/Pedestrian Circulation Policy Consistency

No mitigation is necessary.

Level of Significance after Mitigation

The project would be consistent with the City's policy regarding bicycle/pedestrian circulation. Therefore, the project's impact on bicycle/pedestrian circulation would be considered less than significant.

4.2.12 IMPACTS OF TRAFFIC MITIGATION MEASURES

The CEQA Guidelines section 15126.4, subdivision (a)(1)(D), requires that if a mitigation measure incorporated into a project may have significant adverse effects on the environment, then the Draft EIR must analyze such impacts as an integral part of the whole project. CEQA Guidelines section 15126.4, subdivision (a)(1)(D), states:

> If a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but in less detail than the significant effects of the project as proposed.

Although the City has not identified any *significant* impacts associated with proposed mitigation measures, the City has nevertheless included below a summary of potential impacts of mitigation measures that require the project applicant to construct physical improvements. Certain commenters asked for this information in their comments on the 2007 Draft EIR and 2008 PRDEIR, and the City is happy to provide it, even if is not legally required.

While not specifically required by CEQA, a summary of potential impacts of mitigation measures is provided for those impacts which merely require the payment of fees. The CEQA Guidelines clearly recognize the use of fee payment as mitigation for a project's otherwise "cumulatively considerable" incremental contribution to significant cumulative impacts. If a project is required to fund its fair share of a mitigation measure designed to alleviate the cumulative impact, a project's contribution to that impact is considered less than cumulatively considerable. (CEQA Guidelines, § 15130, subd. (a)(3); *Save Our Peninsula Committee v. Monterey County Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 140.) Where an agency has an existing program by which mitigation measures such as traffic improvements can be funded on a fair-share basis through the collection of fees, an EIR's discussion of traffic mitigation is adequate if it explains how the fee program will address the impact. (*Save Our Peninsula Committee*, 87 Cal.App.4th at p. 141.)

In general, therefore, an EIR need not specifically analyze the impacts of the proposed improvements identified in a mitigation measure where the mitigation measure requires only

that the project applicant pay a traffic impact fee in an amount that constitutes the project's fair share contribution to the construction of improvements necessitated in part by the project impacts. In such instances, the identified improvements are not a "part" of the project (in "whole" or otherwise), but represent a separate, independent project that will someday benefit the project. CEQA does not require a lead agency, in preparing an EIR for a discrete development project, "to consider a mitigation measure which itself may constitute a project at least as complex, ambitious, and costly as project itself." (*Concerned Citizens of South Central Los Angeles v. Los Angeles Unified School District* (2d Dist. 1994) 24 Cal.App.4th 826, 842.) Where a project is only conditioned on the payment of the traffic impact fee, and not on the construction of the improvement itself, an EIR is not required to analyze the impacts of the proposed improvements.

Mitigation Measure 4.2-1 Rocklin Road/Pacific Street Intersection

Mitigation Measure 4.2-1 requires the applicant to add a northbound right-turn overlap phase (which includes modification of the signal phasing and addition of a new signal head that shows a "right-turn arrow"). This improvement can be installed within the existing right-of-way and within the limits of existing paved surfaces. It is anticipated that no potential deleterious environmental effects to natural or cultural resources would occur with adjustments to signal phasing and no new significant impacts would result. Any impacts associated with the improvement called for under Mitigation Measure 4.2-1 would be less than significant.

Mitigation Measure 4.2-2 Sierra College Boulevard/Rocklin Road Intersection

Mitigation Measure 4.2-2 requires the applicant to add an additional westbound through lane (resulting in two through lanes) to this intersection. This improvement can be constructed within the existing right-of-way and within the limits of existing paved surfaces. It is anticipated that all potential deleterious environmental effects to natural or cultural resources would have already been experienced (and presumably mitigated) with the construction of the existing intersection and no new significant impacts would result from the identified construction of an additional westbound through lane. Any impacts associated with the improvement called for under Mitigation Measure 4.2-2 would be less than significant.

Mitigation Measure 4.2-3 Sierra College Boulevard/King Road (Loomis) Intersection

Mitigation Measure 4.2-3 requires the applicant to restripe the intersection to accommodate a westbound right-turn lane. This improvement can be installed within the existing right-of-way and within the limits of existing paved surfaces. It is anticipated that no potential deleterious environmental effects to natural or cultural resources would occur with intersection restriping and no new significant impacts would result. Any impacts associated with the improvement called for under Mitigation Measure 4.2-3 would be less than significant.

Mitigation Measure 4.2-5 Rocklin Road/I-80 Westbound Ramps Without Dominguez Road

Mitigation Measure 4.2-5 requires the project applicant to pay its fair share (in the form of their required traffic impact fees) of the costs of construction of improvements to the Rocklin Road/I-80 Interchange necessitated in part by the project impacts. As stated above, the EIR need not specifically analyze the impacts of the proposed improvements, which will be partially funded

through the fees required by Mitigation Measure 4.2-5, because such improvements are not a "part" of the Rocklin Crossings project (in "whole" or otherwise), are very complex in and of themselves, and represent a separate, independent project that will someday benefit, the Rocklin Crossings project.

The improvements discussed under Mitigation Measure 4.2-5 refers to major improvements arguably within the vicinity of the proposed project that will be initiated by the City as part of its Capital Improvement Program (CIP). The CIP defines the roadway and intersection improvements needed to maintain the Level of Service (LOS) policy adopted in the City's General Plan. (See Rocklin General Plan Circulation Element, Policy 13.). The City determined, prior to the proposed project, that the improvements will be necessary and that these improvements are appropriately part of a municipal capital improvement project, and not a part of a discrete private project. (See Plan for Arcadia, Inc. v. City Council of Arcadia (1974) 42 Cal.App.3d 712, 724.) As such, any improvement initiated as part of the CIP will be separately subject to CEQA. Furthermore, Mitigation Measure 4.2-5 does not make the construction of this improvement a condition of the proposed project's approval. (Cf. id. at p. 723, fn. 5.) The project is only conditioned on the payment of the traffic impact fee. For these reasons, the SPRDEIR was not required to analyze the impacts of the proposed improvements at the Rocklin Road/I-80 westbound ramp.

Regardless of this lack of any legal obligation to address such impacts, the following is a general summary of the impacts typically associated with the kinds of improvements anticipated: establishment of Construction Zone traffic conditions such as temporary detours, lane closures, temporary restrictions on intersection turn movements, temporary diversion of traffic to parallel facilities and traffic movements controlled by flagmen. These conditions could typically last more than a year depending on the scope of the interchange improvements. In addition, traffic on both Rocklin Road as well as I-80 could be affected during construction.

While the City has completed a feasibility study for this intersection that identifies three improvement alternatives, a specific alternative has not been selected by the City. The northeast, northwest, and southwest corners of the Rocklin Road/I-80 intersection have all been previously developed. Those surfaces that are not paved support only roadside landscaping; thus, no impacts to natural resources are anticipated to result from potential roadway/intersection improvements at these locations. If improvements involve excavation, potential impacts to cultural resources may be anticipated, but could be mitigated through prior investigation (i.e., literature search, field survey, and data recovery (if necessary)). The southeast corner of this intersection still supports some natural resource values, including non-native grassland, native oak trees, Secret Ravine Creek and other potentially jurisdictional waters of the U.S./wetlands. Potential impacts to natural resources could involve a minor amount of non-native grassland conversion, direct impacts to native oaks, and direct impacts to Secret Ravine creek or other water/wetlands. Wetland/water impacts (depending upon jurisdictional issues) may require permitting/mitigation administered by the U.S. Army Corps of Engineers, the California Department of Fish and Game, and/or the Central Valley Regional Water Quality Control Board. All of these agency approvals, and consultation with the National Marine Fisheries Service, would be required for potential impacts to Secret Ravine creek.

Mitigation Measure 4.2-6 Sierra College Boulevard/Taylor Road Intersection Without Dominguez Road

Mitigation Measure 4.2-6 requires the applicant to contribute funds constituting the project's fair share of the costs of construction of an additional westbound left-turn lane and an eastbound right-turn overlap phase. All required improvements set forth in Mitigation Measure 4.2-6 may be accomplished within the limits of existing paved surfaces. In the westbound direction there is enough width available to accommodate the second left turn lane. No physical widening is required for these improvements. It is anticipated that all potential deleterious environmental effects to natural or cultural resources would have already been experienced (and presumably mitigated) with the construction of the existing intersection and no new significant impacts would result from the identified intersection restriping plan. Any impacts associated with the improvements called for under Mitigation Measure 4.2-6 would be less than significant.

Mitigation Measure 4.2-7 Barton Road/Rocklin Road Intersection Without Dominguez Road

Mitigation Measure 4.2-7 requires the applicant to pay its fair share toward the signalization of this intersection. This improvement can be constructed within the existing right-of-way and within the limits of existing paved surfaces or the adjacent dirt shoulder. It is anticipated that all potential deleterious environmental effects to natural or cultural resources would have already been experienced (and presumably mitigated) with the construction of the existing intersection. The northwestern and southwestern corners, as well as the eastern side, of this "T" intersection contain disturbed soil with limited ruderal vegetation present along the roadway shoulder. The installation of the signal arms would require the disturbance of several square feet of this disturbed soil in order to accommodate the signal arm foundation. Due to the small area required for signal installation and the disturbed character of the soil, no new significant impacts would be anticipated with installation of the identified intersection signalization. Any impacts associated with the improvement called for under Mitigation Measure 4.2-7 would be less than significant.

Mitigation Measure 4.2-8 Sierra College Boulevard/English Colony Way Intersection Without Dominguez Road and Mitigation Measure 4.2-11 Sierra College Boulevard/English Colony Way Intersection With Dominguez Road

Mitigation Measures 4.2-8 and 4.2-11 require the applicant to pay its fair share toward the signalization of this intersection. This improvement can be constructed within the existing right-of-way and within the limits of existing paved surfaces or the adjacent dirt shoulder. It is anticipated that all potential deleterious environmental effects to natural or cultural resources would have already been experienced (and presumably mitigated) with the construction of the existing intersection The northern and eastern corners, as well as the southwestern side, of this "T" intersection contain disturbed soil with limited ruderal vegetation present along the roadway shoulder. The installation of the signal arms would require the disturbance of several square feet of this disturbed soil in order to accommodate the signal arm foundation. Due to the small area required for signal installation and the disturbed character of the soil, no new significant impacts would be anticipated with installation of the identified intersection

signalization. Any impacts associated with the improvement called for under Mitigation Measures 4.2-8 and 4.2-11 would be less than significant.

Mitigation Measure 4.2-10 Sierra College Boulevard/Dominguez Road Intersection With Dominguez Road

Mitigation Measure 4.2-10 requires the applicant to pay its fair share (in the form of their required traffic impact fees) to restripe the intersection. This improvement can be constructed within the existing right-of-way and within the limits of existing paved surfaces. It is anticipated that all potential deleterious environmental effects to natural or cultural resources would have already been experienced (and presumably mitigated) with the construction of the existing intersection and no new significant impacts would result from the identified intersection restriping plan. Any impacts associated with the improvement called for under Mitigation Measure 4.2-10 would be less than significant.