Tribes

From: Nayeli Gonzalez <ngonzalez@Paskenta.org>
Sent: Monday, April 1, 2024 10:58 AM
To: Broussard, Chad N <Chad.Broussard@bia.gov>
Cc: Damon Safranek <dsafranek@paskenta.org>; Gipsy Esparza <gesparza@paskenta.org>
Subject: [EXTERNAL] Redding Rancheria Fee-To-Trust Project

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Mr. Chad Broussard,

On behalf of, Andrew Alejandre, Tribal Chairman for the Paskenta Band of Nomlaki Indians, please find attached a copy of a letter with two attachments that have been overnighted to the Bureau of Indian Affairs requesting an extension on the review of the Final Environmental Impact Statement regarding the Redding Rancheria Fee-To-Trust Casino Project.

Should you have any questions, please feel free to contact me to schedule time to meet with Chairman Alejandre or the Tribe's CEO Damon Safranek.

Best regards,

Nayeli Gonzalez
Executive Administrative Assistant

Paskenta Band of Nomlaki Indians
22580 Olivewood Ave.

Corning, CA 96021

Office: (530) 670-1750

Direct Line: (530)-670-1711
www.paskenta-nsn.gov

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One attachment • Scanned by Gmai

April 1, 2024

VIA UPS

Hon. Brian Newland
Assistant Secretary
Indian Affairs
U.S. Department of Interior
1849 C. Street, N.W.
Washington, D.C. 20240

Amy Dutschke
Regional Director
Bureau of Indian Affairs, Pacific Region
2800 Cottage Way
Sacramento, CA 95825

Re: Redding Rancheria Fee-To-Trust Project

Dear Assistant Secretary Newland and Regional Director Dutschke:

We are in receipt of the Notice of Availability of the Final Environmental Impact Statement (FEIS) with regard to the Redding Rancheria Fee-To-Trust Casino Project.

I write on behalf of the Paskenta Band of Nomlaki Indians (the Band) to respectfully request that you extend the 30-day time for comments to 75 days. The reason for this request is that the FEIS with Appendices is thousands of pages and dwarfs the Draft Environmental Impact Statement (DEIS). It will take considerable time to review the FEIS, assess how it has been updated relative to the DEIS, and comment on it. Thirty days is far too short a time for any party affected by the project to reasonably review the documents and provide meaningful comments. A 45-day extension is minimally necessary for any reasonable opportunity to provide such comments.

We also wish to draw to your attention the fact that the Band owns property near the project site, and the Secretary of the Interior last week issued Notice of Decision to take this property into trust for the benefit of the Band. Attached hereto is the Grant Deed with property description and Notice of Decision. Given the proximity of the Band's trust lands to the project site, the Band will experience immediate effects from the environmental impacts of the proposed project in addition to the impacts it has previously addressed regarding its cultural and historic resources at the project site and impacts upon its critical gaming operations to the south of the project site.

We greatly appreciate your consideration for the requested extension for the FEIS comments period.

Sincerely,

Andrew Alejandre
Chairman, Paskenta Band of Nomlaki Indians

Cc: Chad Broussard, Environmental Protection Specialist, Bureau of Indian Affairs (via email chad.broussard@bia.gov)

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Pacific Regional Office
2800 Cottage Way, Room W-2820
Sacramento, CA 95825

IN REPLY REFER TO:

03/22/2024

Real Estate Services
TR-4609-P5

Case Number: 53774

CERTIFIED MAIL – RETURN RECEIPT REQUESTED – 7016 3010 0001 0589 2232

Honorable Andrew Alejandre, Chairman
Paskenta Band of Nomlaki Indians
P.O. Box 709
Corning, CA 96021

NOTICE OF DECISION

Dear Chairman Alejandre:

This is notice of our decision as a result of our analysis of the application filed by the Paskenta Band of Nomlaki Indians of California (Tribe) to have the below described real property accepted by the United States of America in trust for the Paskenta Band of Nomlaki Indians of California.

The land described herein is situated in the State of California, County of Tehama, unincorporated area, described as follows:

All that part of the Southeast quarter of Section 15, Township 29 North, Range 4 West, Mount Diablo Meridian, according to the Official Plat thereof, lying and being on the East side of the County Road and Westerly and Northerly of that certain Parcel of land conveyed to County of Tehama in deed recorded July 16, 1969, in Book 531, Page 359, Official Records of Tehama County.

APN: 004-150-029-000

Authority

The authority for this acquisition is the Paskenta Band of Nomlaki Restoration Act 1994, P.L. 103-454, Title III, 25 U.S.C. §1300m-3.

Pursuant to our guidelines pertaining to a "Mandatory" acquisition, the following factors were considered in formulating our decision: (1) the extent to which the applicant has provided

information that allows the Secretary to comply with 516 DM 1-7 National Environmental Policy Act (NEPA) Revised Implementing Procedures, and 602 DM 2, Land Acquisitions: Hazardous Substances Determination; and (2) the Bureau of Indian Affairs (BIA) must obtain current evidence of title ownership that demonstrates the interest is owned by the Tribe and how it was acquired.

Factor 1 - The extent to which the applicant has provided information that allows the Secretary to comply with 602 DM 2, Land Acquisitions: Hazardous Substances Determination and 516 DM 1-7, National Environmental Policy Act Revised Implementing Procedures.

As outlined in the April 6, 2012 Updated Guidance of Processing Mandatory Trust Acquisition memo, neither NEPA environmental review requirements nor 602 DM 2 environmental hazard review requirements are applicable to mandatory acquisitions. Nonetheless, the memo requires that an initial site inspection be conducted to satisfy due diligence requirements. The record indicates that the Paskenta Band's Phase 1 Environmental Site Assessment dated December 12, 2023 meets the 602 DM 2 standards for a pre-acquisition Environmental Site Assessment, which exceeds this requirement for an initial site inspection.

Factor 2 - BIA shall require current evidence of title ownership from the tribe demonstrating that the interest is owned by the tribe and how it was acquired.

The procedure for acquiring title to subject property by the United States of America in trust for the Tribe is acknowledged and in accordance with the Department's procedures.

Conclusion

Based on the foregoing analysis, and a finding that all applicable legal requirements have been satisfied, the Acting Regional Director, Pacific Region is issuing this notice of our intent to approve the taking of the subject property into trust status for the benefit and welfare of the Paskenta Band of Nomlaki Indians of California. The subject acquisition will vest title in the United States of America in trust for the Paskenta Band of Nomlaki Indians of California in accordance with the Paskenta Band of Nomlaki Restoration Act (25 U.S.C. §1300m-3).

Any party who wishes to seek judicial review of this decision must first exhaust administrative remedies. The Regional Director's decision may be appealed to the Interior Board of Indian Appeals (IBIA) in accordance with the regulations in 43 C.F.R. 4.310-4.340.

If you choose to appeal this decision, your notice of appeal to the IBIA must be signed by you or your attorney and must be either postmarked and mailed (if you use mail) or delivered (if you use another means of physical delivery, such as FedEx or UPS) to the IBIA within 30 days from the date of receipt of this decision. The regulations do not authorize filings by facsimile/fax or by electronic means. Your notice of appeal should clearly identify the decision being appealed. You must send your original notice of appeal to the IBIA at the following address: Interior Board of Indian Appeals, Office of Hearings and Appeals, U.S. Department of the Interior, 801 North Quincy Street, Suite 300, Arlington, Virginia 22203.

You must send copies of your notice of appeal to (1) the Assistant Secretary – Indian Affairs, U.S. Department of the Interior, MS-4141-MIB, 1849 C Street N.W., Washington, D.C. 20240; (2) each interested party known to you; and (3) the Regional Director. Your notice of

appeal sent to the IBIA must include a statement certifying that you have sent copies to these officials and interested parties and should identify them by names or titles and addresses.

Sincerely,

RYAN HUNTER

Digitally signed by RYAN HUNTER
Date: 2024.03.22 13:53:09 -07'00'

Acting Regional Director

Enclosures:
43 CFR 4.310, et seq.

cc: Distribution List

DISTRIBUTION LIST

cc: BY CERTIFIED MAIL – RETURN RECEIPTS REQUESTED TO:

Senior Advisor for Tribal Negotiations
Deputy Legal Affairs Secretary
Office of the Governor
State Capitol Building, Suite 1173
Sacramento, CA 95814
Certified Mail ID: 7016 3010 0001 0589 2188

T. Michelle Laird, Supervising Deputy Attorney General C/O Paula Corral
State of California, Department of Justice
P.O. Box 944255
Sacramento, CA 94244-2250
Certified Mail ID: 7016 3010 0001 0589 2195

United States Senator Laphonza Butler
Dirksen Senate Office Building, Room G-12
Washington, DC 20510
Certified Mail ID: 7016 3010 0001 0589 2201

United States Senator Alex Padilla
331 Hart Senate Building
Washington, DC 20510
Certified Mail ID: 7016 3010 0001 0589 2218

Congressman Doug LaMalfa
United States House of Representatives – 1st District
408 Cannon House Office Building
Washington DC, 20515
Certified Mail ID: 7016 3010 0001 0589 2225

Tehama County Board of Supervisors
727 Oak Street
Red Bluff, CA 96080
Certified Mail ID: 7016 3010 0001 0589 2249

Tehama County Assessor's Office
444 Oak Street, Room B
Red Bluff, CA 96080
Certified Mail ID: 7016 3010 0001 0589 2256

Tehama County Planning Department
444 Oak Street, Room I
Red Bluff, CA 96080
Certified Mail ID: 7016 3010 0001 0589 2263

Tehama County Treasurer/Tax Collector
444 Oak Street, Room D
Red Bluff, CA 96080
Certified Mail ID: 7016 3010 0001 0589 2270

Tehama County Public Works Department
9380 San Benito Ave.
Gerber, CA 96035
Certified Mail ID: 7016 3010 0001 0589 2287

Tehama County Sheriff's Department
22840 Antelope Boulevard
Red Bluff, CA 96080
Certified Mail ID: 7016 3010 0001 0589 2294

Tehama County Fire Department
604 Antelope Boulevard
Red Bluff, CA 96080
Certified Mail ID: 7016 3010 0001 0589 2300

Regular Mail:

Superintendent
Bureau of Indian Affairs
Central California Agency
650 Capital Mall, Suite 8-500
Sacramento, CA 95814

RECORDING REQUESTED BY

Placer Title Company
Escrow Number: P-602593
Branch: 1301

AND WHEN RECORDED MAIL TO
AND MAIL TAX STATEMENTS TO

PASKENTA BAND OF NOMLAKI INDIANS, of Calif
22580 Olivewood Ave
Corning, CA 96021

This document is now recorded electronically with the County Recorder. Attached to this original document is a copy of the recorder stamp as it appears of record.

A.P.N.: 004-150-029-000

SPACE ABOVE THIS LINE FOR RECORDER'S USE

GRANT DEED

The undersigned grantor(s) declare(s):
Documentary transfer tax is $306.90 City Transfer Tax: $0.00
(X) Unincorporated Area ( ) City of _____
(X) computed on full value of property conveyed, or
( ) computed on full value less value of liens and encumbrances remaining at time of sale.

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, **Marcus Duivenvoorden and Alexandra Duivenvoorden, husband and wife, as joint tenants**

Hereby GRANT(S) to **PASKENTA BAND OF NOMLAKI INDIANS** OF CALIFORNIA

The land described herein is situated in the State of California, County of Tehama, unincorporated area, described as follows:

All that part of the Southeast quarter of Section 15, Township 29 North, Range 4 West, Mount Diablo Meridian, according to the Official Plat thereof, lying and being on the East side of the County Road and Westerly and Northerly of that certain Parcel of land conveyed to County of Tehama in deed recorded July 16, 1969, in Book 531, Page 359, Official Records of Tehama County.

APN: 004-150-029-000

Dated: August 22, 2023

Marcus Duivenvoorden

Alexandra Duivenvoorden

Doc # 2023008556
Page 1 of 2
Date: 8/31/2023 03:14P
Recording Requested By:
PLACER TITLE CO - SIMPLIFILE
Filed & Recorded in Official Records
of TEHAMA COUNTY
JENNIFER A. VISE
COUNTY CLERK & RECORDER
Fee: $323.90

RECORDING REQUESTED BY

Placer Title Company
Escrow Number: P-602593
Branch: 1301

AND WHEN RECORDED MAIL TO
AND MAIL TAX STATEMENTS TO

PASKENTA BAND OF NOMLAKI INDIANS, of Calif
22560 Olivewood Ave
Corning, CA 96021

A.P.N.: 004-150-029-000 SPACE ABOVE THIS LINE FOR RECORDER'S USE

GRANT DEED

The undersigned grantor(s) declare(s):
Documentary transfer tax is $306.90 City Transfer Tax: $0.00
(X) Unincorporated Area ( ) City of _____
(X) computed on full value of property conveyed, or
( ) computed on full value less value of liens and encumbrances remaining at time of sale.

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, **Marcus Dulvenvoorden and Alexandra Dulvenvoorden, husband and wife, as joint tenants**

Hereby GRANT(S) to **PASKENTA BAND OF NOMLAKI INDIANS** OF CALIFORNIA

The land described herein is situated in the State of California, County of Tehama, unincorporated area, described as follows:

All that part of the Southeast quarter of Section 15, Township 29 North, Range 4 West, Mount Diablo Meridian, according to the Official Plat thereof, lying and being on the East side of the County Road and Westerly and Northerly of that certain Parcel of land conveyed to County of Tehama in deed recorded July 16, 1969, in Book 531, Page 359, Official Records of Tehama County.

APN: 004-150-029-000

Dated: August 22, 2023

Marcus Dulvenvoorden

Alexandra Dulvenvoorden

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
) ss.
County of Tehama)

On 8/29/2023 before me,
Maria Fortner,
Notary Public personally appeared Marcus Duivenvoorden
Alexandra Duivenvoorden who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. WITNESS my hand and official seal.

SIGNATURE _____

MARIA FORTNER
NOTARY PUBLIC – STATE OF MICHIGAN
COUNTY OF OAKLAND
My Commission Expires June 28, 2027
Acting in the County of Oakland

Placer Title Company
955 Main Street, Suite A
Red Bluff, CA 96080
(530)527-3335

File Number: P-602593
Sales Price: $279,000.00
Close Date: 8/31/2023
Disbursement Date: 8/31/2023

BUYER(S) FINAL CLOSING STATEMENT

Type: Sale
Property: 19945 DRAPER ROAD
COTTONWOOD, CA 96022 (TEHAMA)
(004-150-029-000)

Certified True and Correct Copy
Placer Title Company

Buyer(s): PASKENTA BAND OF NOMLAKI INDIANS OF CALIFORNIA
22580 Olivewood Ave
Corning, CA 96021

Description	Debit	Credit
Deposits, Credits, Debits		
Contract sales price	$279,000.00	
Deposit or Earnest Money from Placer Title Company		$5,000.00
Buyers funds to close from PASKENTA BAND OF NOMLAKI INDIANS OF CALIFORNIA		$275,176.33
Prorations		
County taxes 7/1/2023 to 8/31/2023 @ $1,092.86/Six Months		$364.29
Title Charges		
Title - Owner's Title Insurance $279,000.00 Premium $1,015.00 to Placer Title Company	$507.50	
Endorsement(s) to Placer Title Company		
E-Recording Service Fee to Simplifile	$4.00	
Settlement or closing fee to Placer Title Company $1,350.00 Total: $1,350.00	$675.00	
Government Recording and Transfer Charges		
Recording fees: Deed $17.00	$17.00	
Totals	$280,203.50	$280,540.62

Balance Due TO Buyer: $337.12

Proceeds paid as:
$337.12 to PASKENTA BAND OF NOMLAKI INDIANS OF CALIFORNIA

From: Kaighn Smith, Jr. <KSmith@dwmlaw.com>
Sent: Thursday, May 2, 2024 8:22 PM
To: Broussard, Chad N <Chad.Broussard@bia.gov>
Cc: Andrew Alejandre <aalejandre@paskenta.org>; Damon Safranek (dsafranek@paskenta.org) <dsafranek@paskenta.org>; Robert L. Gips <RGips@dwmlaw.com>; Erick J. Giles <EGiles@dwmlaw.com>
Subject: [EXTERNAL] FEIS Comments, Redding Rancheria Project

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Dear Mr. Broussard:

Attached please find the Comments of the Paskenta Band of Nomlaki Indians on the Final Environmental Impact Statement for the Redding Rancheria Fee-to-Trust and Casino Project. We will separately submit Exhibits A – E, together with Appendices B through O to Exhibit C.

Thank you for the opportunity to submit these comments and supporting Exhibits.

Kaighn Smith, Jr.
Attorney

D| 207.253.0559 M| 207.838.9127
KSmith@dwmlaw.com

800.727.1941 F| 207.772.3627 **dwmlaw.com**

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DrummondWoodsum
ATTORNEYS AT LAW

May 2, 2024

Via Email: chad.broussard@bia.gov

Chad Broussard
Environmental Protection Specialist
Bureau of Indian Affairs
Pacific Regional Office
2800 Cottage Way, Room W-2820
Sacramento, CA. 95825

Re: Redding Rancheria Fee-to-Trust and Casino Project: FEIS

Dear Mr. Broussard:

The Paskenta Band of Nomlaki Indians (the "Band," "PBNI," or "Tribe") submits the following comments to the Bureau of Indian Affairs ("BIA") on the Redding Rancheria Fee-to-Trust Casino Project Final Environmental Impact Statement ("Final EIS" or "FEIS").

The Band owns property near the proposed Project, and in March, 2024, the Secretary of the Interior issued a Notice of Decision to take that property into trust for the benefit of the Band. That Notice of Decision and the related Grant Deed for the property are submitted herewith as **Exhibit A**. Given the proximity of the Band's trust lands to the Project, the Band will experience the significant environmental impacts from the Project in addition to the significant impacts it has previously addressed in its comments on the DEIS (and addresses further here) regarding (a) its cultural and historic resources and (b) impacts upon its critical governmental revenue from gaming to the south of the Project.

* * *

The informational gaps and unclear information contained in the Final EIS result in undisclosed impacts associated with Alternatives A-D. The Final EIS does not include adequate analysis to support the impact conclusions necessary to adopt a record of decision for the Project. Of particular concern are undisclosed designs elements of the Project that would be constructed in the floodplain, including the proposed streambank stabilization and inadequate hydraulic analysis for the proposed outfall and wet pond. No geotechnical evaluation is included as part of the Final EIS. As such, there is insufficient information to determine whether Project components proposed in the floodplain can be feasibly constructed and operated. Because Alternatives A-D (as described) do not adequately address lighting impacts on special-status fish in the adjacent Sacramento River, detrimental effects on these species and their critical habitats could occur. The updated traffic impact analysis is deficient for multiple reasons. For example, it does not include a Vehicle Miles Traveled (VMT) analysis in accordance with the requirements

of state law. The traffic counts utilized in the Kimley-Horn updated traffic impact analysis presented in the Final EIS are approximately 8 years old (from 2016). Major developments, both retail and commercial, have been completed north of Bonnyview Road on both sides of Interstate-5 within that time frame. Without new traffic counts, the Project's full impact is likely significantly underestimated and cannot be properly analyzed, understood, and disclosed as required by NEPA. Further, the Final EIS fails to adequately address significant impacts to cultural and historic resources of the Band and the Wintu, the ancient Indigenous occupants of the Project site. For these reasons and more, discussed below, a record of decision approving the Project cannot be supported by the Final EIS.

Biological Resources - Inadequate

The Final EIS, the NMFS Biological Assessment (July 2018), and the subsequent NMFS Letter of Concurrence (May 2019) do not address the impact of permanent proposed light features of the casino complex and the potential to influence predation rates of juvenile salmonids in the adjacent Sacramento River. The only mention of lighting effects is in reference to impacts to birds in final EIR (page 4.5.5): "With the incorporation of design features in Section 2.3.2, including the use of non-reflective glass and downcast lighting, potential adverse effects to migratory birds and other birds of prey would be less than significant." However, these incorporated design features do not address issues with lighting on the river side of the casino, nor how lighting can influence predation of listed fish resulting in potential impacts that need to be minimized or mitigated for.

The analysis in both the Final EIS and NMFS biological assessment are inadequate in regard to lighting impacts to state and federal listed fish species, primarily juvenile steelhead, and winter-run and spring-run Chinook salmon. Many recent studies have demonstrated the enhanced susceptibility of juvenile salmonids to predation due to artificial lighting sources during nighttime. Two recent publications from NMFS biologists examine this impact in California: https://repository.library.noaa.gov/view/noaa/47838 and https://afspubs.onlinelibrary.wiley.com/doi/full/10.1002/tafs.10286

Operation of the casino on a year-round basis, would generate light and noise which would be likely to increase the effectiveness of predators (including striped bass and Sacramento pikeminnow) in the Sacramento River at preying upon juvenile salmonids. A desktop analysis that includes a summary of recent studies examining the influence of artificial light on predation should be included in the impact analysis. In addition, specific mitigation measures should be included to minimize these impacts, such as minimizing lights on the river side of the casino, altering the orientation of lighting, or introducing shade elements (e.g. trees) to specifically block artificial light from reaching the river.

It should be noted Conservation Recommendation 1 from the NOAA Concurrence Letter should be provided in the response and incorporated as part of the Project, as this measure was deemed necessary by NOAA and would further avoid potential Project impacts on federally protected salmonids and the associated aquatic habitat offered by the Sacramento River

Comments regarding potential *seasonal* impacts of onsite wells and wastewater disposal facilities on the Sacramento River's riparian ecology and listed species need to be addressed explicitly. A sub-watershed map should also be provided to ensure that hydrologic connection to off-site areas is adequately disclosed and analyzed.

Flooding and Floodplain - Inadequate

There are discrepancies between the text and figures in the Final EIS. Despite the assertion made in the Response to Comment T6-20 and General Response 3.11, Sections 2.3.2 and 4.3.3 do not explicitly state that the stormwater pond, outfall, and bank stabilization measures would be developed in the 100-year floodplain. These sections of the Final EIS should be revised to include this critical information. Furthermore, Response to Comment T6-20 indicates that the streambank stabilization measure would entail balanced removal and replacement of material within the floodplain. However, the proposed biotechnical bank stabilization measure, as described in Final EIS Appendix N, solely involves planting of willows along the bank toe and native trees at top of bank without any soil removal. This discrepancy should be addressed and clarified. Furthermore, as presented in General Response 3.11, and responses to comments T6-29, T6-32 and T6-33, additional analyses should be performed to assess and evaluate the vulnerability of the streambank to ongoing erosion under normal and during high flow events. The responses should clarify why it is acceptable to place the pond within a 100-year floodplain. If the pond is designed to attenuate rare event flood flows and the vegetated swale leading to it is designed to convey a 100-year flow (FEIS Appendix N), then it is contradictory to place the pond within a 100-year floodplain.

Contrary to Response to Comment T6-20, the potential impacts of developing the proposed stormwater pond (or wet pond) and streambank stabilization have not been fully analyzed or addressed in the Final EIS. While the stormwater pond does not appear to represent an obstruction to conveyance, the design as currently presented does not identify outlet appurtenances, such as a spillway to direct overflow or drainage back to the Sacramento River in a controlled manner. A detailed hydraulic analysis of the performance and potential effects of the outfall, stormwater pond and its outlet works should be performed to ensure that impacts to the Sacramento River and its floodplain have been adequately disclosed and analyzed. Further, a formal geotechnical assessment is necessary to verify the adequacy of the assumed 150-foot setback between the existing eastern top of bank and building footprint. Without a geotechnical evaluation, it is not known whether the setback distance is sufficient. This is necessary to confirm that the surcharge from proposed buildings will not exacerbate erosive conditions or result in bank failure and to minimize potential damage to new structures.

Both the stormwater pond, outfall, and bank stabilization measures are proposed to be constructed within 100-year floodplain. However, no hydraulic analysis of the effects of these features on the Sacramento River and floodplain is presented in the Final EIS. While the stormwater pond does not appear to represent an obstruction to conveyance, the design as currently presented does not identify outlet appurtenances, such as a spillway or energy dissipation structures that may be necessary to direct overflow or drainage back to the Sacramento River in a controlled manner. Likewise, the potential influence of the bank

stabilization measure on water surfaces, velocity, and bed shear stress within the Sacramento River 100-year floodplain is unknown and requires further analysis. The grading and drainage study (Final EIS Appendix N) asserts that essentially no change to channel roughness would occur with the bank stabilization. A hydraulic analysis of the performance and potential effects of the stormwater pond and bank stabilization measures should be performed to ensure that impacts to the Sacramento River and its floodplain have been adequately disclosed and analyzed.

Proposed streambank stabilization measures have not been adequately designed to incorporate hydraulic calculations and considerations for maintenance and feasibility. Appendix N fails to note whether irrigation would be required for the establishment of the willow plantings or what the performance criteria would be included to ensure that such measures succeed. As previously noted in submitted comments, a proposed streambank stabilization, only above the OHWM, is unusual and not likely to be structurally stable; alternative solutions to prevent ongoing erosion should be considered and evaluated to effectively demonstrate structural stability.

Groundwater - Inadequate

The Final EIS fails to adequately address comments regarding potential *seasonal* impacts of operating onsite wells such as potential drawdown effects on neighboring wells. In addition to chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply, other undesirable effects could also occur due to wells being constructed and drawing water in close proximity to the Sacramento River. Significant and unreasonable use of water; reduction of groundwater storage; degradation of water quality and land subsidence are all possible consequences of failing to conduct this analysis. Furthermore, groundwater-related surface water depletions could have significant and unreasonable adverse impacts on beneficial uses of the Sacramento River groundwater dependent ecosystems, and riparian habitats. Further analysis must be conducted and the results need to be disclosed in detail before a decision is made approving the proposed project.

Note that if water supply for the proposed casino and other project components will require a new or altered groundwater well (if Alternative A, option 1 is selected), Executive Order N-7-22 would be in effect. In response to extreme and expanding drought conditions in California, the Governor issued Executive Order N-7-22 in March of 2022. Among other water resource considerations, EO-N-7-22 prohibits counties, cities, and other public agencies from approving permits for either the construction of new groundwater wells or the alteration of existing wells that are within a Sustainable Groundwater Management Act-regulated medium or high-priority groundwater basin unless (1) the Groundwater Sustainability Agency managing the basin verifies in writing that the proposed groundwater extractions: (i) would be consistent with any applicable Groundwater Sustainability Plan, and (ii) would not decrease the likelihood of achieving a sustainability goal for the basin; and (2) the well-permitting agency determines that extraction of groundwater from the proposed or modified well is not likely to (a) interfere with the production and functioning of existing nearby wells, and (b) cause subsidence that would adversely impact or damage nearby infrastructure.

Public Services and Utilities - Inadequate

Wastewater - Inadequate

Final EIS Alternative A (option 1) relies on sewer capacity information from the 2012 City of Redding Wastewater Master Plan. Note the City's Wastewater Master Plan was updated in 2022; therefore, the Final EIS should be updated to reflect current Sunnyhill Lift Station capacities, conveyance pipelines, and Clear Creek Wastewater Treatment Plant capacities with respect to current and projected peak demand along with the estimated (0.2 MGD) demand from the Project. Although the response to comment T6-82 asserts that the Final EIS wastewater capacity data reflects this update, the so-called updated wastewater management feasibility study (Final EIS Appendix M, Section 3.4.1 page 13) in fact refers to the 2012 City of Redding Utility Master Plan capacity data. Response to DEIS Comment T6-82 states that with the Sunnyhill Lift Station would be "approximately at firm capacity" once the Project becomes operational (or with inclusion of wastewater flows from the Project).

The response also fails to mention that, as demonstrated in Table 6.1 of the 2022 Wastewater Master Plan, the Sunnyhill Lift Station does not currently have an emergency bypass system in place. If the Final EIS is to rely on use of the Sunnyhill Lift Station to move flows upgradient near the Sacramento River, it is recommended that an emergency bypass system or alternate emergency protections be installed. This is necessary to ensure that the Project's wastewater does not overwhelm the lift station, spill raw sewage, and contribute to water quality violations.

Further, the FEIS points to no agreement between the Rancheria and the City of Redding to address sewer or wastewater services for the Project. Without such an agreement, the FEIS cannot confirm the option for off-site sewer or wastewater service essential to the Project and, therefore, leaves significant environmental impacts unaddressed. Further, maps in the FEIS show water and sewer coming across private property (Daniell) to which the Rancheria and the City lack access.

Public Safety - Inadequate

Final EIS General Response 3.6.3 concedes that on a net basis the estimated increase in customers under Alternative A is expected to result in an approximately 52 percent increase above the baseline level of calls for law enforcement services at the existing casino. The general response also notes that if the IGO is terminated and another agreement cannot be reached, another option involving operation of a public safety building on the Project site would occur (to be paid for by the Tribe) to mitigate potential increased law enforcement demand at the Strawberry Fields Site. It is unclear how such a facility (under Alternative A, Option 2) would have jurisdiction and capability to respond to casino-related *off-site* impacts, such as a proliferation of crime in the region.

Furthermore, the siting for the proposed Option 2 locates a public safety facility at the south-eastern part of Strawberry Fields Site, which would logically rely on the south off-site access route for ingress and egress. However, it is unclear how this option would work if 1) the south access route proves to be infeasible and no ROW is granted for Casino public safety egress,

and/or 2) traffic is generated to the extent that emergency response is limited in other parts of the site or to the north.

The fact is that the validity of agreement between Shasta County and the Redding Rancheria pertaining to public safety services is the subject of pending litigation. Submitted herewith as **Exhibit B** is a copy of the complaint. Thus, the foundational premise for public safety services for Project Alternative A is in jeopardy. By failing to properly address this fundamental problem, the Final EIS's analysis of public safety services is wholly inadequate.

Traffic - Inadequate

Submitted herewith as **Exhibit C** is the Report of Linscott, Law & Greenspan, Engineers (LLG), *Peer Review and Technical Memorandum – Traffic Impact Study, Redding Rancheria, Shasta County*, together with supporting Appendices B-O. The Band incorporates this Report with its Appendices B-O as its comments on the FEIS traffic impacts with respect to Project Alternative A. As the Report and appendices show, there are serious deficiencies with the updated traffic impact study. To provide just one glaring example, it is based on data that does not reflect current and future conditions; the Project Trip Generation Assessment significantly underestimates the number of peak hour trips and numerous intersections that have not been considered. Without new traffic counts, the project's full impact is likely significantly underestimated and cannot be properly understood and disclosed. Thus, any record of decision approving the Project cannot find support from the evidence provided in the Final EIS. In fact, LLG's *current* traffic counts and related analysis set forth in section 3 of its report reveal significant, unmitigated traffic impacts.

The Band makes the following additional comments with respect to traffic impacts.

<u>Traffic Mitigation for South Access to Project Alternative A is Unworkable Because Redding Rancheria Lacks Requisite Land Ownership</u>:

Attached hereto as **Exhibit D** is July 31, 2023 Guarantee of Title Issued By First American Title Insurance Company (Guarantee No. 5026900-0007374e), The title at issue is "title to the estate or interest in land vested in A. A. Emmerson, as Trustee of the Survivor's Trust established under the A. A. and Ida Emmerson Revocable Trust of 1990, dated December 19, 1990, as to an undivided one-half interest" and "Redding Rancheria, California, a Federally recognized Tribal Entity, as to an undivided 1/2 interest," together with attached property description at pages 9 (narrative) and 15 (map).

The legal description of the land that is the subject of the Guarantee of Title at page 9 (narrative) and page 15 (map) shows that Redding Rancheria owns only 50% of the parcel at issue. The other 50% is owned by the referenced Trustee, A. A. Emerson. As such, the Redding Rancheria does not have control of the use of the land at issue. The Redding Rancheria nevertheless has claimed the opportunity for traffic mitigation to the south, which would not be possible because the Rancheria does not own the land necessary to implement any such traffic mitigation.

North Access: Widening Constraints

Under Alternatives A, B, C and D, off-site northern access improvements would be necessary for vehicle access to the Strawberry Fields site. The right-of-way for the northern access improvement would require a width of at least 62 feet (four 12-foot lanes, 4- foot shoulders in both directions, and a 6-foot sidewalk on one side).

Redding Rancheria's easement is not wide enough to provide sufficient access due to I-5 and private property (Daniell) over which the Rancheria has no control.

There is limited space between Caltrans facilities (Interstate 5 southbound on-ramp and the existing Sunnyhill Lift Station at 5100 Bechelli Lane) to accommodate a minimum 62-foot right-of-way. The EIS should disclose the needed setbacks from both Caltrans facilities and the Sunnyhill Lift Station for the proposed right-of-way to confirm that the right-of-way can be accommodated without relocation of the Sunnyhill Lift station and associated sewer line connections.

Historic and Cultural Resources – Inadequate

Federal agencies, including the BIA, should "coordinate compliance with section 106 [of the NHPA] and the procedures in this part with any steps taken to meet the requirements of the National Environmental Policy Act (NEPA)" (36 CFR 800.8(a)(1)). There are notable gaps with the existing administrative and consultation record as it pertains to cultural resources (i.e. FEIS Section 3.6.3). These gaps indicate that the agency is relying on insufficient data and has additional steps to take to comply with Section 106 of the NHPA and NEPA before it can make an informed decision through a Record of Decision.

This discussion is divided into several sections to address these gaps in the FEIS:

- Area of Potential Effects
- Interagency/Tribal/Interested Party Consultation Record
- Efforts to Identify and Evaluate Historic Properties
- Efforts to Assess Effects & Efforts to Avoid, Minimize, and Resolve Adverse Effects

Area of Potential Effects

To comply with Section 106, the BIA is required to establish the Area of Potential Effects (APE) which is defined as

> *the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking [36 CFR 800.16(a)].*

The BIA does not appear to have contacted the California State Historic Preservation Office (SHPO) regarding a change in the size of the APE. The impact of this oversight has a ripple effect across the rest of the BIA's Section 106 process.

In the letter from the California SHPO to the BIA dated May 9, 2023, the SHPO inferred that

> *Per the 15 April 2020 letter written for the previous SHPO review, on behalf of the Redding Rancheria BIA proposed the transfer of a 232-acre parcel located near the City of Redding and known as Strawberry Fields from fee to trust status. BIA had determined that the undertaking would be for the transfer of land only albeit the Rancheria had proposed the future development of a casino on a 37-acre construction site located within the larger parcel. BIA determined the APE to be the 232-acre parcel.*

The BIA does not disclose its letter dated 15 April 2020 nor an additional letter provided to SHPO dated 24 February 2023 to verify the SHPO's inferences or what information was provided to the SHPO. These correspondences are essential to understanding how the agency made its determinations and findings under Section 106 of the NHPA as well as NEPA.

As of May 9, 2023, as far as the SHPO was aware, the BIA had determined that the APE would only lie within the 232-acre parcel to be transferred. Subsequent to that correspondence, however, the Final EIS describes a much larger APE that included additional Project components. In section 3.6.3 of the Final EIS under the heading of "Strawberry Fields Site," the BIA discloses that

> *The APE for the Strawberry Fields Site is defined as the footprint of the proposed development, including the casino, a 250-room hotel, conference and event centers, restaurants, retail facilities, parking, and other supporting facilities water, wastewater, storm water, and access road facilities and depicted on DEIS Figure 2-8.1. It is presumed that construction and staging may occur anywhere within the Strawberry Fields Site and that no construction will continue more than 8 feet below ground surface.*

The Final EIS also discusses additional areas that were surveyed for cultural resources including the South Access Improvement Area, North Access Improvement Area, and Traffic Improvement Area that included six intersections where improvements may be needed. While these areas are discussed in the FEIS as now located in the APE, there is nothing within the record of the FEIS that indicates that these expansions in the APE were discussed with or reviewed by the SHPO consistent with 36 CFR 800.4(a).

The EIS also identifies that the APE for cultural resources should have been increased due to the visual effects from the proposed project. The proposed hotel, for instance, is described as being in excess of 190 feet in height. In its assessment of visual impacts to visually sensitive resources in FEIS section 3.13.1, for instance, the BIA acknowledges that the types of properties visually affected by the Project may include "an historic building that is a rare example of its period, style, or design, or that has special architectural features and details of importance" but notably absent from consideration is a place of importance to Indian Tribes who ascribe importance to a place's visual character and/or natural setting that also includes views of important rivers and/or

mountains. The BIA acknowledges that there would be substantial effects from the Project upon the visual environment by noting that

> *Alternative A would considerably increase the level of human-made elements on the existing landscape of the Strawberry Fields Site, which currently has no buildings or development. The proposed development would substantially alter the visual character of the northern portion of the site by transforming it from rural, undeveloped greenspace along the Sacramento River to commercial development.*

Despite the acknowledgement that Alternative A "would substantially alter the visual character" of the property, the BIA did not take these visual effects into account when establishing the APE as these visual effects would extend far outside the area where Project construction effects would occur.

The concerns about the APE are not new (See BIA Response to Comments, Final EIS, Volume 1, T6-56; T4-01). The PBNI and the Wintu Tribe of Northern California (WTNC) both expressed concerns about the initial vagueness of the Project APE in the Draft EIS. While the Final EIS expands the definition of the APE, it does not disclose the full physical extent of the APE for the access improvements or the transportation area improvements. Given the discrepancies noted above and the lack of specificity, these concerns persist, leaving potentially significant impacts to cultural and historic resources unaddressed.

<u>Interagency/Tribal/Interested Party Consultation Record</u>

Pursuant to 36 CFR 800.2(c), the BIA is required to identify the participants in the Section 106 process. The regulations require that the agency consult with the SHPO, Indian Tribes, representatives of local governments, applicants for Federal assistance, permits, licenses, and other approvals, as well as certain organizations with a demonstrated interest in the undertaking.

While the FEIS discusses the BIA's consultation with the California SHPO through 2023 and some of the communications with the Redding Rancheria, there is minimal record that the BIA consulted with the PBNI, the WTNC, and the City of Redding. The FEIS for instance, only includes a now outdated consultation letter from the California SHPO that dates from May 9, 2023. While the SHPO letter discusses two letters from the BIA to the California SHPO (dated February 24, 2023 and April 15, 2023), those letters are not contained in Appendix E of the Draft EIS (Cultural Resources Consultation) or Appendix P (Additional Cultural Resources Consultation) of the Final EIS. No other letters from the California SHPO to the BIA are included in the EIS's appendices. From the single letter from the SHPO, it is unclear whether the BIA's decision to expand the APE, evaluate resources such as site CA-SHA-266 and its related burials, or the Anderson-Cottonwood Irrigation District Canal (due to its location within the APE of the North Access Improvement Area, Final EIS p. 3.6-8) were ever discussed with the SHPO. There is also nothing in the public record that indicates the BIA passed along the information provided by the PBNI or the WTNC to the SHPO concerning their assertions regarding the NRHP eligibility of site CA-SHA-4413 and the associated Wintu Cultural Landscape under

Criterion A and D. It is also unclear whether the BIA conveyed the Project's adverse effects to these three resources to the SHPO.

At a more fundamental level, the existing public record did not include the PBNI in the BIA's list of tribes to consult with when the Draft EIS was released (See DEIS Appendix E). At the time the Draft EIS was published in April 2019, the BIA provided a list of tribes that were called in 2016. The PBNI is not on that list. Three separate calls to the WTNC are contained in Appendix E. The WTNC requested the opportunity to monitor the archaeological investigations, but the BIA responded it was too late for them to participate as they had already been conducted. The WTNC also requested several documents from the BIA, but Appendix E does not confirm whether this information was ever shared with the Tribe. In all three calls with the WTNC, the Tribe expressed concerns including that the Project area was "culturally significant." It is not clear from the public record whether these sentiments were shared with the SHPO.

In response to the Draft EIS, on June 17, 2019, the PBNI and WTNC provided extensive comments and its information pertaining to cultural resources, and the BIA's Section 106 consultation process to date. It was not until January 15, 2020 that the BIA formally invited the PBNI to consult on the BIA's undertaking, but the WTNC were not invited to consult. This remains the only BIA invitation to consultation letter in the Project's Section 106 record as it is not clear whether the agency formally invited the Redding Rancheria to be a Section 106 consulting party. In the letter, the BIA acknowledges that the PBNI "expressed concern over cultural resources that may be impacted as a result of this federal undertaking. We will take these comments into consideration as we initiate the Section 106 process with the State Historic Preservation Office (SHPO)." The BIA stated further that "if your tribe has additional knowledge of, or concerns about historic properties with which you ascribe religious or cultural importance in relation to the federal undertaking, we would like to include such comments in our correspondence with the SHPO." Despite the fact that the PBNI and the WTNC provided information about a historic property within the Strawberry Fields APE, no publicly accessible records, either in the EIS or the Section 106 consultation record, confirm that this information was ever shared with the SHPO. In response to the PBNI and WTNC comments on the Draft EIS, the BIA responded in the Final EIS by arguing that the site can only be evaluated under criterion "D" and failed to consider the assertions in the Theodoratus & McBride Report (2019) in their comment responses and in the text of the FEIS.[1] Again the publicly accessible administrative record does not indicate this determination of eligibility for the Wintu Cultural Landscape was disclosed to the SHPO.

Lastly, in the BIA's response to comments, the agency noted that "Project consultation is under the purview of the BIA; the BIA is in receipt of the Wintu Tribe's [WTNC] comments regarding the Proposed Project's need for consultation, however the BIA only consults with federally

[1] Dorothea Theodoratus, Ph.D. and Kathleen McBride, M.A., *Report on Tribal Historical Connections to the "Strawberry Fields" Site Near Redding California* (May 29, 2019), attached as Exhibit B to the Comments of PBNI to the DEIS (June 17, 2019) (hereinafter referred to as "Theodoratus & McBride report (2019)").

recognized tribes when fulfilling the requirements of NHPA" (BIA Response to Comments, Final EIS, Volume 1, T4-03). This response is at odds with 36 CFR 800.3(c)(5). The WTNC repeatedly expressed concerns to the BIA about the undertaking's effects on historic properties important to the Tribe. Regardless of their federal status as an Indian Tribe, the WTNC are clearly a group "with a demonstrated interest in the undertaking" and "may participate as consulting parties due to…[their] concern with the undertaking's effects on historic properties." As such, the BIA is required to engage in consultation with the WTNC. The BIA, however, does not appear to have granted the WTNC consulting party status consistent with 36 CFR 800.3(c)(5).

Efforts to Identify and Evaluate Historic Properties

Under 36 CFR 800.4 "Identification of historic properties," the BIA is required to "determine scope of identification efforts" in consultation with the SHPO/THPO. Additionally it is required to "Seek information, as appropriate from consulting parties, and other individuals and organizations likely to have knowledge of, or concerns with, historic properties in the area…" Prior to the commencement of field investigations, the BIA's Final EIS record of consultation does not discuss whether or not the BIA ever consulted with the SHPO, Tribes, or the consulting parties regarding the methods the agency was going to take in order to identify historic properties until after the field investigations were completed. Further, the record shows that the BIA granted the Redding Rancheria the opportunity to serve as tribal monitors during the investigations but did not offer a similar opportunity for other consulting parties including the WTNC. This was significant because the Redding Rancheria provided its opinion regarding the eligibility of site CA-SHA-4133 during the field investigations. The BIA notes that the on-site Redding Rancheria representatives said the site "does not possess values that make it eligible for listing in the NRHP" (Final EIS Section 3.6-6). The assertions of the Theodoratus & McBride Report (2019) and the opinions of the PBNI and the WTNC are not disclosed in this section and thus it is difficult to understand how the agency weighed the eligibility conclusions of one Tribe versus the opinions of other Tribes.

Furthermore, as a part of its identification of cultural resources, in 2016, the BIA consulted with the California Native American Heritage Commission's Sacred Lands file (NAHC; Final EIS Section 3.6.4). The BIA does not appear to have updated the search when it re-initiated the NEPA or NHPA consultation processes. As a result, the BIA does not discuss the NAHC Sacred Lands filings made by the PBNI and WTNC prior to the release of the Final EIS. Without this critical information, the BIA did not have sufficient information to make an informed decision regarding the NRHP eligibility of the Wintu Cultural Landscape or its sacred character. Additionally, under NEPA (40 CFR 1508.8) and as noted in the CEQ guidance[2] "the term cultural resources covers a wider range of resources than historic properties such as sacred sites, archaeological sites not eligible for the NRHP, and archaeological collections." However, the BIA's analysis in the Final EIS (Section 3.6.3) does not disclose how the proposed Project will affect resources that are not

[2] Council on Environmental Quality Executive Office of the President and Advisory Council on Historic Preservation, *NEPA and NHPA: A Handbook for Integrating NEPA and Section 106*. March 2013.

eligible for the NRHP and/or are considered sacred by Tribes. Given the lack of a recent NAHC Sacred Lands search, the agency does not appear to have adequately disclosed how the Project would affect Sacred Lands that have been identified by the PBNI and WTNC to the NAHC.

The lack of clarity in how the agency considered visual effects, suggests the agency did not assess whether the Project would visually impact the settings of historic properties located surrounding the property. It does not appear as if the investigations considered whether the Project could affect resources outside of the Project's construction footprint. Under 36 CFR 800.5(a)(2)(v), federal agencies must consider whether the "introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features" would adversely affect the historic property. Despite the acknowledgement that Alternative A "would substantially alter the visual character" of the property, the BIA did not seek to identify historic properties situated outside of the Project construction footprint and in the areas that would be visually affected by the Project.

The Final EIS does not take into account several recent updates to guidelines and procedures involving the evaluation of cultural properties. As noted in the Theodoratus & McBride Report (2019) and summarized in the Band's related DEIS comments of June 17, 2019, "throughout history, the Band's Nomlaki ancestors migrated to Strawberry Fields to engage in salmon fishing and related economic relations with the Wintu people, the indigenous occupants of Strawberry Fields, from time immemorial, and these Nomlaki ancestors likely perished alongside Wintu in one of the largest massacres of Native people: that carried out by John Fremont and his forces in 1846."

Additionally, the Band's DEIS comments note that "The Wintu therefore have a significant and unique historical connection to the Strawberry Fields Site. The site and immediately adjacent lands is the location of six Wintu villages bordered by the Sacramento River to the west and Churn Creek to the east. These villages were in existence and occupied well into the 1800's. Between 760 and 950 Wintu resided within about 190 Wintu homes in these villages. These Wintu residents relied upon the salmon runs on the Sacramento River for their subsistence" (Theodoratus and McBride, 4-23).

Perhaps most importantly, the Theodoratus and McBride Report (2019), after discussing the string of Wintu villages along the bluff overlooking the Sacramento River, concludes that "these documented Wintu villages" should be assessed for their "eligibility for inclusion in the National Register under both criterion A and criterion D as a Wintu Cultural Landscape." The report continues that "the estimate length of occupancy, the seasonal, inter-tribal activities carried out in a unique river configuration exceptionally suited to the salmon harvest, and the shared history of assault and attempted annihilation of the entire community contribute to the historical significance of this cluster of villages on the Sacramento River. It is a shared indigenous history of the Wintu and their nearest neighbors to the south, the Nomlaki, and embodies their shared heritage values" (Theodoratus and McBride, 4).

The analysis by Theodoratus & McBride is consistent with recent guidance and policy statements released by the National Park Service (concerning the application of Criterion A) and the ACHP (concerning the "special expertise" of Indian Tribes) and supports the assertions of the PBNI and WTNC that a historic property of cultural significance is located on the Strawberry Fields property.

As noted in the National Park Service's recent white paper concerning the application of NRHP Criterion A clarified that it can be applied to a broader range of cultural resources:

> *In National Register practice, culture is understood as "a pattern of events" or "repeated activities" significant under Criterion A, and the Criteria Bulletin provides as examples a building used by an important local social organization and a site where precontact Native Americans annually gathered for seasonally available resources and for social interaction.*[3]

As noted in NPS's guidance, Criterion A is well suited to the historical connections between the Strawberry Fields site and the PBNI and WTNC as established in the preceding paragraphs. Further, it does not appear that the BIA offered deference to the "special expertise" of the PBNI and the WTNC consistent with 36 CFR 800.4(c)(1). The Section 106 regulations require federal agencies to acknowledge the special expertise of Indian Tribes and NHOs in identifying and assessing the eligibility of historic properties that may be of religious and cultural significance to them. As noted recently by the ACHP, "Acknowledgement in this context means to recognize and defer to Tribal or NHO interpretation of the property's significance and integrity. Members of the preservation community are not the experts on what constitutes Indigenous Knowledge or how it should be utilized to identify or evaluate the eligibility of a property that may be of religious and cultural significance to an Indian Tribe or NHO, including, but not limited to, ancestral materials recorded and documented as 'archaeological.'" (Advisory Council on Historic Preservation Policy Statement on Indigenous Knowledge and Historic Preservation, March 21, 2024. Policy Principles 3(b) and 3(d)).

The BIA's response to comments (Volume I Final EIS) as well as the analysis in Section 3.6.3, does not defer to the PBNI or WTNC's knowledge about the site and as a consequence did not discuss the possibility of a Wintu Cultural Landscape despite acknowledging the presence of ethnographically identified villages, accounts in historical records, as well as archaeological sites and burials (such as sites CA-SHA-266, CA-SHA-268, and CA-SHA-4133) within the APE. It elects to rely on the recommendations of the Redding Rancheria concerning the eligibility of CA-SHA-4133 but does not explain why the expertise of one Tribe is selected over another.

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[3] *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation* (Criteria Bulletin), p. 12; USDOI/NPS "Nominating Properties for Cultural Significance Under Criterion A. Best Practices Review: A Quarterly Publication on National Register Bulletin Guidance." Issue 6, January 2024, p.1.

It should be noted, that the parcel is one of the last intact parcels in the area where the Wintu villages were located and features distant views of Mt. Lassen and Mt. Shasta, as well as views of the Sacramento River – key landscape features within the larger Wintu Cultural Landscape. When taken collectively, the material culture, landscape components, and documentary research demonstrate that there is a significant concentration, linkage, and continuity of sites united historically and aesthetically by physical development and should be evaluated as a district and not as individual sites that lack distinction. The Final EIS consultation record does not discuss whether the BIA considered the possibility that these resources could form a district.

In further support of the Strawberry Fields property as a property of cultural significance, the PBNI and WTNC are developing a National Register nomination for review by the California SHPO, California Historical Resources Commission, as well as the Keeper of the National Register of Historic Places.

Lastly, the BIA acknowledges that it did not complete its survey of the APE. As noted on page 3.6-9 of the Final EIS, the "southern half of the footprint [of the Traffic Improvement Areas] has not been surveyed. Without a completed survey of the APE, it is unclear whether the BIA has adequately taken into account how its proposed undertaking will affect historic properties consistent with 36 CFR Part 800. If the agency wishes to defer investigations, then it would be required to prepare a memorandum of agreement or a programmatic agreement consistent with 36 CFR 800.4(b)(2).

Efforts to Assess Effects & Efforts to Avoid, Minimize, and Resolve Adverse Effects

From the FEIS consultation records (FEIS Appendices E and P), it does not appear that the BIA ever consulted with the California SHPO regarding a determination of eligibility or finding of effect for site CA-SHA-266. This represents an important oversight as the Final EIS states that "portions of CA-SHA-266 could be adversely affected by the widening of Bechelli Lane, and the development of appurtenant structures" related to the North Access to Strawberry Fields Site. The FEIS continues that "burials have been recovered from CA-SHA-266 and it remains possible that additional burials or other cultural expressions are represented within the site." The FEIS, however, fails to disclose that the burials that were previously encountered during recent non-Project related cultural resource investigations and have since been reinterred within the established footprint of the Project APE and would likely be re-impacted by the proposed project (Final EIS p. 4.6-2). Despite the presence of these known burials, which are culturally significant to the PBNI and WTNC, the BIA has not considered these internments adequately in the effects analysis much less as a larger part of a Wintu Cultural Landscape.

When an adverse effect is determined by a federal agency, the agency must "consult further to resolve the adverse effect pursuant to 36 CFR 800.6" (see 36 CFR 800.5(d)(2)). To date, there is nothing in the FEIS record of consultation that the BIA has followed through on any additional steps to address adverse effects required by 36 CFR 800.6 including (but not limited to):

1. A continuance of consultation with the SHPO and other consulting parties (800.6(a))
2. Notification of the ACHP that there would be an adverse effect (800.6(a)(1))

3. Provide documentation to all consulting parties the information required under 800.11(c)
4. Consult with the SHPO and other consulting parties to seek ways to avoid, minimize, or mitigate the adverse effects (800.6(b))
5. Development of a memorandum of agreement or a programmatic agreement (800.6(c) and 800.14(b))

The Final EIS fails to indicate when the BIA will complete these regulatory steps prior to making a final agency decision on the Project.

Although there is no record of additional consultation with the California SHPO concerning these regulatory requirements, the BIA's Final EIS identifies several measures that the BIA will undertake to "mitigate" effects to cultural resources. This includes the preparation of an Unanticipated Discoveries Plan (Mitigation Measure 5.6(A)), surveying of areas not previously surveyed, new Northeast Information Center (NEIC) record searches (Mitigation Measure 5.6(B)), archaeological and tribal monitoring (Mitigation Measure 5.6(C)), and inadvertent discoveries procedures for cultural resources and human remains (Mitigation Measures 5.6(D)) and 5.6(F and G). It does not appear that any of these mitigation measures adequately resolve adverse impacts from the Project or that they were discussed as a part of Section 106 consultation with the SHPO, Tribes, or the consulting parties.

Additionally, several of these measures are at odds with 36 CFR Part 800. Despite the SHPO reminding the BIA that "consultation with my office on the potential of any inadvertent discovery encountered during project implementation" (Final EIS Appendix P, May 9, 2023 SHPO to BIA), the BIA's Mitigation Measure 5.6(D) that addresses inadvertent discoveries only stipulates that "BIA and Tribe shall be notified" in the event of a discovery (Final EIS, p. ES-18). In addition to not notifying the SHPO, which is contrary to 36 CFR 800.13, the mitigation measure, as written, does not require the notification of the Indian Tribes that ascribe significance to the Project site that include the PBNI and WTNC.

Also, as a part of the mitigation measure that discusses the agency's compliance with the Native American Graves and Protection and Repatriation Act (NAGPRA; Mitigation Measure 5.6(F)), the agency has not completed a NAGPRA Plan of Action nor does the existing measure suggest that affiliated tribes (such as the PBNI and WTNC) will be contacted if the remains are found on lands taken into trust.

In light of all of this and the unaddressed significant impacts to the Band's historic and cultural resources, the Band requests the following here (and will do so by separate formal letters):

- government-to-government consultation with the BIA to discuss the Project and its effects upon properties of cultural importance to the respective tribes.
- a Section 106 consultation meeting to discuss the substantive regulatory issues contained in these comments.
- that the BIA re-initiate consultation with the SHPO and consulting parties due to changes in the APE, identification of additional cultural resources, evaluation of additional properties, assessment of additional effects, and determinations the agency has made concerning mitigation without consultation with the SHPO and other consulting parties.

- that the ACHP enter consultation pursuant to 36 CFR Part 800.
- a more comprehensive record of consultation that documents how the agency complied with the consultation requirements of Section 106, the determinations and findings it made under that statute and how it will resolve adverse effects. (The BIA's NEPA Handbook requires that the agency collect a record of "Agency determinations made pursuant to law (e.g. ESA, NHPA, etc.)" (BIA NEPA Handbook, p. 44). It also requires that "To the extent possible, these other compliance actions [i.e. NHPA] should be completed by the end of the NEPA process (FONSI or ROD)" (BIA NEPA Handbook, p. 7).)
- that the BIA hold in abeyance its decision on the Project until a National Register nomination for the property of cultural importance by the PBNI and WTNC can be reviewed by the California SHPO, State Historical Resources Commission, and the Keeper of the National Register.
- That the BIA afford the Band adequate time to prepare a supplemental NRHP evaluation of the Wintu Cultural Landscape for submittal to the Keeper of the National Register.

Economic Impact of the Proposed Project (Alternative A) Upon the Rolling Hills Casino and Related Governmental Revenues of the Band-- Inadequate

As set forth in the Band's DEIS Comments, Project Alternative A on I-5 will reduce the Band's earnings before interest, taxes, depreciation, and amortization from its gaming facility, south of the Project on I-5, at the Rolling Hills Casino between 35 and 38 percent. *See Global Market Advisors, Evaluation of the Impact of the Redding Rancheria Fee-to-Trust and Casino Project on the Rolling Hills Casino* (May, 2019), attached as Exhibit A to the Band's DEIS, at 3, 43-45.

At page 3-12 in section 3.6.1 of the FEIS Response to Comments, the BIA states:

> GMA Advisor's EBITDA estimate is not corroborated by Pro Forma Advisors. As described in Final EIS Appendix L, Pro Forma Advisors estimates that Alternative A would reduce the Rolling Hills Casino EBITDA by approximately 7.7 percent during the first full year of Alternative A's operations. As described in Final EIS Appendix L (see Paskenta T-6.1), GMA Advisor's estimate of declining EBITDA at the Rolling Hills Casino is unrealistic because the model used by GMA underestimates the level of market growth at 0.8% despite other developments, resulting in an overestimate of substitution effects, and the use of an unrealistic assumption of how much of a decline in revenue would translate into EBITDA.

Attached hereto as **Exhibit E** is *GMA's Report on the FEIS* (May 2, 2024). As GMA points out,

> Alternative A will directly compete with the Rolling Hills Casino & Resort because it will be of the same or more expansive quality and scope. As such, having a new competitor located directly on the same highway of equal to or superior quality, with a larger hotel and enhanced non-gaming amenities, will significantly impact the revenues of Rolling Hills Casino. . . . *[A] long-term impact on revenue of over 34% is very reasonable. The Pro Forma Advisors estimate of 7.7 % is not.*

* * *

> With regards to the impact on EBITDA, this is simply an analysis of fixed versus variable expenses. With a new quality competitor going after the same market, Rolling Hills will be forced to spend more on marketing and player reinvestment to retain their players. Furthermore, while Rolling Hills would be able to reduce some of its other operating expenses, it is far from a linear analysis. Through decades of experience of evaluating casino operations, GMA is confident in discussing how EBITDA diminishes at a far greater rate than revenue. The inverse is the same where as revenues increase, EBITDA is expected to increase at a far greater rate. Economic impacts flow in both directions.
>
> The notion of only a 7% reduction as proposed by ProForma Advisors is not grounded in any reasonable analysis or even commonsense, given the clear competition that Alternative A poses to the Rolling Hills Casino.

GMA's Report on the FEIS.

Economic Feasibly of Alternative A- Inadequate

As set forth in the Band's DEIS Comments, Project Alternative A is not economically viable. *See Global Market Advisors, Economic Return Evaluation of the Redding Rancheria Draft Environmental Impact Statement Alternatives: Review of Methodology, Reasonableness of Conclusions, and Analysis of a Modified "Alternative F"* (May, 2019) ("GMA's Economic Return Report"), attached as Exhibit J to the Band's DEIS Comments, at 3-5.

The FEIS fails to adequately address this economic reality. As *GMA's Report on the FEIS* states:

> *GMA's Economic Return Evaluation* favors the modified F scenario even more so today. Over the past 2 decades, GMA has witnessed numerous Tribes (and commercial developers) invest bad money expecting increased net income to its stakeholders and that appears to be the situation with Alternative A the FEIS preferred alternative. While the revenues associated with the expansion scenarios are much greater than at the existing Win River Casino, Alternative A would result in an incremental loss to Redding Rancheria when taking into account the net income, which is after debt service, capital maintenance expenditures, etc. Since the Pandemic, construction prices across the United States have skyrocketed. The project costs estimated in 2019 have now increased by about 50% for the same scope. The cost of capital (interest charge on projects) has increased substantially as well. In May 2019, LIBOR was approximately 2.6%. Today, that number has more than doubled to 5.7%. For a greenfield project of this nature, lending rates would be extraordinary, assuming the money was even available. Given these factors, GMA continues to believe that it is unlikely that the construction of the development as proposed by Redding Rancheria on the Strawberry Fields site would increase net income to the Tribe. If Redding Rancheria truly wants to increase revenue for its government expenditures, following a more prudent investment at its existing facility would have a greater benefit for its members.

* * *

Thank you for the opportunity to comment on the FEIS. We request that these comments and Exhibits A-E submitted herewith (including Appendices B-O accompanying Exhibit C) be made part of the public record and included in the public document that addresses comments on the FEIS.

Sincerely,

/s/ Kaighn Smith Jr.	*/s/ Robert L. Gips*	*/s/ Erick J. Giles*
Kaighn Smith Jr.	Robert L. Gips	Erick J. Giles

Counsel for the Paskenta Band of Nomlaki Indians

cc: Paskenta Band of Nomlaki Indians Tribal Council

EXHIBIT A

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Pacific Regional Office
2800 Cottage Way, Room W-2820
Sacramento, CA 95825

IN REPLY REFER TO:

03/22/2024

Real Estate Services
TR-4609-P5

Case Number: 53774

CERTIFIED MAIL – RETURN RECEIPT REQUESTED – 7016 3010 0001 0589 2232

Honorable Andrew Alejandre, Chairman
Paskenta Band of Nomlaki Indians
P.O. Box 709
Corning, CA 96021

NOTICE OF DECISION

Dear Chairman Alejandre:

This is notice of our decision as a result of our analysis of the application filed by the Paskenta Band of Nomlaki Indians of California (Tribe) to have the below described real property accepted by the United States of America in trust for the Paskenta Band of Nomlaki Indians of California.

The land described herein is situated in the State of California, County of Tehama, unincorporated area, described as follows:

All that part of the Southeast quarter of Section 15, Township 29 North, Range 4 West, Mount Diablo Meridian, according to the Official Plat thereof, lying and being on the East side of the County Road and Westerly and Northerly of that certain Parcel of land conveyed to County of Tehama in deed recorded July 16, 1969, in Book 531, Page 359, Official Records of Tehama County.

APN: 004-150-029-000

Authority

The authority for this acquisition is the Paskenta Band of Nomlaki Restoration Act 1994, P.L. 103-454, Title III, 25 U.S.C. §1300m-3.

Pursuant to our guidelines pertaining to a "Mandatory" acquisition, the following factors were considered in formulating our decision: (1) the extent to which the applicant has provided

information that allows the Secretary to comply with 516 DM 1-7 National Environmental Policy Act (NEPA) Revised Implementing Procedures, and 602 DM 2, Land Acquisitions: Hazardous Substances Determination; and (2) the Bureau of Indian Affairs (BIA) must obtain current evidence of title ownership that demonstrates the interest is owned by the Tribe and how it was acquired.

Factor 1 - The extent to which the applicant has provided information that allows the Secretary to comply with 602 DM 2, Land Acquisitions: Hazardous Substances Determination and 516 DM 1-7, National Environmental Policy Act Revised Implementing Procedures.

As outlined in the April 6, 2012 Updated Guidance of Processing Mandatory Trust Acquisition memo, neither NEPA environmental review requirements nor 602 DM 2 environmental hazard review requirements are applicable to mandatory acquisitions. Nonetheless, the memo requires that an initial site inspection be conducted to satisfy due diligence requirements. The record indicates that the Paskenta Band's Phase 1 Environmental Site Assessment dated December 12, 2023 meets the 602 DM 2 standards for a pre-acquisition Environmental Site Assessment, which exceeds this requirement for an initial site inspection.

Factor 2 - BIA shall require current evidence of title ownership from the tribe demonstrating that the interest is owned by the tribe and how it was acquired.

The procedure for acquiring title to subject property by the United States of America in trust for the Tribe is acknowledged and in accordance with the Department's procedures.

Conclusion

Based on the foregoing analysis, and a finding that all applicable legal requirements have been satisfied, the Acting Regional Director, Pacific Region is issuing this notice of our intent to approve the taking of the subject property into trust status for the benefit and welfare of the Paskenta Band of Nomlaki Indians of California. The subject acquisition will vest title in the United States of America in trust for the Paskenta Band of Nomlaki Indians of California in accordance with the Paskenta Band of Nomlaki Restoration Act (25 U.S.C. §1300m-3).

Any party who wishes to seek judicial review of this decision must first exhaust administrative remedies. The Regional Director's decision may be appealed to the Interior Board of Indian Appeals (IBIA) in accordance with the regulations in 43 C.F.R. 4.310-4.340.

If you choose to appeal this decision, your notice of appeal to the IBIA must be signed by you or your attorney and must be either postmarked and mailed (if you use mail) or delivered (if you use another means of physical delivery, such as FedEx or UPS) to the IBIA within 30 days from the date of receipt of this decision. The regulations do not authorize filings by facsimile/fax or by electronic means. Your notice of appeal should clearly identify the decision being appealed. You must send your original notice of appeal to the IBIA at the following address: Interior Board of Indian Appeals, Office of Hearings and Appeals, U.S. Department of the Interior, 801 North Quincy Street, Suite 300, Arlington, Virginia 22203.

You must send copies of your notice of appeal to (1) the Assistant Secretary – Indian Affairs, U.S. Department of the Interior, MS-4141-MIB, 1849 C Street N.W., Washington, D.C. 20240; (2) each interested party known to you; and (3) the Regional Director. Your notice of

appeal sent to the IBIA must include a statement certifying that you have sent copies to these officials and interested parties and should identify them by names or titles and addresses.

Sincerely,

RYAN HUNTER

Digitally signed by RYAN HUNTER
Date: 2024.03.22 13:53:09 -07'00'

Acting Regional Director

Enclosures:
43 CFR 4.310, et seq.

cc: Distribution List

DISTRIBUTION LIST

cc: BY CERTIFIED MAIL – RETURN RECEIPTS REQUESTED TO:

Senior Advisor for Tribal Negotiations
Deputy Legal Affairs Secretary
Office of the Governor
State Capitol Building, Suite 1173
Sacramento, CA 95814
Certified Mail ID: 7016 3010 0001 0589 2188

T. Michelle Laird, Supervising Deputy Attorney General C/O Paula Corral
State of California, Department of Justice
P.O. Box 944255
Sacramento, CA 94244-2250
Certified Mail ID: 7016 3010 0001 0589 2195

United States Senator Laphonza Butler
Dirksen Senate Office Building, Room G-12
Washington, DC 20510
Certified Mail ID: 7016 3010 0001 0589 2201

United States Senator Alex Padilla
331 Hart Senate Building
Washington, DC 20510
Certified Mail ID: 7016 3010 0001 0589 2218

Congressman Doug LaMalfa
United States House of Representatives – 1st District
408 Cannon House Office Building
Washington DC, 20515
Certified Mail ID: 7016 3010 0001 0589 2225

Tehama County Board of Supervisors
727 Oak Street
Red Bluff, CA 96080
Certified Mail ID: 7016 3010 0001 0589 2249

Tehama County Assessor's Office
444 Oak Street, Room B
Red Bluff, CA 96080
Certified Mail ID: 7016 3010 0001 0589 2256

Tehama County Planning Department
444 Oak Street, Room I
Red Bluff, CA 96080
Certified Mail ID: 7016 3010 0001 0589 2263

Tehama County Treasurer/Tax Collector
444 Oak Street, Room D
Red Bluff, CA 96080
Certified Mail ID: 7016 3010 0001 0589 2270

Tehama County Public Works Department
9380 San Benito Ave.
Gerber, CA 96035
Certified Mail ID: 7016 3010 0001 0589 2287

Tehama County Sheriff's Department
22840 Antelope Boulevard
Red Bluff, CA 96080
Certified Mail ID: 7016 3010 0001 0589 2294

Tehama County Fire Department
604 Antelope Boulevard
Red Bluff, CA 96080
Certified Mail ID: 7016 3010 0001 0589 2300

Regular Mail:

Superintendent
Bureau of Indian Affairs
Central California Agency
650 Capital Mall, Suite 8-500
Sacramento, CA 95814

RECORDING REQUESTED BY

Placer Title Company
Escrow Number: P-602593
Branch: 1301

AND WHEN RECORDED MAIL TO
AND MAIL TAX STATEMENTS TO

PASKENTA BAND OF NOMLAKI INDIANS, of Calif
22580 Olivewood Ave
Corning, CA 96021

This document is now recorded electronically with the County Recorder. Attached to this original document is a copy of the recorder stamp as it appears of record.

A.P.N.: 004-150-029-000

SPACE ABOVE THIS LINE FOR RECORDER'S USE

GRANT DEED

The undersigned grantor(s) declare(s):
Documentary transfer tax is $306.90 City Transfer Tax: $0.00
(X) Unincorporated Area ( ) City of _____
(X) computed on full value of property conveyed, or
( ) computed on full value less value of liens and encumbrances remaining at time of sale.

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, **Marcus Duivenvoorden and Alexandra Duivenvoorden, husband and wife, as joint tenants**

Hereby GRANT(S) to **PASKENTA BAND OF NOMLAKI INDIANS** OF CALIFORNIA

The land described herein is situated in the State of California, County of Tehama, unincorporated area, described as follows:

All that part of the Southeast quarter of Section 15, Township 29 North, Range 4 West, Mount Diablo Meridian, according to the Official Plat thereof, lying and being on the East side of the County Road and Westerly and Northerly of that certain Parcel of land conveyed to County of Tehama in deed recorded July 16, 1969, in Book 531, Page 359, Official Records of Tehama County.

APN: 004-150-029-000

Dated: August 22, 2023

Marcus Duivenvoorden

Alexandra Duivenvoorden

Doc # 2023008556
Page 1 of 2
Date: 8/31/2023 03:14P
Recording Requested By:
PLACER TITLE CO - SIMPLIFILE
Filed & Recorded in Official Records
of TEHAMA COUNTY
JENNIFER A. VISE
COUNTY CLERK & RECORDER
Fee: $323.90

RECORDING REQUESTED BY

Placer Title Company
Escrow Number: P-602593
Branch: 1301

AND WHEN RECORDED MAIL TO
AND MAIL TAX STATEMENTS TO

PASKENTA BAND OF NOMLAKI INDIANS, of Calif
22560 Olivewood Ave
Corning, CA 96021

A.P.N.: 004-150-029-000 SPACE ABOVE THIS LINE FOR RECORDER'S USE

GRANT DEED

The undersigned grantor(s) declare(s):
Documentary transfer tax is $306.90 City Transfer Tax: $0.00
(X) Unincorporated Area ( ) City of _____
(X) computed on full value of property conveyed, or
( ) computed on full value less value of liens and encumbrances remaining at time of sale.

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, **Marcus Duivenvoorden and Alexandra Duivenvoorden, husband and wife, as joint tenants**

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All that part of the Southeast quarter of Section 15, Township 29 North, Range 4 West, Mount Diablo Meridian, according to the Official Plat thereof, lying and being on the East side of the County Road and Westerly and Northerly of that certain Parcel of land conveyed to County of Tehama in deed recorded July 16, 1969, in Book 531, Page 359, Official Records of Tehama County.

APN: 004-150-029-000

Dated: August 22, 2023

Marcus Duivenvoorden

Alexandra Duivenvoorden

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
) ss.
County of Tehama)

On 8/29/2023 before me,
Maria Fortner,
Notary Public personally appeared Marcus Duivenvoorden
Alexandra Duivenvoorden who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. WITNESS my hand and official seal.

SIGNATURE _____

MARIA FORTNER
NOTARY PUBLIC – STATE OF MICHIGAN
COUNTY OF OAKLAND
My Commission Expires June 28, 2027
Acting in the County of Oakland

Placer Title Company
955 Main Street, Suite A
Red Bluff, CA 96080
(530)527-3335

File Number: **P-602593**
Sales Price: **$279,000.00**
Close Date: **8/31/2023**
Disbursement Date: **8/31/2023**

BUYER(S) FINAL CLOSING STATEMENT

Type: **Sale**
Property: **19945 DRAPER ROAD**
COTTONWOOD, CA 96022 (TEHAMA)
(004-150-029-000)

Certified True and Correct Copy
Placer Title Company

Buyer(s): **PASKENTA BAND OF NOMLAKI INDIANS OF CALIFORNIA**
22580 Olivewood Ave
Corning, CA 96021

Description	Debit	Credit
Deposits, Credits, Debits		
Contract sales price	$279,000.00	
Deposit or Earnest Money from Placer Title Company		$5,000.00
Buyers funds to close from PASKENTA BAND OF NOMLAKI INDIANS OF CALIFORNIA		$275,176.33
Prorations		
County taxes 7/1/2023 to 8/31/2023 @ $1,092.86/Six Months		$364.29
Title Charges		
Title - Owner's Title Insurance $279,000.00 Premium $1,015.00 to Placer Title Company	$507.50	
Endorsement(s) to Placer Title Company		
E-Recording Service Fee to Simplifile	$4.00	
Settlement or closing fee to Placer Title Company $1,350.00 Total: $1,350.00	$675.00	
Government Recording and Transfer Charges		
Recording fees: Deed $17.00	$17.00	
Totals	$280,203.50	$280,540.62

Balance Due TO Buyer: $337.12

Proceeds paid as:
$337.12 to PASKENTA BAND OF NOMLAKI INDIANS OF CALIFORNIA

EXHIBIT B

NAVI SINGH DHILLON (SBN 279537)
navidhillon@paulhastings.com
CHRISTOPHER J. CARR (SBN 184076)
chriscarr@paulhastings.com
DYLAN J. CROSBY (SBN 299536)
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LUCAS V. GRUNBAUM (SBN 314180)
lucasgrunbaum@paulhastings.com
PAUL HASTINGS LLP
101 California Street, 48th Floor
San Francisco, California 94111
Telephone: (415) 856-7000

Attorneys for Petitioner and Plaintiff
CALIFORNIA LAND STEWARDSHIP
COUNCIL LLC

FILED

FEB 13 2024

SHASTA COUNTY SUPERIOR COURT
BY: A. WADDLE, DEPUTY CLERK

SUPERIOR COURT OF CALIFORNIA

COUNTY OF SHASTA

CALIFORNIA LAND STEWARDSHIP COUNCIL LLC,

Petitioner and Plaintiff,

v.

COUNTY OF SHASTA and its BOARD OF SUPERVISORS,

Respondents and Defendants.

Case No. 204273

VERIFIED PETITION FOR WRIT OF MANDATE AND COMPLAINT

UNLIMITED JURISDICTION

By Fax

1. Petitioner and Plaintiff California Land Stewardship Council LLC (Petitioner) brings this civil action against Respondents County of Shasta (County) and its Board of Supervisors (Board), and alleges as follows:

THE CONTROVERSY

2. Over the objection of the County Fire Chief, the County Sheriff, and the County's own lawyers and staff, the Board gave away millions of dollars of public funds via an agreement with the developer of a casino. More specifically, the dispute concerns the Board's July 25, 2023, unlawful approval of an "Intergovernmental Agreement" (Agreement) between the County and the Redding Rancheria, a federally recognized Indian tribe (Tribe). The Tribe seeks to relocate its existing casino to a nearby undeveloped 232-acre parcel of land on the banks of the Sacramento River, known as "Strawberry Fields." There, the Tribe wants to build a new 1,123,272 square foot gaming complex (Project), which includes a 9-story hotel that, according to the County Fire Chief, would be the tallest building between Sacramento, California and Portland, Oregon.

3. The Agreement commits the County to provide services for the Project for a period of up to 30 years, including law enforcement, fire, and other emergency services. In exchange, the Tribe is required to make certain "non-recurring" (or one-time) and "recurring" payments to the County. The claimed purpose of those payments is to mitigate the Project's impacts related to providing County services, and other fiscal impacts relating to traffic and roads. However, the Board did not disclose or perform any cost-benefit or other analysis to determine whether the payments called for by the Agreement were actually sufficient to compensate the County. In fact, the payments are grossly insufficient by any measure. What's more, the Board disregarded a "scathing" report about the Agreement prepared by the County's own outside counsel.

4. The Tribe has been attempting to obtain the necessary governmental approvals to relocate its casino, including from the federal Bureau of Indian Affairs (BIA) and the California Senate. The Board has historically opposed the Project, given its potential to cause significant impacts to the community. For example, in an October 2019 letter to the BIA, the Board expressed its concern that the Project would have a "detrimental impact on the Shasta County community that cannot be adequately mitigated."

5. By January 2023, four of the five Supervisors who had opposed the Project had been replaced. In early 2023, the Tribe and one or more Supervisors began negotiating the terms of the Agreement. The one remaining Supervisor who had voted against the Project in 2019 and 2022 was, in her own words, kept "in the dark" as to the negotiations. Likewise, the County Counsel, Risk Manager, Sheriff, and Fire Chief were not kept apprised of the negotiations.

6. At the July 25, 2023, meeting, County staff and public safety department heads made formal presentations to the Board opposing the proposed Agreement. County staff recommended that the Board delay approving the Agreement to allow staff more time to analyze the Project's potential impacts. Staff presented to the Board the below table, comparing (without adjusting for inflation) the drastic differences between the recurring and non-recurring payments the County would receive under the proposed Agreement and those received by other local governments in connection with similar agreements for similar sized projects.

California Intergovernmental Agreement Comparison

Agreement:	Shasta County Redding Rancheria (Proposed)	Sonoma County Graton Rancheria (2012)	City of Rohnert Park Graton Rancheria (2013)	Madera County North Fork Rancheria (2004)	City of Madera North Fork Rancheria (2006)	Yuba County Enterprise Rancheria (2002)
Acres	232	254	254	305	305	40
Square Feet	69,500	65,000	65,000	68,150	68,150	91,000
# of Machines	1,200	3,000	3,000	2,000	2,000	2,100
# of Rooms	250	200	200	200	200	170
One-Time Payments	$3.6M	$5.1M	$9.7M	$6.9-17.9M	$6.3M-10.3M	$1.9M
Recurring Payments	$50k	$12.2M	$12.0M	$4.0M	$1.1M	$5.0M

Staff explained that the "Agreement would not fully mitigate the anticipated costs related to the new Casino for providing law enforcement, fire emergency services, and the costs to maintain the County roads and traffic controls."

7. Consistent with the concerns of staff, the Sheriff and Fire Chief also opposed the proposed Agreement. The Sheriff informed the Board that the payments would be insufficient to cover the cost to the County related to providing law enforcement services. He stated: "I am charged with looking out for the public safety of this County, and that's why I am up here urging you and pleading with you that you defer your decision on this Agreement and give us a chance to go back to the table and negotiate with the Tribe and hopefully come up with a more equitable agreement." The Fire Chief reached the same conclusion: "Just like the Sheriff, I am proposing to

you to make sure that all the information that you guys have is accurate in a timely manner and you have all the fact[s] behind what, how that's going to impact, not only my shop but the Sheriff's shop and everybody else. . . . And I obviously don't have the tools right now as your fire chief in order to mitigate a significant event at that casino."

8. The County Counsel warned the Board that his office had not yet reviewed the Agreement. Nor had the County's Risk Manager reviewed it. Shasta County Contracts Manual, Administrative Policy 6-101 (Contracts Manual or Policy), requires non-standard contracts, such as the proposed Agreement, to be reviewed and approved as to form by the County Counsel and reviewed and approved by the County's Risk Manager.

9. Undeterred, the Board purported to vote to waive the Policy's requirements, without first taking any formal action to amend the Policy to authorize such a waiver. It then voted to approve the Agreement, as amended to remove the requirement that it "be approved as to form by the County Counsel."

10. The Agreement is illegal. For example, the Board ignored its own procedures for approving contracts. The Board also made its decision based on no evidence, recklessly committing the County to a 30-year term. The financial terms of the Agreement are egregious and constitute waste of public funds. In short, the Board failed to comply with its legal duties and prompt judicial intervention is needed to protect the County.

THE PARTIES

11. Petitioner seeks to promote responsible government and advance the interests of its members. Petitioner's members include residents of the County who have either: (i) been assessed and are liable for a tax that funds the County; or (ii) within one year before the commencement of this action, paid a tax that funds the County. Petitioner's members are concerned with the negative impacts to the County and its residents that will result from the Board's unlawful approval of the Agreement. Accordingly, Petitioner has a beneficial interest in the issuance of a writ within the meaning of Code of Civil Procedure section 1086.

12. Respondent County is a political subdivision of the State of California. Respondent Board is the local governing body for the County.

JURISDICTION AND VENUE

13. This Court has jurisdiction over the subject matter of this action under Code of Civil Procedure, sections 526a and 1085.

14. Venue is proper in this Court because this action involves a challenge to the Board's unlawful approval of the Agreement. (Code Civ. Prov. § 394, subd. (a).)

15. The Board approved the Agreement on July 25, 2023. That decision is final and the underlying administrative process is complete. Accordingly, any exhaustion requirement has been met or is excused due to futility.

THE LAW: COUNTY CONTRACTS MANUAL AND PROHIBITION AGAINST WASTE

A. Shasta County Contracts Manual, Policy 6-101.

16. The Contracts Manual establishes policies and procedures for the County to enter into agreements or contracts. The Board formally adopted the Contracts Manual as Policy No. 6-101. The Contracts Manual has been amended by the Board on numerous occasions via Policy Resolutions.

17. Section 1.3 of the Contracts Manual "describes the responsibilities and procedures that apply generally to contracts," including the "responsibility for obtaining the best terms" for the County (§ 1.3.4), and the requirement that all County contracts be reviewed and approved by the County Counsel and the County's Risk Manager (§ 1.3.3). Section 1.3.3 of the Contracts Manual provides, in relevant part, that:

> With the exception of certain pre-approved standard contracts and other specified low-risk contracts identified in this Manual (see e.g., Section 5.6), all contracts must be reviewed and signed for approval as to form by County Counsel.
>
> [¶]
>
> The Risk Manager . . . must approve and sign all County contracts except those standard format contracts which department heads or the CEO can independently sign.

18. The Contracts Manual does not permit the Board to waive compliance with these requirements.

B. Taxpayer Actions under Section 526a.

19. Code of Civil Procedure, section 526a permits a taxpayer to bring an action to restrain or prevent an "illegal" or "wasteful" expenditure of public money. "No showing of special damage to a particular taxpayer is required as a requisite for bringing a taxpayer suit." (*Connerly v. State Personnel Bd*. (2001) 92 Cal.App.4th 16, 29.) California courts recognize the importance of taxpayer suits to ensure government accountability: "'[T]he individual citizen must be able to take the initiative through taxpayers' suits to keep government accountable on the state as well as on the local level." (*Vasquez v. Cal.* (2003) 105 Cal.App.4th 849, 854.)

20. California courts broadly and liberally construe Section 526a to promote its remedial purpose. (See *Blair v. Pitchess* (1971) 5 Cal.3d 258, 267-68.) In that connection, taxpayer actions are permitted for both "actual or threatened expenditures of public funds." (*Waste Mgmt. of Alameda Cnty., Inc. v. Cnty. of Alameda* (2000) 79 Cal.App.4th 1223, 1240, disapproved on other grounds.) Taxpayer actions may be used to challenge an agency's decision to enter into an illegal contract. (See, e.g., *Miller v. McKinnon* (1942) 20 Cal.2d 83, 89; *A.J. Fistes Corp. v. GDL Best Contractors, Inc*. (2019) 38 Cal.App.5th 677, 689.) An injunction preventing the illegal or wasteful expenditure of funds is explicitly authorized. (Code Civ. Proc. § 526a, subd. (a).)

FACTUAL BACKGROUND

A. The Tribe's Proposed Project and the County's Historic Opposition.

21. The Tribe currently conducts gaming activities at its existing Win-River Casino located just off Interstate 5 in Redding, California. The Tribe seeks the County's assistance in relocating its existing casino 1.6 miles northeast to the Strawberry Fields property. The Tribe plans to construct a massive 1,123,272 square foot gaming complex at Strawberry Fields, including a 69,541 square foot casino, a 52,000 square foot event center, and a 9-story, 250-room hotel.

22. In 2003, the Tribe submitted a "fee-to-trust" application to the BIA to relocate its gaming facility from its existing location to Strawberry Fields. The BIA denied the Tribe's request. In 2016, the Tribe re-submitted its request to the BIA, which agreed to take the Tribe's request under consideration to give the Tribe time to prove the Project "would not be detrimental to the surrounding community." (25 U.S.C. § 2719(a).)

23. Between 2016 and 2022, the Redding City Council and the Board consistently opposed the Tribe's proposed Project. For example, in 2019, both the Redding City Council and the Board sent letters to the BIA expressing their disapproval of the Project. The Board's letter expressed its concern that the Project would have a "detrimental impact on the Shasta County community that cannot be adequately mitigated."

B. The Board Reverses Course.

24. Between January 2021 and January 2023, four of the Board's five Supervisors were replaced. In or around early 2023, one or more Supervisors began negotiating the terms of the proposed Agreement with the Tribe. The fifth Supervisor—who had historically opposed the Project—was excluded from the negotiations, as were the County's staff and its Sheriff, Fire Chief, Counsel, and Risk Manager.

25. On June 30, 2023, the Tribe presented the Board with the proposed Agreement, which the Board later approved, as amended, and then executed on behalf of the County. Pursuant to Section 5(B) of the Agreement, it is to remain effective for a period of approximately 30 years, unless the Tribe permanently ceases gaming at the Project sooner.

26. Section 2(A)-(C) of the Agreement provides that the Tribe is to "make non-recurring (one-time) payments" to mitigate the Project's impacts to County services, including law enforcement, fire, and emergency services. Section 2(D) also requires the Tribe to make a one-time payment to mitigate the Project's impacts on County roads in accordance with the federal Environmental Impact Statement and Record of Decision for the Project.

27. Section 3 of the Agreement requires the Tribe to make certain "recurring" payments purportedly to: (i) mitigate the Project's impacts to law enforcement, fire, and emergency services, based on the number of calls received for such services per year; and (ii) ensure the County roads and traffic controls are "secured and maintained by the County for commercial and business traffic" for the Project. Section 4 further provides that the recurring payments to the County are to be made annually. Unlike the other intergovernmental agreements identified by County staff, none of the recurring payments required under the Agreement would be adjusted for inflation.

C. The Board Votes to Approve the Agreement.

28. At its meeting of July 25, 2023, the Board received comments, and ultimately voted, on the proposed Agreement. The proposed Agreement was widely opposed.

29. Pursuant to the Board's direction, County staff analyzed, on an expedited schedule, the impacts of the proposed Agreement. The Staff Report acknowledged that the intent of the Agreement is to "mitigate the County costs related to the new casino for providing law enforcement, fire and emergency services, and costs to maintain County roads and traffic controls and related costs." However, the Staff Report concluded the Agreement "would not fully mitigate the anticipated costs" to the County for providing those services. Accordingly, County staff recommended that the Board delay approving the proposed Agreement, to allow staff time to sufficiently analyze its impacts and negotiate revisions to its terms based upon that review.

30. Using the figures presented by County staff, the below table highlights the differences between the recurring and non-recurring payments the County would receive under the proposed Agreement and those received by other local governments. A row in the table adjusts the one-time payments for inflation[1] to show their present value relative to the one-time payments to the County under the Agreement:

California Intergovernmental Agreement Comparison				
Agreement	Shasta County Redding Rancheria (Proposed)	Sonoma County Graton Rancheria (2012)	City of Rohnert Park Graton Rancheria (2013)	Yuba County Enterprise Rancheria (2002)
Acres	232	254	254	40
Square Feet	59,500	65,000	65,000	91,000
# of Machines	1,200	3,000	3,000	2,100
# of Rooms	250	200	200	170
One-Time Payments (not adjusted for inflation)	**$3,600,000**	**$5,100,000**	**$9,700,000**	**$1,900,000**
Inflation Adjusted One-Time Payments	$3,600,000	$6,799,875	$12,852,199	$3,239,316
Recurring Payments (per annum) (not adjusted for inflation)	**$50,000**	**$12,200,000**	**$12,000,000**	**$5,000,000**
30 Year Recurring Payment Total (not adjusted for inflation)	$1,500,000	$366,000,000	$360,000,000	$150,000,000
30 Year Recurring Payment Total Per Square Foot (PSF) (not adjusted for inflation)	$22	$5,631	$5,538	$1,648

[1] U.S. Bureau of Labor Statistics, CPI Inflation Calculator, https://www.bls.gov/data/inflation_calculator.htm (last accessed February 13, 2024.)

Below is a graph that simplifies some of the above information:

31. As noted, the County Sheriff and Fire Chief opposed the proposed Agreement, expressing concerns about impacts to their departments and that the payments called for by the proposed Agreement would not be nearly enough to cover the cost of providing law enforcement, fire, and emergency services for the Project.

32. The Sheriff explained that, although the Agreement requires the Tribe to pay the County a $1,000 per call recurring payment for law enforcement services, the Tribe is not required to compensate the County for any investigation that follows. The Sheriff estimated an investigation of a major crime could easily cost in the range of $10,000 to $20,000—somewhere between a 900 percent and 1,900 percent underestimation for such services. Nor does the $1,000 payment take into account crimes committed at the Project site but reported from off-site. Nor does it take into account proactive patrols taking place at the Project site. Nor does it take into account cost impacts to related local law enforcement agencies, including the District Attorney's Office, Public Defender's Office, Probation Department, courts, local police departments, and the local jail. The

Sheriff concluded his remarks by stating the following: "hastily passing an Agreement like this is fiscally irresponsible to the citizens and long term viability of this County."

33. The Fire Chief explained that the Tribe's $1 million non-recurring payment would not be sufficient to cover the $2.5 to $3 million cost to purchase a new ladder firetruck, which would be a necessary expense to respond to calls for the Project considering the planned 9-story hotel. This represents an underestimation of somewhere between 150 percent and 200 percent. Likewise, the Tribe's $10,000 per call recurring payment would not be sufficient to cover either the: (i) annual $2.5 million in costs necessary to staff that fire truck to respond to calls at the Project site; or (ii) cost to respond to a major emergency requiring significant resources (e.g., large fire, multiple trucks).

34. The District Attorney for the City of Redding also opposed the Agreement and expressed concerns over the negotiation process, as well as the potential impacts to her department. She stated it was important to "get some real numbers" to ensure the safety of the community.

35. One Supervisor stated that she could not support an agreement that has not been approved by County Counsel and County Risk Management. She stated the Board had received a "scathing report" on the proposed Agreement from the County's outside legal counsel, which noted several issues with the Agreement.

36. The County Counsel informed the Board that his office had not reviewed the proposed Agreement, despite the Contracts Manual's requirement that the County Counsel and Risk Manager review any non-standard contract before the County enters into it. The Board nevertheless purported to vote to "waive" the requirement—which had also been set forth in the proposed Agreement itself (Section 5(A)(ii)).

37. The Board ultimately voted 4-1 to approve the Agreement, as amended. The County was undeterred by the knowledge that: (i) the Agreement would result in the County having to expend funds to provide services for the Project far in excess of the payments it would receive from the Tribe; and (ii) entering into the Agreement would violate its own Policy.

38. The Board's approval of the Agreement and decision to enter into the Agreement on behalf of the County was unlawful and constitutes an illegal and wasteful expenditure of public funds.

FIRST CAUSE OF ACTION

(Petition for Writ of Mandate – Code Civ. Proc. § 1085)

39. Petitioner hereby incorporates each paragraph set forth above.

40. The County's Contracts Manual, Policy No. 6-101, requires non-standard contracts to be reviewed and approved as to form by the County Counsel and reviewed and approved by the County's Risk Manager before they are entered into by the County. The Policy does not permit the County or its Board to waive this requirement. The Board unlawfully purported to waive this requirement, and then approved and entered into the Agreement on behalf of the County. The Board did so without first adopting a formal resolution as required to amend the County's Policy to authorize such a waiver. In addition to violating the Contract Manual, the decision to approve the Agreement is devoid of any evidentiary support.

41. Petitioner seeks a writ directing Respondents to set aside the approval of the Agreement because the Board failed to comply with its ministerial and other legal duties (e.g., not commit waste) and also acted in a manner that is arbitrary, capricious and an abuse of discretion. No other plain, speedy and adequate legal remedy exists.

SECOND CAUSE OF ACTION

(Taxpayer Action for Illegal and Wasteful Expenditure - Code Civ. Proc. § 526a)

42. Petitioner hereby incorporates each paragraph set forth above.

43. The Board's decision to enter into the Agreement on behalf of the County constitutes an illegal act, waste of, and/or injury to, the County's funds and/or property. The Board recklessly committed the County to provide services to a casino on Tribal land for a 30-year term without any benefit to the public. In effect, the Board gifted tens of millions of dollars of public funds to the Tribe. The Board claimed the goal of the payments under the Agreement was to mitigate the negative impacts of the casino but the evidence at trial will show the payments would not come

close to achieving that goal. The Board's decision was intentional and the product of a "backroom deal" that elevated the interests of the Tribe over those of the County.

PRAYER FOR RELIEF

Wherefore, Petitioner prays that the Court issue the following relief:

1. A declaration to the effect that the Board's approval of the Agreement was contrary to law.

2. A writ directing the Board to set aside and/or rescind its decision to approve and enter into the Agreement on behalf of the County.

3. A permanent injunction prohibiting Respondents from taking acts, spending public funds, or using public resources in furtherance of the Agreement.

4. An award of Petitioner's reasonable fees and costs, including under Code of Civil Procedure section 1021.5.

5. For such other and further relief as the Court deems just and proper.

DEMAND FOR JURY TRIAL

Petitioner hereby demands trial by jury.

Respectfully submitted,

DATED: February 13, 2024

PAUL HASTINGS LLP

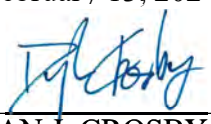
By: _____
NAVI SINGH DHILLON

Attorneys for Petitioner and Plaintiff
CALIFORNIA LAND STEWARDSHIP
COUNCIL LLC

VERIFICATION

As authorized by Code of Civil Procedure section 446, subdivision (a), because my office is not located in the County in which Petitioner and Plaintiff California Land Stewardship Council LLC is headquartered, I, Dylan J. Crosby, submit this verification. I have read this Verified Petition for Writ of Mandate and Complaint and am informed and believe that the matters therein are true, and on that ground allege that the matters stated therein are true.

Executed at San Francisco, California on February 13, 2024.



DYLAN J. CROSBY

EXHIBIT C

PEER REVIEW AND TECHNICAL MEMORANDUM

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Pasadena
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To: David Beauchamp
ESA | Environmental Science Associates

Date: April 30, 2024

From: Zawwar Saiyed, M.S., P.E., R.S.P., Associate Principal
Angela Besa, P.E., Transportation Engineer III
Linscott, Law and Greenspan, Engineers

LLG Ref: 2.24.4801.1

Subject: ***Peer Review and Technical Memorandum – Traffic Impact Study, Redding Rancheria, Shasta County***

Linscott, Law & Greenspan, Engineers (LLG) has been engaged by the Paskenta Band of Nomlaki Indians to provide comments on the *Updated* Traffic Impact Study for Redding Rancheria, prepared by Kimley-Horn, dated February 2023, which serves as the basis for the assessment of traffic impacts in the *Final Environmental Impact Statement: Redding Rancheria Fee-to-Trust and Casino Project (February 2024).* This review focuses on the proposed Project's Alternative A, as it would generate the largest amount of traffic. The Project Alternative A consists of development of an approximately 69,515 SF casino, 250-room hotel, an event/convention center and a retail center. The Project Alternative A site, also referred to as the Strawberry Field Site, is generally located in the southwest corner of the I-5 Freeway and South Bonnyview Road.

We previously provided comments on the Traffic Impact Study for Redding Rancheria, prepared by Kimley-Horn, dated June 2018, which served as the basis for the assessment of traffic impacts in the *Draft Environmental Impact Statement: Redding Rancheria Fee-to-Trust and Casino Project (April 2019).* See *Linscott, Law & Greenspan Engineers, Peer Review – Traffic Impact Study for the Redding Rancheria Project (June 17, 2019) ("LLG June 2019"), "Exhibit K"* to *Comments of the Paskenta Band of Nomlaki Indians on The Draft Environmental Impact Statement for the Redding Rancheria Fee-to-Trust and Casino Project* (June 17, 2019), which is *Comment Letter T6 - Exhibit K* in the *Final Environmental Impact Statement for the Redding Rancheria Fee-to-Trust and Casino Project, Volume I – Response to Comments (February 2024)* (the "FEIS"). Thus, the present comments identify unaddressed or inadequately addressed issues set out in LLG June 2019: those that render the FEIS deficient with respect to traffic impacts .

Appendix A contains both the June 2018 and February 2023 Traffic Impact Studies for Redding Rancheria, prepared by Kimley-Horn.

David S. Shender, PE
John A. Boarman, PE
Richard E. Barretto, PE
Keil D. Maberry, PE
KC Yellapu, PE
Dave Roseman, PE
Shankar Ramakrishnan, PE

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1. General Comments on the *Updated* Traffic Impact Study (February 2023)

1.1 The *Updated* Traffic Impact Study is deficient because it does not include a Vehicle Miles Traveled (VMT) analysis in accordance with the requirements of state law] On September 27, 2013, Governor Jerry Brown signed Senate Bill 743 (SB 743). SB 743 created a process to change the way analysis of transportation impacts under the California Environmental Quality Act (CEQA) is conducted. The Governor's Office of Planning and Research (OPR) OPR concluded that the use of Vehicle Miles Traveled (VMT), with thresholds linked to GHG reduction targets, would adequately analyze a project's transportation impacts while supporting all three statutory goals.

OPR transmitted the final proposed revisions to the CEQA Guidelines and the current draft of the *Technical Advisory* to the California Natural Resources Agency (the body responsible for certifying, adopting, and amending the CEQA Guidelines) in November 2017. Beginning in January 2018, the California Natural Resources Agency initiated the formal rulemaking process to adopt the proposed revisions, including the new Section 15064.3 which specifies VMT as the metric for transportation analysis. On December 28, 2018, the California Office of Administrative Law filed the revised CEQA Guidelines with the Secretary of the State on behalf of the Natural Resources Agency, thereby formally implementing vehicle miles traveled as the metric for transportation analysis under CEQA. Pursuant to the adopted Section 15064.3, a lead agency may elect to implement the new criteria for analyzing transportation impacts immediately. As of July 1, 2020, the criteria was mandated for application state-wide.

1.2 The majority of the traffic counts utilized in the *Updated* Traffic Impact Study are inadequate because they are approximately eight (8) years old (Year 2016), and the retail and commercial areas north of Bonnyview Road on both sides of Interchange 5 (I-5) are now significantly buildout, including a new Costco Wholesale Center. Without new traffic counts, the Project's full impacts cannot be properly understood and are most likely significantly underestimated. Thus, new traffic counts should be conducted to capture all the new trips from the retail and commercial land uses as well as growth in traffic over the past eight (8) years.

1.3 The *Updated* Traffic Impact Study assumes a Project Opening Year of 2025. A Project Opening Year of 2025 is unrealistic. Thus, the *Updated* Traffic Impact Study should be updated accordingly.

1.4 The analyses should be updated to include the roundabout (instead of the signalized intersection) at Bechelli Lane at S Bonnyview Road since it has been constructed and will provide direct access to the Project.

1.5 The comment below was included in LLG June 2019 and hasn't been addressed since new counts have not been conducted for the *Updated* Traffic Impact Study.

"It is generally accepted that a traffic impact analysis for a large project that is the busiest on a weekend would assess typical weekday AM and PM peak periods in addition to the anticipated peak times for the project itself. Additionally, weekday traffic counts for the analysis would normally be taken on a Tuesday, Wednesday or Thursday when schools are in session, unless there are extraordinary circumstances. The *Updated* Traffic Impact Study collected intersection turning movement counts during the Friday and Saturday PM Peak Period (5:00 PM – 7:00 PM). In addition, the counts were collected in July 2016, which is non-typical considering schools were not in session. Additional counts were collected in September 2016 and the TIA states that adjustments were applied to the July 2016 turning movement counts to proportionally increase volumes to reflect observed seasonal variation, but did not document these adjustments. According to City of Redding Guidelines, turning movement counts for the weekday morning and evening peak hours shall be collected from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m., respectively, at 15-minute intervals, on a Tuesday, Wednesday or Thursday. Saturday mid day counts shall be conducted from 11:00 a.m. to 1:00 p.m. at 15 minute intervals. Additional traffic counts for other time periods are required if the peak hour trips for the Project fall outside these time ranges. It is recommended that new traffic counts be collected when schools are in session to provide a conservative analyses and to be consistent with the City of Redding guidelines. The new traffic counts should be collected during a weekday AM Peak Period (7:00 AM – 9:00 AM) and PM Peak Period (4:00 PM – 6:00 PM), as well as a Saturday Midday Peak Period (11:00 AM – 1:00 PM). In addition, Saturday PM Peak Period (4:00 PM – 7:00 PM) traffic counts should be collected to validate that the Saturday PM Peak Hour volumes evaluated in the TIA fall within the 5:00 PM – 7:00 PM Period, since several locations have peak hours starting at 5:00 PM and the peak hour could potentially be earlier."

The City of Redding Traffic Impact Analysis Guidelines state:

- *"Traffic Counts Turning movement counts for the weekday morning and evening peak hours shall be collected from 7:00 a.m. to 9:00 a.m. and*

from 4:00 p.m. to 6:00 p.m., respectively, at 15 minute intervals. Saturday mid-day counts shall be conducted from 11:00 a.m. to 1:00 p.m. at 15 minute intervals. Traffic counts for other time periods will be required if the peak hour trips for the project fall outside these time ranges, for example, schools, theaters, and churches."

- *"Weekday average vehicle counts should be conducted on Tuesdays, Wednesdays, and Thursdays in dry weather conditions."*
- *"Data shall not be collected during holidays, days immediately before or after holidays, or during the last two weeks in December. Data should not be collected at times when spring break or summer break could significantly alter the data."*
- *"Historical traffic counts may not be used if more than two years old."*

1.6 The comment below was also included in LLG June 2019 and has not been addressed.

"Review of the intersection count sheets provided in *Appendix A* indicate that truck classification counts weren't accounted for in order to determine existing truck percentage. Furthermore, review of the Synchro worksheets show that the HCM default of 2% Heavy vehicles was used. According to the *City of Redding Traffic Impact Analysis Guidelines*, actual existing percent heavy vehicles should be utilized on State facilities, otherwise 2% can be assumed. It is recommended that the existing truck percentage be utilized in the intersection level of service calculations, since most intersections fall within the SR-273 corridor and are freeway ramp intersections."

1.7 The point below was also included in LLG June 2019 and hasn't been addressed since Weekday AM Peak Hour analyses have not been conducted for the *Updated* Traffic Impact Study. The casino, hotel, event/convention center, retail center and ancillary uses will have office components with employees commuting during the AM Peak Hour for work. The *Updated* Traffic Impact Study does not account for any of the Project's impacts during this time period and therefore does not adequately assess impacts.

The *Updated* Traffic Impact Study does not include Weekday AM Peak Hour analyses per the *City of Redding Traffic Impact Analysis Guidelines*. Analyses are needed for the Weekday AM Peak Hour using counts conducted on either Tuesday, Wednesday or Thursday in dry weather conditions during the peak hours between 7:00 AM to 9:00 AM, at 15-minute intervals, as stated in the *City of Redding Traffic Impact Analysis Guidelines*.

1.8 The point below was also included in LLG June 2019 and hasn't been addressed since Weekday PM Peak Hour analyses have not been updated for the *Updated* Traffic Impact Study.

The Weekday PM Peak Hour analyses in The *Updated* Traffic Impact Study are inconsistent per the *City of Redding Traffic Impact Analysis Guidelines*, since all the traffic counts and analyses were conducted for a Friday. It is Analyses are needed for the Weekday PM Peak Hour using counts conducted on either Tuesday, Wednesday or Thursday in dry weather conditions during the peak hours between 4:00 PM to 6:00 PM, at 15-minute intervals, as stated in the *City of Redding Traffic Impact Analysis Guidelines*.

1.9 The point below was also included in LLG June 2019 and hasn't been addressed since Saturday Midday Peak Hour analyses have not been updated for the *Updated* Traffic Impact Study.

The Saturday Midday Peak Hour analyses in The *Updated* Traffic Impact Study weren't conducted per the *City of Redding Traffic Impact Analysis Guidelines*, since all the traffic counts and analyses were conducted for a Saturday PM Peak hour. Analyses are needed for the Saturday Midday Peak Hour using counts in dry weather conditions during the peak hours between 11:00 AM to 1:00 PM, at 15 minute intervals, as stated in the *City of Redding Traffic Impact Analysis Guidelines*.

1.10 The point below was also included in LLG June 2019 and hasn't been addressed since Saturday Midday Peak Hour analyses have not been updated for the *Updated* Traffic Impact Study.

LLG June 2019,stated that best practices warranted LOS calculations using at the time most current *Highway Capacity Manual 6th Edition (2016)*. The *Updated* Traffic Impact Study used *Highway Capacity Manual 2010 (2010)*. Since it has been almost five (5) years since the last review, LOS calculations using the most current *Highway Capacity Manual 7th Edition (2022)* should be used Further, at the time the Notice of Intent for the Redding Rancheria was published in the Federal Register (November 29, 2016), the *Highway Capacity Manual 6th Edition* was available.

1.11 The point below was also included in LLG June 2019 and hasn't been addressed since Weekday PM Peak Hour analyses have not been updated for the *Updated* Traffic Impact Study.

According to the *Updated* Traffic Impact Study, the Opening (Year 2025) traffic volumes for a portion of the study intersections were developed based on linearly interpolating between existing and Year 2040 traffic volumes from information contained in the *River Crossing Marketplace Specific Plan Traffic Impact Analysis Report* prepared by Omni-Means, A GHD Company, 2017. Generally, interpolation has lower volumes and is less conservative than manually developing Year 2025 volumes from ambient growth and assignment of cumulative projects in the area. There is no list of cumulative projects that were used as representative of the Year 2025 volumes , nor any Year 2040 Model Post-Processing model plots and worksheets to validate the Year 2040 volumes utilized. Furthermore, it is unclear how the Year 2040 Saturday volumes were developed. Proper impact evaluation should involve manually developing Opening Year volumes using recent counts, ambient growth and assignment of cumulative projects in the area, to provide more conservative analyses using as realistic Project opening year as previously also stated in ***Comments 1.2 & 1.3***.

1.12 The comment below was also included in LLG June 2019 hasn't been fully addressed since only three (3) of the ten (10) locations were included in the *Updated* Traffic Impact Study. The three (3) locations included in the *Updated* Traffic Impact Study are shown as struck out. It is also noted that three (3) new intersections have been added along Smith Road (24 Smith Road/Proposed Project South Driveway, 25 Smith Road/I-5 SB Ramps and 26 Smith Road/I-5 NB Ramps) and analyses are included in the *Updated* Traffic Impact Study.

"Based on preliminary review of the Project Trip Generation and Assignment, it appears that there would be some locations beyond what was analyzed that exceed 50 trips, in some cases these locations have close to 200 peak hour Projects trips. It is recommended that the potential for significant traffic impacts at these following ten (10) additional locations should be evaluated:

1. Market Street (SR-273) at Kenyon Drive
2. Market Street (SR-273) at Breslauer Way
3. Market Street (SR-273) at Buenaventura Boulevard
4. ~~I-5 Southbound Ramps at Knighton Road~~
5. ~~I-5 Northbound Ramps at Knighton Road~~
6. ~~Churn Creek Road/Pacheco Road at Knighton Road~~
7. Market Street (SR-273) at Briggs Street
8. Market Street (SR-273) at 3rd Street

9. Market Street (SR-273) at Ox Yoke Road
10. Market Street (SR-273) at Spring Gulch Road"

1.13 The comment below was also included in LLG June 2019 and hasn't been addressed.

"It is unclear whether actual percent trucks were utilized for the Roadway Segment and Freeway Analyses. If default values were utilized, it is recommended that the actual percent trucks from the counts be utilized instead, per City and Caltrans' Guidelines."

1.14 The Project Trip Generation tables provided in the Kimley-Horn study need to show the trip generation rates, as the notes are unclear how the rates were derived. The following provides further general comments on the Project Trip Generation:

- It appears that the trip forecast for the Conference Center was modeled similar to the Event Center. However, the trip characteristics for an Event Center is not adequately representative of a Conference Center use.
- Based on review of the Project description for the "Strawberry Fields site" in the FEIS, it appears that a 1,500-seat Outdoor Amphitheater was excluded from this study. There is no justification as to why the Outdoor Amphitheater was excluded from the Project Trip Generation.
- It is unclear how the Event Center trip generation was derived. The description that "most of the patrons visiting the event are already onsite at the casino and only 30 percent of the patrons represent new trips" likely overestimates the trip reduction from the event center. A proper impact assessment requires further explanation of the Event Center trip rates. If it were assumed that the 70 percent of patrons already onsite were from the Hotel, this alone would exceed the 250-room occupancy.

* * * * * * * * * * *

2. Specific Comments on the *Updated* Traffic Impact Study (February 2023)

The points below were also included in LLG June 2019and haven't been adequately addressed in the *Updated* Traffic Impact Study. All references are to the *Updated* Traffic Impact Study.

2.1 Page 8, Paragraph 1 – For accurate impact assessment, he latest Highway Capacity Manual 7th Edition (2022) should be utilized, or at the minimum the Highway Capacity Manual 6th Edition (2016) should be utilized, which was available in November 2016, at the time the Notice of Intent to Prepare an Environmental Impact Statement for the Project was released.

2.2 Page 20, Paragraph 2 :

a) It is noted that the *Updated* Traffic Impact Study only analyzes the Friday PM and Saturday PM Peak Period, from 5:00 PM to 7:00 PM. Consistent with Redding TIA Guidelines, for an accurate impact assessment, a typical Weekday AM (7:00 AM – 9:00 AM) and PM (4:00 PM – 6:00 PM) Peak Periods, as well as Saturday Midday (11:00 AM – 1:00 PM) Peak Period should be analyzed.

b) Truck classification counts should be conducted and Passenger Car Equivalent (PCE) factors utilized to accurately assess impacts. There are truck uses within the vicinity of the Project site.

2.3 Page 33, Table 8 – Market Street has been identified as SR 275, (should be SR 273). This is repeated multiple times throughout the report.

2.4 Page 36, Baseline Conditions – A Project Opening Year of 2025 is not realistic. Thus, the *Updated* Traffic Impact Study needs to be updated accordingly.

2.5 The point below was also included in LLG June 2019 and hasn't been addressed. Please also see comment 1.5.

Page 54, Paragraph 2 – There is no documentation that supports the identification that Friday and Saturday PM peak periods represent the worst-case periods.

2.6 The point below was also included in LLG June 2019 and hasn't been fully addressed since only three (3) of the ten (10) locations were included in the *Updated* Traffic Impact Study. The three (3) locations included in the *Updated* Traffic Impact Study are shown as struck out.

Figure 17 – Based on preliminary review of the Project Trip Generation and Assignment, it appears that there would be some locations beyond what was analyzed that exceed 50-trips, in some cases these locations have close to 200 peak hour Projects trips. The potentially significant traffic impacts at these following ten (10) additional locations need to be analyzed.

1) Market Street (SR-273) at Kenyon Drive
2) Market Street (SR-273) at Breslauer Way
3) Market Street (SR-273) at Buenaventura Boulevard
4) ~~I-5 Southbound Ramps at Knighton Road~~
5) ~~I-5 Northbound Ramps at Knighton Road~~
6) ~~Churn Creek Road/Pacheco Road at Knighton Road~~
7) Market Street (SR-273) at Briggs Street
8) Market Street (SR-273) at 3rd Street
9) Market Street (SR-273) at Ox Yoke Road
10) Market Street (SR-273) at Spring Gulch Road

* * * * * * * * * * *

3. LLG Analyses (April 2024) & Comparison to the *Updated* Traffic Impact Study (February 2023)

In filing its June 17, 2019 comments on the DEIS, the Paskenta Band of Nomlaki Indians pointed out that the comment period was too short to adequately address a variety of issues, in particular, traffic impacts, and stated that the Band would be filing supplemental comments on traffic. On December 10, 2019, the Band filed Supplemental DEIS Comments with the BIA's Sacramento Office in accordance with the Office's original instructions on filing DEIS comments. The Band filed as "Exhibit A" to its December 10, 2019 LLG's *Peer Review Traffic Impact Study for the Redding Rancheria Project,* dated November 18, 2019, consisting of 58 pages of narrative, 147 supporting tables and 15 supporting Appendices with traffic counts and calculations (collectively, "LLG 2019 Peer Review").

The FEIS fails to consider in any way the Band's December 10, 2019 Supplemental Comments and the LLG 2019 Peer Review.

Because data and results in the KHA Traffic Impact Study (June 2018) have not changed in the KHA *Updated* Traffic Impact Study (February 2023), the LLG 2019 Peer Review remains relevant, but LLG has now engaged in updated analyses with comparison to the KHA *Updated* Traffic Impact Study (February 2023). That updated analysis follows and constitutes additional comments on the FEIS, accounting for present day traffic counts overlooked by the KHA *Updated* Traffic Impact Study (February 2023). As indicated, there are numerous significant impacts to traffic from the "preferred alternative" Redding Rancheria Casino Resort at Strawberry Fields that the FEIS fails to address.

EXECUTIVE SUMMARY

LLG performed a separate traffic analysis for Project Alternative A (Site Access Options 1 and 2) and Alternative E which were analyzed in the F EIS and Kimley-Horn study. Alternative A was selected as it would generate the largest amount of traffic. Alternative E was also analyzed as it is located at a different off-Reservation site in comparison to the other alternatives.

Study Area

- LLG analyzed the same twenty eight (28) intersections, fourteen (14) roadway segments, twelve (12) freeway mainline segments and eight (8) freeway merge/diverge segments analyzed in the Kimley-Horn Study.

- In addition, seven (7) intersections, four (4) freeway mainline segments and four (4) freeway merge/diverge segments that were not included in the Kimley-Horn study were analyzed due to the potential of the proposed Project to significantly impact these locations as a result of the significant Project traffic volume (i.e. >50 trips) that is forecast to travel through these locations. The Kimley-Horn Study should also evaluate the following:

  Additional Study Intersections:

  1) Market Street (SR-273) at Kenyon Drive
  2) Market Street (SR-273) at Breslauer Way
  3) Market Street (SR-273) at Buenaventura Boulevard
  4) Market Street (SR-273) at Briggs Street
  5) Market Street (SR-273) at 3rd Street
  6) Market Street (SR-273) at Ox Yoke Road
  7) Market Street (SR-273) at Spring Gulch Road

  Additional Freeway Mainline locations:

  1. I-5 Northbound, south of Knighton Road
  2. I-5 Northbound, north of Knighton Road
  3. I-5 Southbound, north of Knighton Road
  4. I-5 Southbound, south of Knighton Road

  Additional Freeway Merge/Diverge locations:

  1. I-5 Northbound Off-Ramp to Knighton Road
  2. I-5 Northbound On-Ramp from Knighton Road
  3. I-5 Southbound Off-Ramp to Knighton Road

4. I 5 Southbound On Ramp from Knighton Road

Existing Plus Project Analysis

- The Kimley-Horn TIA does not include an analysis of an Existing Plus Project traffic condition scenario, therefore all significant impacts identified under this scenario are considered new direct Project impacts when compared to the Kimley-Horn study. LLG's analysis identified the following new significant traffic impacts:
  - Existing Plus Project Alternative A – Option 1:
    - Four (4) new intersections will have significant traffic impacts.
    - One (1) new roadway segment will have a significant traffic impact.
  - Existing Plus Project Alternative A – Option 2:
    - Four (4) new intersections will have significant traffic impacts.
    - One (1) new roadway segment will have a significant traffic impact.
  - Existing Plus Project Alternative E:
    - One (1) new intersection will have a significant traffic impact.
    - Two (2) new roadway segments will have significant traffic impacts.

Year 2025 Plus Project Analysis

- LLG proceeded with the volume "build up" methodology which conservatively forecasts Year 2025 traffic volumes by applying an ambient growth rate of 1% per year to existing traffic counts and layering on traffic forecasts from cumulative projects within the area. LLG's analysis identified the following new significant traffic impacts:
  - Year 2025 Plus Project Alternative A – Option 1:
    - Two (2) new intersections will have significant traffic impacts.
    - One (1) new roadway segment will have a significant traffic impact.
  - Year 2025 Plus Project Alternative A – Option 2:
    - Two (2) new intersections will have significant traffic impacts.

- One (1) new roadway segment will have a significant traffic impact.

➢ Year 2025 Plus Project Alternative E:

- Two (2) new roadway segments will have significant traffic impacts

Year 2040 Plus Project Analysis

➢ LLG coordinated with the Shasta Regional Transportation Agency (SRTA) to obtain the most current Year 2040 Shasta County Regional Travel Demand Model (SCRTDF). SRTA provided LLG with Base Model Year 2015 and Buildout Model Year 2040 AM and PM peak hour plots, which were utilized to develop Year 2040 traffic volumes. LLG's analysis identified the following new significant traffic impacts:

➢ Year 2040 Plus Project Alternative A – Option 1:

- Two (2) new intersections will have significant traffic impacts.
- One (1) new roadway segment will have a significant traffic impact.

➢ Year 2040 Plus Project Alternative A – Option 2:

- Two (2) new intersections will have significant traffic impacts.
- Two (2) new roadway segments will have significant traffic impacts.

➢ Year 2040 Plus Project Alternative E:

- Two (2) new roadway segments will have significant traffic impacts.

COMMENTS & ANALYSES

3.1 LLG collected intersection turning movement counts with truck classifications at all twenty-eight (28) intersections analyzed in the Kimley-Horn study on Wednesday, April 10, 2024 and Thursday April 11, 2024, during the AM peak period (7:00 AM – 9:00 AM) and PM peak period (4:00 PM – 7:00 PM). Counts were also collected on Saturday, April 13, 2024, during the Midday peak period (11:00 AM – 1:00 PM) and PM peak period (4:00 PM – 7:00 PM). It should be noted that schools were still in session while the counts were being collected.

Appendix B contains the detailed intersection peak hour traffic count sheets prepared by Counts Unlimited, Inc.

3.2 Based on preliminary review of Kimley-Horn's Existing (Year 2016) Intersection level of service calculations, the following provides a brief summary of our initial findings:

- Synchro 9 Software and HCM 2010 was utilized.
- Peak Hour Factor (PHF) of 0.92 was utilized.
- Heavy Vehicle Percentage (%) of 2% was utilized, which is the default per HCM.
- Based on City of Redding guidelines, the worst-case movement LOS should be reported for two way stop controlled intersections. It appears that some intersections do not show the correct LOS in *Table 6* of the Kimley-Horn TIA Report (i.e. Intersection #7).

3.3 LLG prepared Existing baseline (Year 2024) intersection level of service (LOS) calculations for the twenty-eight (28) intersections Kimley-Horn analyzed, as well as the seven (7) additional intersections. The following provides a brief summary of the universal inputs assumed in the intersection LOS calculations:

- Vistro Version 2022 Software and HCM 7th Edition (most current) was utilized.
- Peak Hour Factors from existing traffic counts were utilized.
- Heavy Vehicle Percentages were based on the existing truck percentages from the traffic counts.
- Base Saturation Flow Rate of 1,710 vehicles per hour per lane (vphpl) was utilized for exclusive left-turn lanes and 1,900 vphpl was utilized for all other lanes.

- Intersection Lost Time was based on HCM (16 seconds for 8 phase and 6 phase signals, 12 seconds for 5-phase and 3 phase signals and 8 seconds for 2-phase signals).
- The worst-case movement LOS for TWSC intersections was reported, per City of Redding Guidelines.

3.4 ***Tables 1*** and ***2*** present the LOS thresholds as defined in the Highway Capacity Manual 7th Edition (HCM 7) for signalized intersections and unsignalized intersections, respectively. ***Table 3*** summarizes the Weekday (Wednesday & Thursday) Existing (Year 2024) peak hour service level calculations for all thirty-five (35) intersections based on existing traffic volumes and current street geometry. As shown in *Table 3*, the following seven (7) intersections are currently operating at adverse service levels during the Weekday (Wednesday & Thursday) AM and/or PM peak hour:

- Intersection #6: Churn Creek Road at S Bonnyview Road
- Intersection #7: Alrose Lane at Churn Creek Road
- Intersection #8: Victor Avenue at Churn Creek Road
- Intersection #9: Rancho Road at Churn Creek Road
- Intersection #27: I-5 SB Ramps at Knighton Road
- Intersection #28: I-5 NB Ramps at Knighton Road
- Intersection #35: Bechelli Lane at Sunnyhill Lane

It should be noted that these seven (7) intersections were not identified as having adverse service levels under Kimley Horn's Existing (Year 2016) traffic conditions.

3.5 A comparison between the Existing (Year 2024) intersection LOS analysis prepared by LLG and the Existing (Year 2016) intersection LOS analysis prepared by Kimley-Horn was conducted. It should be noted that Kimley Horn's study did not analyze a Weekday AM Peak Hour traffic condition or a Saturday Midday Peak Hour traffic condition. ***Tables 4*** and ***5*** present the LOS comparison for applicable intersections for Weekday and Saturday traffic conditions, respectively. LLG's Existing (Year 2024) intersection delay/LOS is higher (worse) at 21 of the 28 intersections when compared to Kimley Horn's Existing (Year 2016) analysis. Furthermore, a review of *Table 5* shows that a comparison of LLG's Saturday Midday LOS against Kimley-Horn's Saturday PM LOS indicate that LLG's Existing (Year 2024) intersection delay/LOS is higher (worse) at 23 of the 28 comparable intersections.

3.6 It should be noted that according to the City of Redding TIA Guidelines, City of Redding General Plan and the Shasta County Circulation Element, the following intersections should have been assessed utilizing the minimum acceptable LOS C:

- Intersection #2: E Bonnyview Road at S Bonnyview Road
- Intersection #3: Bechelli Lane at S Bonnyview Road
- Intersection #6: Churn Creek Road at S Bonnyview Road
- Intersection #29: Churn Creek Road/Pacheco Road at Knighton Road

The Kimley-Horn TIA Report analyzed these four (4) intersections utilizing the minimum acceptable LOS D.

This minimum acceptable LOS discrepancy should be verified with the City of Redding and Shasta County.

3.7 In addition, a comparison between the LLG's Existing (Year 2024) and Kimley-Horn's Existing (Year 2016) intersection total volume was conducted. It should be noted that since Kimley-Horn's traffic study only analyzed a Friday PM Peak Hour and Saturday PM Peak Hour, the Weekday (Wednesday & Thursday) PM Peak Hour volumes prepared by LLG for the twenty-six (26) intersections were compared to the Friday PM Peak Hour volumes prepared by Kimley-Horn. LLG also collected Saturday counts at the twenty-six (26) intersections, the Saturday PM counts at these locations were compared to Kimley-Horn's Saturday PM counts. ***Tables 6*** and *7* summarize the intersection volume comparisons for a Weekday and Saturday, respectively. As shown in *Table 6*, LLG's Wednesday & Thursday PM Peak Hour total intersection volumes were higher than Kimley-Horn's Friday PM Peak Hour volumes at 23 of the 26 intersections (with a range of between 2% to 50% higher).

As shown in *Table 7*, LLG's Saturday PM Peak hour total intersection volumes were higher than Kimley-Horn's Friday PM Peak Hour volumes at 25 of the 26 intersections (with a range of between 6% to 91% higher).

Additionally, a comparison of LLG's Existing (Year 2024) Saturday Midday Peak Hour counts to Kimley-Horn's Existing (Year 2016) Saturday PM Peak Hour counts was prepared and presented in ***Table 8***. A review of *Table 8* shows that LLG's Saturday Midday Peak Hour total intersection volumes are all higher than Kimley-Horn's Saturday PM Peak Hour volumes, except for the intersection of Redding Rancheria Road at Canyon Road (#15) (with a range between 9% to 117% higher).

3.8 ***Tables 9*** and ***10*** summarize the daily roadway segment volume comparisons for a Weekday and Saturday, respectively. Based on preliminary review of the daily roadway segment counts from *Appendix A* of the Kimley-Horn Report, it appears that these daily traffic counts were not utilized in the Roadway Segment levels of service calculations, as peak-hour volumes from adjacent intersections were utilized instead. However, since LLG collected daily roadway segment counts on a Thursday and Saturday in April 2024, a comparison to the daily roadway segment counts presented in the Kimley Horn Report appendices that were collected in July/September 2016, was prepared. As shown in *Table 9*, LLG's Thursday daily roadway segment volumes are higher (with a range of between 3% to 72% higher) than Kimley-Horn's Friday daily roadway segment volumes, with the exception of Roadway Segments #2 and #9. *Appendix B* contains the detailed roadway segment traffic count sheets prepared by Counts Unlimited, Inc.

As shown in *Table 10*, LLG's Saturday daily roadway segment volumes are both lower and higher (with a range of between 1% to 35% higher) that Kimley-Horn's Saturday roadway segment volumes, with 6 of the 11 roadway segments being higher than Kimley Horn's volumes.

3.9 ***Table 11*** summarizes the Saturday Existing (Year 2024) peak hour service level calculations for 35 intersections. As shown in *Table 11*, all intersections are currently operating at an acceptable service level during the Saturday Midday and PM peak hour, except for Intersection #6.

Appendix C presents the intersection level of service calculations for Existing Traffic Conditions.

3.10 Based on preliminary review of Kimley-Horn's Existing (Year 2016) Roadway Segment level of service calculations, the following provides a brief summary of our initial findings:

- Highway Capacity Software (HCS) was utilized.
- Method 1 for analyzing roadway segments based on the City of Redding's TIA Guidelines was utilized for all roadway segments. Roadway Segments #1 through #8 and Roadway Segments #12 through #14 were assumed to be two-lane highway and Roadway Segments #9 through #11 were assumed to be multi-lane highway.

3.11 LLG prepared Existing baseline (Year 2024) intersection level of service (LOS) calculations for the fourteen (14) Roadway Segment analyzed. Two (2) methods were utilized based on the requirements identified in the City of Redding TIA

Guidelines, as well as consistency with Kimley-Horn Study and other studies in the area. The following provides a brief summary of the methodology utilized for the Roadway Segment LOS calculations:

- Method 1 for analyzing roadway segments based on the City of Redding's TIA Guidelines and the Highway Capacity Software (HCS) was utilized for Roadway Segments #9 through #11, which is consistent with the Kimley-Horn study.
- Based on review of Roadway Segments #1 through #8 and Roadway Segments #12 through #14, Method 2 for analyzing roadway segments which is based on peak hour volumes, was utilized. This method is consistent with other studies in the area prepared by Omni-Means.

3.12 ***Table 12*** summarizes the Weekday Existing (Year 2024) roadway segment service level calculations for all fourteen (14) roadway segments based on existing traffic volumes and current street geometry. As shown in *Table 12*, the following three (3) roadway segments are currently operating at adverse service levels during the Weekday AM and/or PM peak hour:

- Roadway Segment #2: Churn Creek Road, east of Alrose Lane
- Roadway Segment #4: Canyon Road, south of Redding Rancheria Rd
- Roadway Segment #13: Knighton Road, between I-15 NB Ramps and Churn Creek Road

It should be noted that these roadway segments were not identified as having adverse service levels under Kimley-Horn's Existing (Year 2016) traffic conditions.

Appendix D presents the roadway segment HCS level of service calculations for Existing Traffic Conditions for roadway segments #9 through #11.

3.13 ***Table 13*** summarizes the Saturday Existing (Year 2024) service level calculations for all fourteen (14) roadway segments. As shown in *Table 13*, all roadway segments are currently operating at an acceptable service level during the Saturday Midday and PM peak hour.

Appendix D presents the roadway segment HCS level of service calculations for Existing Traffic Conditions for roadway segments #9 through #11.

3.14 A comparison between the Existing (Year 2024) roadway segment LOS analysis prepared by LLG and the Existing (Year 2016) roadway segment LOS analysis prepared by Kimley-Horn was conducted. It should be noted that

Kimley-Horn's study did not analyze a Weekday AM Peak Hour traffic condition or a Saturday Midday Peak Hour traffic condition. ***Tables 14*** and ***15*** present the LOS comparison for applicable roadway segments for Weekday and Saturday traffic conditions, respectively. In general, LLG's Existing (Year 2024) roadway segment LOS is worse at 3 of the 14 comparable roadway segments when compared to Kimley-Horn's Existing (Year 2016) analysis. Furthermore, a review of *Table 15* shows that a comparison of LLG's Saturday Midday/PM LOS against Kimley-Horn's Saturday PM LOS show similar results.

3.15 Based on preliminary review of Kimley Horn's Existing (Year 2016) Freeway Mainline and Merge/Diverge level of service calculations, the following provides a brief summary of our initial findings:

- Unknown software was utilized.
- PHF of 0.92 and Truck Percentage of 6% was utilized.

3.16 LLG prepared Existing baseline (Year 2024) Freeway Mainline and Merge/Diverge level of service (LOS) calculations for the twelve (12) mainline segments and eight (8) merge/diverge segments analyzed in the Kimley Horn study. <u>It should be noted that the following four (4) mainline segments and four (4) merge/diverge segments that were not included in the Kimley-Horn study were also analyzed due to the potential of the proposed Project to significantly impact these locations:</u>

<u>Additional Freeway Mainline locations:</u>

- I 5 Northbound, south of Knighton Road
- I 5 Northbound, north of Knighton Road
- I 5 Southbound, north of Knighton Road
- I 5 Southbound, south of Knighton Road

<u>Additional Freeway Merge/Diverge locations:</u>

- I 5 Northbound Off-Ramp to Knighton Road
- I 5 Northbound On Ramp from Knighton Road
- I 5 Southbound Off-Ramp to Knighton Road
- I 5 Southbound On Ramp from Knighton Road

3.17 The following provides a brief summary of the methodology utilized for the Freeway Mainline and Merge/Diverge Segment LOS calculations:

- Highway Capacity Software (HCS 7) was utilized.
- Existing PHF, Existing Ramp Truck Percentage was utilized from the counts and Existing Freeway Truck Percentage was utilized from Caltrans Traffic Census website.

3.18 ***Tables 16*** and ***17*** present the LOS thresholds as defined in the Highway Capacity Manual 7th Edition (HCM 7) for Basic Freeway Segments and Merge/Diverge Freeway Segments, respectively. ***Table 18*** summarizes the Weekday Existing (Year 2024) peak hour service level calculations for all sixteen (16) basic freeway mainline segments. As shown in *Table 18,* all freeway mainline segments currently operate at acceptable service levels.

Appendix E presents the freeway mainline level of service calculations for Existing Traffic Conditions.

3.19 ***Table 19*** summarizes the Saturday Existing (Year 2024) peak hour service level calculations for all sixteen (16) basic freeway mainline segments. As shown in *Table 19*, all freeway mainline segments currently operate at acceptable service levels.

Appendix E presents the freeway mainline level of service calculations for Existing Traffic Conditions.

3.20 ***Table 20*** summarizes the Weekday Existing (Year 2024) peak hour service level calculations for all twelve (12) freeway merge/diverge segments. As shown in *Table 20*, all freeway merge/diverge segments currently operate at acceptable service levels.

Appendix F presents the freeway merge/diverge level of service calculations for Existing Traffic Conditions.

3.21 ***Table 21*** summarizes the Saturday Existing (Year 2024) peak hour service level calculations for all twelve (12) freeway merge/diverge segments. As shown in *Table 21*, all freeway merge/diverge segments currently operate at acceptable service levels.

Appendix F presents the freeway merge/diverge level of service calculations for Existing Traffic Conditions.

3.22 A comparison between the Existing (Year 2024) basic freeway mainline LOS analysis prepared by LLG and the Existing (Year 2016) basic freeway mainline LOS analysis prepared by Kimley-Horn was conducted. It should be noted that

Kimley-Horn's study did not analyze a Weekday AM Peak Hour traffic condition or a Saturday Midday Peak Hour traffic condition. ***Tables 22*** and ***23*** present the LOS comparison for applicable freeway mainline segments for Weekday and Saturday traffic conditions, respectively. LLG's Existing (Year 2024) freeway mainline LOS are similar when compared to Kimley-Horn's Existing (Year 2016) analysis. Furthermore, a review of *Table 23* shows that a comparison of LLG's Saturday Midday/PM LOS against Kimley Horn's Saturday PM LOS show similar results.

3.23 A comparison between the Existing (Year 2024) freeway merge/diverge LOS analysis prepared by LLG and the Existing (Year 2016) freeway merge/diverge LOS analysis prepared by Kimley-Horn was conducted. It should be noted that Kimley-Horn's study did not analyze a Weekday AM Peak Hour traffic condition or a Saturday Midday Peak Hour traffic condition. ***Tables 24*** and ***25*** present the LOS comparison for applicable freeway merge/diverge segments for Weekday and Saturday traffic conditions, respectively. LLG's Existing (Year 2024) Weekday freeway merge/diverge LOS are similar when compared to Kimley-Horn's Existing (Year 2016) analysis. Furthermore, a review of *Table 25* shows that a comparison of LLG's Saturday Midday/PM LOS against Kimley-Horn's Saturday PM LOS show similar results.

3.24 For the purposes of LLG's analyses and comparison to the Kimley-Horn study, LLG analyzed the following Project Alternatives that were provided in the Kimley-Horn study:

Alternative A ("Strawberry Fields Site"): "Consists of a new casino and resort, including an approximately 69,515 SF casino, 250-room hotel, an event/convention center and a retail center, as well as associated parking and infrastructure."

Alternative A – Option 1: North Access only, access to Project Site via South Bonnyview Road/Bechelli Lane.

Alternative A – Option 2: North Access and South Access; access to Project Site via South Bonnyview Road/Bechelli Lane and a new connecting roadway at Smith Road.

Alternative E: "A development at an alternative site located in the City of Anderson, which consists of a new casino and resort, including an approximately 69,515 SF casino, 250-room hotel, an event/convention center and a retail center, as well as associated parking and infrastructure."

Table 26 presents the trip generation rates and forecasts for the proposed Project Alternative A. Weekday PM Peak Hour and Saturday PM Peak Hour trip rates and forecasts were taken directly from the Kimley-Horn study. Since data was unavailable for Weekday AM Peak Hour and Saturday Midday Peak Hour, these trip rates and forecasts were developed based on the *San Manuel Hotel and Casino Expansion TIA prepared by LLG Engineers*. Similarly, ***Table 27*** presents the trip generation rates and forecasts for the proposed Project Alternative E. Consistent with the Kimley-Horn study, with the development of the proposed Project, the existing Win River Casino site is expected to close and be redeveloped into tribal services and housing uses. ***Table 28*** presents the existing win river casino trip adjustments that were accounted for with the development of each Project Alternative.

The following LLG analyses focuses on the proposed **Project Alternative A – Option 1**, **Alternative A – Option 2** and **Alternative E**.

Existing Plus Project Traffic Conditions

The following section of comments presents the Existing Plus Project levels of service calculations for intersections, roadway segments and freeway segments for the aforementioned three (3) project alternatives. It should be noted that the Kimley-Horn study did not analyze an Existing Plus Project traffic scenario. See ***Appendices C*** *through* ***F*** for level of calculation worksheets for intersections, roadway segments and freeway segments.

3.25 ***Tables 29*** and ***30*** summarize the Weekday and Saturday Existing Plus Project Alternative A – Option 1 peak hour service level calculations for all thirty five (35) intersections, respectively. As shown in *Tables 29* and *30*, the proposed Project Alternative A – Option 1 will have a direct significant impact at the following four (4) intersections during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours:

- Intersection #3: Bechelli Lane at S Bonnyview Road
- Intersection #6: Churn Creek Road at S Bonnyview Road
- Intersection #27: I-5 SB Ramps at Knighton Road
- Intersection #28: I-5 NB Ramps at Knighton Road

It should be noted that these four (4) impacted intersections are also identified under Year 2025 and 2040 traffic conditions.

Since the proposed Project Alternative A – Option 1 is anticipated to directly impact four (4) intersections, the following mitigation measures are needed to improve the intersections to an acceptable LOS:

- Intersection #3: Bechelli Lane at S Bonnyview Road: No feasible mitigation.
- Intersection #6: Churn Creek Road at S Bonnyview Road: Modify traffic signal and install a southbound overlap phase.
- Intersection #27: I-5 SB Ramps at Knighton Road: Install a 2 phase traffic signal.
- Intersection #28: I-5 NB Ramps at Knighton Road: Install a 2 phase traffic signal.

Since the proposed Project Alternative A – Option 1 is anticipated to directly impact Intersections #3, #6, #27 and #28, the proposed Project is fully responsible for implementing these potential mitigation measures.

3.26 ***Tables 31*** and ***32*** summarize the Weekday and Saturday Existing Plus Project Alternative A – Option 2 peak hour service level calculations for all thirty five (35) intersections, respectively. As shown in *Tables 31* and *32*, the proposed Project Alternative A – Option 2 will have a direct significant impact at the following four (4) intersections during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours:

- Intersection #3: Bechelli Lane at S Bonnyview Road
- Intersection #6: Churn Creek Road at S Bonnyview Road
- Intersection #27: I-5 SB Ramps at Knighton Road
- Intersection #28: I-5 NB Ramps at Knighton Road

It should be noted that these four (4) impacted intersections are also identified under Year 2025 and 2040 traffic condition.

Since the proposed Project Alternative A – Option 2 is anticipated to directly impact four (4) intersections, the following mitigation measures are needed to improve the intersections to an acceptable LOS:

- Intersection #3: Bechelli Lane at S Bonnyview Road: No feasible mitigation.
- Intersection #6: Churn Creek Road at S Bonnyview Road: *(Same as Existing Plus Project Alternative A – Option 1)*. Modify traffic signal and install a southbound overlap phase.

- Intersection #27: I-5 SB Ramps at Knighton Road: *(Same as Existing Plus Project Alternative A Option 1)*. Install a 2-phase traffic signal.
- Intersection #28: I-5 NB Ramps at Knighton Road: *(Same as Existing Plus Project Alternative A Option 1)*. Install a 2-phase traffic signal.

Since the proposed Project Alternative A – Option 2 is anticipated to directly impact Intersections #3, #6, #27 and #28, the proposed Project is fully responsible for implementing these potential mitigation measures.

3.27 ***Tables 33*** and ***34*** summarize the Weekday and Saturday Existing Plus Project Alternative E peak hour service level calculations for all thirty-five (35) intersections, respectively. As shown in *Tables 33* and *34*, the proposed Project Alternative E will have a direct significant impact at the following one (1) intersection during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours:

- Intersection #18: Oak Street at North Street

It should be noted that this impacted intersection is also identified under Year 2025 and 2040 traffic conditions and is consistent with the Kimley-Horn study.

Since the proposed Project Alternative E is anticipated to directly impact one (1) intersection, the following mitigation measures are needed to improve the intersection to an acceptable LOS:

- Intersection #18: Oak Street at North Street: Install a 2 phase traffic signal.

Since the proposed Project Alternative E is anticipated to directly impact Intersection #18, the proposed Project is fully responsible for implementing these potential mitigation measures.

3.28 ***Tables 35*** and ***36*** summarize the Weekday and Saturday Existing Plus Project Alternative A – Option 1 peak hour service level calculations for all fourteen (14) roadway segments, respectively. As shown in *Tables 35* and *36*, the proposed Project Alternative A – Option 1 will have a direct significant impact at the following one (1) roadway segment during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours:

- Roadway Segment #1: Bechelli Lane, south of S Bonnyview Road

It should be noted that this impacted roadway segment is also identified under Year 2025 traffic conditions and was not identified in the Kimley-Horn study.

3.29 ***Tables 37*** and ***38*** summarize the Weekday and Saturday Existing Plus Project Alternative A – Option 2 peak hour service level calculations for all fourteen (14) roadway segments, respectively. As shown in *Tables 37* and *38*, the proposed Project Alternative A – Option 2 will have a direct significant impact at the following one (1) roadway segment during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours:

- Roadway Segment #1: Bechelli Lane, south of S Bonnyview Road

It should be noted that this impacted roadway segment is also identified under Year 2025 traffic conditions and was not identified in the Kimley-Horn study.

3.30 ***Tables 39*** and ***40*** summarize the Weekday and Saturday Existing Plus Project Alternative E peak hour service level calculations for all fourteen (14) roadway segments, respectively. As shown in *Tables 39* and *40*, the proposed Project Alternative E will have a direct significant impact at the following two (2) roadway segments during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours:

- Roadway Segment #5: North Street, east of Oak Street
- Roadway Segment #7: Oak Street, north of North Street

It should be noted that these two (2) impacted roadway segments are also identified under Year 2025 traffic conditions and were not identified in the Kimley-Horn study.

3.31 ***Tables 41*** and ***42*** summarize the Weekday and Saturday Existing Plus Project Alternative A – Option 1 peak hour service level calculations for all sixteen (16) basic freeway mainline segments, respectively. As shown in *Tables 41* and *42*, the proposed Project Alternative A – Option 1 will not have a direct significant impact at any of the freeway mainline segments during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours.

3.32 ***Tables 43*** and ***44*** summarize the Weekday and Saturday Existing Plus Project Alternative A – Option 2 peak hour service level calculations for all sixteen (16) basic freeway mainline segments, respectively. As shown in *Tables 43* and *44*, the proposed Project Alternative A – Option 2 will not have a direct significant impact at any of the freeway mainline segments during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours.

3.33 ***Tables 45*** and ***46*** summarize the Weekday and Saturday Existing Plus Project Alternative E peak hour service level calculations for all sixteen (16) basic freeway mainline segments, respectively. As shown in *Tables 45* and *46*, the

proposed Project Alternative E will not have a direct significant impact at any of the freeway mainline segments during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours.

3.34 ***Tables 47*** and ***48*** summarize the Weekday and Saturday Existing Plus Project Alternative A – Option 1 peak hour service level calculations for all twelve (12) freeway merge/diverge segments, respectively. As shown in *Tables 47* and *48*, the proposed Project Alternative A – Option 1 will not have a direct significant impact at any of the freeway merge/diverge segments during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours.

3.35 ***Tables 49*** and ***50*** summarize the Weekday and Saturday Existing Plus Project Alternative A – Option 2 peak hour service level calculations for all twelve (12) freeway merge/diverge segments, respectively. As shown in *Tables 49* and *50*, the proposed Project Alternative A – Option 2 will not have a direct significant impact at any of the freeway merge/diverge segments during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours.

3.36 ***Tables 51*** and ***52*** summarize the Weekday and Saturday Existing Plus Project Alternative E peak hour service level calculations for all twelve (12) freeway merge/diverge segments, respectively. As shown in *Tables 51* and *52*, the proposed Project Alternative E will not have a direct significant impact at any of the freeway merge/diverge segments during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours.

Year 2025 Plus Project Traffic Conditions

The following section of comments presents the Year 2025 Plus Project levels of service calculations for intersections, roadway segments and freeway segments for the aforementioned three (3) project alternatives. In order to develop Year 2025 traffic volumes, LLG proceeded with the volume "build-up" methodology which conservatively forecasts Year 2025 traffic volumes by applying an ambient growth rate of 1% per year to existing traffic counts and layering on traffic forecasts from cumulative projects within the area. This is different from the methodology that Kimley-Horn utilized which was by means of interpolation from Year 2040 traffic forecasts from the Shasta County Regional Travel Demand Model (SCRTDF), as well as directly utilizing volumes from the *River Crossing Marketplace Specific Plan Traffic Impact Analysis*.

LLG researched cumulative projects within the study area and a total of three (3) cumulative projects were included in LLG's Year 2025 traffic conditions analyses.

Tables 53 and ***54*** present the location/description and traffic generation forecast for the three (3) cumulative projects, respectively.

See ***Appendices G*** through ***J*** for level of calculation worksheets for intersections, roadway segments and freeway segments.

3.37 ***Tables 55*** and ***56*** summarize the Weekday and Saturday Year 2025 Cumulative Plus Project Alternative A – Option 1 peak hour service level calculations for all thirty-five (35) intersections, respectively. As shown in *Tables 55* and *56*, the proposed Project Alternative A – Option 1 will have a significant impact at the following five (5) intersections during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours:

- Intersection #3: Bechelli Lane at S Bonnyview Road
- Intersection #6: Churn Creek Road at S Bonnyview Road
- Intersection #8: Victor Avenue at Churn Creek Road
- Intersection #27: I-5 SB Ramps at Knighton Road
- Intersection #28: I-5 NB Ramps at Knighton Road

Intersections #3, #6 and #8 were significant traffic impacts that are consistent with the Kimley-Horn Study. Intersections #27 and #28 are new traffic impacts that were not disclosed in the Kimley-Horn Study.

Since the proposed Project Alternative A – Option 1 is anticipated to impact five (5) intersections, the following mitigation measures are needed to improve the intersections to an acceptable LOS:

- <u>Intersection #3: Bechelli Lane at S Bonnyview Road:</u> No feasible mitigation.
- <u>Intersection #6: Churn Creek Road at S Bonnyview Road:</u> *(Same as Existing Plus Project Alternative A – Option 1 & 2).* Modify traffic signal and install a southbound overlap phase.
- <u>Intersection #8: Victor Avenue at Churn Creek Road:</u> Install a 2-phase traffic signal.
- <u>Intersection #27: I-5 SB Ramps at Knighton Road:</u> *(Same as Existing Plus Project Alternative A – Option 1 & 2).* Install a 2 phase traffic signal.
- <u>Intersection #28: I-5 NB Ramps at Knighton Road:</u> *(Same as Existing Plus Project Alternative A – Option 1 & 2).* Install a 2 phase traffic signal.

3.38 ***Table 57*** summarizes the Weekday Year 2025 Cumulative Plus Project Alternative A – Option 1 LOS Comparisons to the Kimley-Horn study for comparable intersections. As shown in *Table 57*, LLG's analyses indicated that there are two (2) additional locations where the proposed Project Alternative A – Option 1 would be significantly impacted and were not identified in the Kimley-Horn study:

- Intersection #27: I-5 SB Ramps at Knighton Road
- Intersection #28: I-5 NB Ramps at Knighton Road

3.39 ***Table 58*** summarizes the Saturday Year 2025 Cumulative Plus Project Alternative A – Option 1 LOS Comparisons to the Kimley-Horn study for comparable intersections. As shown in *Table 57*, LLG's analyses indicated that there are no locations where the proposed Project Alternative A – Option 1 would be significantly impacted and were not identified in the Kimley-Horn study.

3.40 Further review of *Tables 57* and *58* show that there is a discrepancy with the delay/LOS presented in the Kimley-Horn study versus LLG's analyses for Intersections #6 through #9. These discrepancies are attributable to the following:

- Kimley-Horn's study utilized a combination of Synchro and Vissum software, while LLG's analyses utilized the Vistro software throughout all scenarios.
- Kimley-Horn's Year 2025 volumes come from other traffic studies in the area and/or are based on an interpolation from Year 2040 modeled volumes. LLG's Year 2025 volumes were based on applying an ambient growth rate of 1% per year to existing traffic counts and layering on traffic from cumulative projects. LLG's Year 2025 volumes are higher at some intersections (i.e. Intersections #7 through #9) since they include traffic from a total of three (3) cumulative projects.

Although delay/LOS may vary between the two studies, LLG's analyses show significant impacts at an additional two (2) locations.

3.41 ***Tables 59*** and ***60*** summarize the Weekday and Saturday Year 2025 Cumulative Plus Project Alternative A – Option 2 peak hour service level calculations for all thirty-five (35) intersections, respectively. As shown in *Tables 59* and *60*, the proposed Project Alternative A – Option 2 will have a significant impact at the

following five (5) intersections during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours:

- Intersection #3: Bechelli Lane at S Bonnyview Road
- Intersection #6: Churn Creek Road at S Bonnyview Road
- Intersection #8: Victor Avenue at Churn Creek Road
- Intersection #27: I-5 SB Ramps at Knighton Road
- Intersection #28: I-5 NB Ramps at Knighton Road

Intersections #3, #6 and #8 were significant traffic impacts that are consistent with the Kimley-Horn Study. Intersections #27 and #28 are new traffic impacts that were not disclosed in the Kimley-Horn Study.

Since the proposed Project Alternative A – Option 2 is anticipated to impact five (5) intersections, the following mitigation measures are needed to improve the intersections to an acceptable LOS:

- Intersection #3: Bechelli Lane at S Bonnyview Road: No feasible mitigation.
- Intersection #6: Churn Creek Road at S Bonnyview Road: *(Same as Existing Plus Project Alternative A Option 1 & 2).* Modify traffic signal and install a southbound overlap phase.
- Intersection #8: Victor Avenue at Churn Creek Road: Install a 2-phase traffic signal.
- Intersection #27: I-5 SB Ramps at Knighton Road: *(Same as Existing Plus Project Alternative A Option 1 & 2).* Install a 2 phase traffic signal.
- Intersection #28: I-5 NB Ramps at Knighton Road: *(Same as Existing Plus Project Alternative A Option 1 & 2).* Install a 2 phase traffic signal.

3.42 ***Table 61*** summarizes the Weekday Year 2025 Cumulative Plus Project Alternative A – Option 2 LOS Comparisons to the Kimley-Horn study for comparable intersections. As shown in *Table 61*, LLG's analyses indicated that there are two (2) additional locations where the proposed Project Alternative A – Option 2 would be significantly impacted (that were determined to be less than significant in the Kimley-Horn study):

- Intersection #27: I-5 SB Ramps at Knighton Road
- Intersection #28: I-5 NB Ramps at Knighton Road

3.43 ***Table 62*** summarizes the Saturday Year 2025 Cumulative Plus Project Alternative A – Option 2 LOS Comparisons to the Kimley-Horn study for comparable intersections. As shown in *Table 62*, LLG's analyses indicated that there are no additional locations where the proposed Project Alternative A – Option 2 would be significantly impacted.

3.44 Further review of *Tables 61* and *62* show that there is a discrepancy with the delay/LOS presented in the Kimley-Horn study versus LLG's analyses for Intersections #6 through #9. These discrepancies are attributable to the following:

- Kimley-Horn's study utilized Synchro and/or Vissum software, while LLG's analyses utilized the Vistro software throughout all scenarios.
- Kimley-Horn's Year 2025 volumes come from other traffic studies in the area and/or are based on an interpolation from Year 2040 modeled volumes. LLG's Year 2025 volumes were based on applying an ambient growth rate of 1% per year to existing traffic counts and layering on traffic from cumulative projects. LLG's Year 2025 volumes are higher at some intersections (i.e. Intersections #7 through #9) since they include traffic from a total of three (3) cumulative projects.

Although delay/LOS may vary between the two studies, LLG's analyses show significant impacts at an additional two (2) locations.

3.45 ***Tables 63*** and ***64*** summarize the Weekday and Saturday Year 2025 Cumulative Plus Project Alternative E peak hour service level calculations for all thirty-five (35) intersections, respectively. As shown in *Tables 63* and *64*, the proposed Project Alternative E will have a significant impact at the following one (1) intersection during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours:

- Intersection #18: Oak Street at North Street

Since the proposed Project Alternative E is to impact one (1) intersection, the following mitigation measures are needed to improve the intersection to an acceptable LOS:

- Intersection #18: Oak Street at North Street: *(Same as Existing Plus Project Alternative E mitigation)* Install a 2-phase traffic signal.

3.46 ***Table 65*** summarizes the Weekday Year 2025 Cumulative Plus Project Alternative E LOS Comparisons to the Kimley-Horn study for comparable

intersections. As shown in *Table 65*, LLG's analyses indicated that there are no additional locations where the proposed Project Alternative E would be significantly impacted.

3.47 ***Table 66*** summarizes the Saturday Year 2025 Cumulative Plus Project Alternative E LOS Comparisons to the Kimley-Horn study for comparable intersections. As shown in *Table 66*, LLG's analyses indicated that there are no additional locations where the proposed Project Alternative E would be significantly impacted.

3.48 ***Tables 67*** and ***68*** summarize the Weekday and Saturday Year 2025 Cumulative Plus Project Alternative A – Option 1 peak hour service level calculations for all fourteen (14) roadway segments, respectively. As shown in *Tables 67* and *68*, the proposed Project Alternative A – Option 1 will have a significant impact at the following one (1) roadway segment during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours:

- Roadway Segment #1: Bechelli Lane, south of S Bonnyview Road

It should be noted that this impacted roadway segment was determined to be less than significant in the Kimley-Horn study.

3.49 ***Table 69*** summarizes the Weekday Year 2025 Cumulative Plus Project Alternative A – Option 1 LOS Comparisons to the Kimley-Horn study for comparable roadway segments. As shown in *Table 69*, LLG's analyses indicated that there is one (1) additional location where the proposed Project Alternative A – Option 1 would be significantly impacted:

- Roadway Segment #1: Bechelli Lane, south of S Bonnyview Road

3.50 ***Table 70*** summarizes the Saturday Year 2025 Cumulative Plus Project Alternative A – Option 1 LOS Comparisons to the Kimley-Horn study for comparable roadway segments. As shown in *Table 70*, LLG's analyses indicated that there is one (1) additional location where the proposed Project Alternative A – Option 1 would be significantly impacted:

- Roadway Segment #1: Bechelli Lane, south of S Bonnyview Road

3.51 ***Tables 71*** and ***72*** summarize the Weekday and Saturday Year 2025 Cumulative Plus Project Alternative A – Option 2 peak hour service level calculations for all fourteen (14) roadway segments, respectively. As shown in *Tables 71* and *72*, the proposed Project Alternative A – Option 2 will have a significant impact at the following one (1) roadway segment during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours:

- Roadway Segment #1: Bechelli Lane, south of S Bonnyview Road

It should be noted that this impacted roadway segment was determined to be less than significant in the Kimley-Horn study.

3.52 ***Table 73*** summarizes the Weekday Year 2025 Cumulative Plus Project Alternative A – Option 2 LOS Comparisons to the Kimley-Horn study for comparable roadway segments. As shown in *Table 73*, LLG's analyses indicated that there is one (1) additional location where the proposed Project Alternative A – Option 2 would be significantly impacted:

- Roadway Segment #1: Bechelli Lane, south of S Bonnyview Road

3.53 ***Table 74*** summarizes the Saturday Year 2025 Cumulative Plus Project Alternative A – Option 2 LOS Comparisons to the Kimley-Horn study for comparable roadway segments. As shown in *Table 74*, LLG's analyses indicated that there is one (1) additional location where the proposed Project Alternative A – Option 2 would be significantly impacted:

- Roadway Segment #1: Bechelli Lane, south of S Bonnyview Road

3.54 ***Tables 75*** and ***76*** summarize the Weekday and Saturday Year 2025 Cumulative Plus Project Alternative E peak hour service level calculations for all fourteen (14) roadway segments, respectively. As shown in *Tables 75* and *76*, the proposed Project Alternative E will have a significant impact at the following two (2) roadway segments during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours:

- Roadway Segment #5: North Street, east of Oak Street
- Roadway Segment #7: Oak Street, north of North Street

It should be noted that these impacted roadway segments were determined to be less than significant in the Kimley-Horn study.

3.55 ***Table 77*** summarizes the Weekday Year 2025 Cumulative Plus Project Alternative E LOS Comparisons to the Kimley-Horn study for comparable roadway segments. As shown in *Table 77*, LLG's analyses indicated that there are two (2) additional locations where the proposed Project Alternative E would be significantly impacted:

- Roadway Segment #5: North Street, east of Oak Street
- Roadway Segment #7: Oak Street, north of North Street

3.56 ***Table 78*** summarizes the Saturday Year 2025 Cumulative Plus Project Alternative E LOS Comparisons to the Kimley-Horn study for comparable

roadway segments. As shown in *Table 78*, LLG's analyses indicated that there is one (1) additional location where the proposed Project Alternative E would be significantly impacted:

- Roadway Segment #7: Oak Street, north of North Street

3.57 ***Tables 79*** and ***80*** summarize the Weekday and Saturday Year 2025 Cumulative Plus Project Alternative A – Option 1 peak hour service level calculations for all sixteen (16) basic freeway mainline segments, respectively. As shown in *Tables 79* and *80*, the proposed Project Alternative A – Option 1 will not have a significant impact at any of the freeway mainline segments during the Weekday AM, Weekday PM, Saturday Midday or Saturday PM Peak Hours.

3.58 ***Tables 81*** and ***82*** summarize the Weekday and Saturday Year 2025 Cumulative Plus Project Alternative A – Option 1 LOS Comparisons to the Kimley-Horn study for comparable freeway mainline segments, respectively. As shown in *Tables 81* and *82*, LLG's analyses indicated that there are no additional impacts when compared to the freeway segments analyzed in the Kimley-Horn study.

3.59 ***Tables 83*** and ***84*** summarize the Weekday and Saturday Year 2025 Cumulative Plus Project Alternative A – Option 2 peak hour service level calculations for all sixteen (16) basic freeway mainline segments, respectively. As shown in *Tables 83* and *84*, the proposed Project Alternative A – Option 2 will not have a significant impact at any of the freeway mainline segments during the Weekday AM, Weekday PM, Saturday Midday or Saturday PM Peak Hours.

3.60 ***Tables 85*** and ***86*** summarize the Weekday and Saturday Year 2025 Cumulative Plus Project Alternative A – Option 2 LOS Comparisons to the Kimley-Horn study for comparable freeway mainline segments, respectively. As shown in *Tables 85* and *86*, LLG's analyses indicated that there are no additional impacts when compared to the freeway segments analyzed in the Kimley-Horn study.

3.61 ***Tables 87*** and ***88*** summarize the Weekday and Saturday Year 2025 Cumulative Plus Project Alternative E peak hour service level calculations for all sixteen (16) basic freeway mainline segments, respectively. As shown in *Tables 87* and *88*, the proposed Project Alternative E will not have a significant impact at any of the freeway mainline segments during the Weekday AM, Weekday PM, Saturday Midday or Saturday PM Peak Hours.

3.62 ***Tables 89*** and ***90*** summarize the Weekday and Saturday Year 2025 Cumulative Plus Project Alternative E LOS Comparisons to the Kimley-Horn study for comparable freeway mainline segments, respectively. As shown in *Tables 89*

and *90*, LLG's analyses indicated that there are no additional impacts when compared to the freeway segments analyzed in the Kimley-Horn study.

3.63 ***Tables 91*** and ***92*** summarize the Weekday and Saturday Year 2025 Cumulative Plus Project Alternative A – Option 1 peak hour service level calculations for all twelve (12) freeway merge/diverge segments, respectively. As shown in *Tables 91* and *92*, the proposed Project Alternative A – Option 1 will not have a significant impact at any of the freeway merge/diverge segments during the Weekday AM, Weekday PM, Saturday Midday or Saturday PM Peak Hours.

3.64 ***Tables 93*** and ***94*** summarize the Weekday and Saturday Year 2025 Cumulative Plus Project Alternative A – Option 1 LOS Comparisons to the Kimley-Horn study for comparable freeway merge/diverge segments, respectively. As shown in *Tables 93* and *94*, LLG's analyses indicated that there are no additional impacts when compared to the freeway segments analyzed in the Kimley-Horn study.

3.65 ***Tables 95*** and ***96*** summarize the Weekday and Saturday Year 2025 Cumulative Plus Project Alternative A – Option 2 peak hour service level calculations for all twelve (12) freeway merge/diverge segments, respectively. As shown in *Tables 95* and *96*, the proposed Project Alternative A – Option 2 will not have a significant impact at any of the freeway merge/diverge segments during the Weekday AM, Weekday PM, Saturday Midday or Saturday PM Peak Hours.

3.66 ***Tables 97*** and ***98*** summarize the Weekday and Saturday Year 2025 Cumulative Plus Project Alternative A – Option 2 LOS Comparisons to the Kimley-Horn study for comparable freeway merge/diverge segments, respectively. As shown in *Tables 97* and *98*, LLG's analyses indicated that there are no additional impacts when compared to the freeway segments analyzed in the Kimley-Horn study.

3.67 ***Tables 99*** and ***100*** summarize the Weekday and Saturday Year 2025 Cumulative Plus Project Alternative E peak hour service level calculations for all twelve (12) freeway merge/diverge segments, respectively. As shown in *Tables 99* and *100*, the proposed Project Alternative E will not have a significant impact at any of the freeway merge/diverge segments during the Weekday AM, Weekday PM, Saturday Midday or Saturday PM Peak Hours.

3.68 ***Tables 101*** and ***102*** summarize the Weekday and Saturday Year 2025 Cumulative Plus Project Alternative E LOS Comparisons to the Kimley-Horn study for comparable freeway merge/diverge segments, respectively. As shown in *Tables 101* and *102*, LLG's analyses indicated that there are no additional

impacts when compared to the freeway segments analyzed in the Kimley-Horn study.

Year 2040 Plus Project Traffic Conditions

The following section of comments presents the Year 2040 Plus Project levels of service calculations for intersections, roadway segments and freeway segments for the aforementioned three (3) project alternatives. In order to develop Year 2040 traffic volumes, LLG coordinated with the Shasta Regional Transportation Agency (SRTA) to obtain the most current Year 2040 Shasta County Regional Travel Demand Model (SCRTDF). SRTA provided LLG with Base Model Year 2015 and Buildout Model Year 2040 AM and PM peak hour plots. The base year turning movement counts for each intersection must be converted to approach and departure volumes for each leg of the intersection. Once the base counts are in this format, the difference between the Buildout model and base model are then added to the base year counts for each corresponding approach and departure volume. This step provides the adjusted volumes that will be used to determine the Buildout turning movement volumes. The next process in the forecasting of future turning volumes applies the B turn methodology. The B turn methodology is generally described in the "National Cooperative Highway Research Program Report (NCHRP) 255: Highway Traffic Data for Urbanized Area Project Planning and Design", Chapter 8. The B turn method uses the base year turning percentages (from traffic counts) and proceeds through an iterative computational technique to produce a final set of future year turning volumes. The computations involve alternatively balancing the rows (approaches) and the columns (departures) of a turning movement matrix until an acceptable convergence is obtained. Future year link volumes are fixed using this method and the turning movements are adjusted to match. The results must be checked for reasonableness and manual adjustments are sometimes necessary. Year 2040 turning movement volumes were post-processed against Year 2025 volumes and adjusted accordingly. ***Appendix K*** presents the Year 2040 Model Post-Processing worksheets.

This is different from the methodology that Kimley-Horn utilized which was by means of directly utilizing volumes from the *River Crossing Marketplace Specific Plan Traffic Impact Analysis*, as well as utilizing the SCRTDF.

See ***Appendices L*** through ***O*** for level of calculation worksheets for intersections, roadway segments and freeway segments.

3.69 ***Tables 103*** and ***104*** summarize the Weekday and Saturday Year 2040 Buildout Plus Project Alternative A – Option 1 peak hour service level calculations for all thirty-five (35) intersections, respectively. As shown in *Tables 103* and *104*,

the proposed Project Alternative A – Option 1 will have a significant impact at the following six (6) intersections during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours:

- Intersection #3: Bechelli Lane at S Bonnyview Road
- Intersection #6: Churn Creek Road at S Bonnyview Road
- Intersection #8: Victor Avenue at Churn Creek Road
- Intersection #9: Rancho Road at Churn Creek Road
- Intersection #27: I-5 SB Ramps at Knighton Road
- Intersection #28: I-5 NB Ramps at Knighton Road

It should be noted that four (4) of the six (6) intersections listed above were traffic impacts that are consistent with the Kimley-Horn study. Intersections #27 and #28 are new traffic impacts that were not disclosed in the Kimley-Horn Study.

Since the proposed Project Alternative A – Option 1 is anticipated to impact six (6) intersections, the following mitigation measures are needed to improve the intersections to an acceptable LOS, which are all consistent with the improvements identified under Year 2025 Buildout Plus Project traffic conditions:

- Intersection #3: Bechelli Lane at S Bonnyview Road: No feasible mitigation.
- Intersection #6: Churn Creek Road at S Bonnyview Road: *(Same as Existing Plus Project Alternative A – Option 1 & 2).* Modify traffic signal and install a southbound overlap phase.
- Intersection #8: Victor Avenue at Churn Creek Road: Install a 2-phase traffic signal.
- Intersection #9: Victor Avenue at Churn Creek Road: Install a traffic signal. Construct a southbound left-turn lane. (This mitigation measure is new and not identified in the Kimley-Horn study.)
- Intersection #27: I-5 SB Ramps at Knighton Road: *(Same as Existing Plus Project Alternative A – Option 1 & 2).* Install a 2 phase traffic signal. (This mitigation measure is new and not identified in the Kimley-Horn study.)
- Intersection #28: I-5 NB Ramps at Knighton Road: *(Same as Existing Plus Project Alternative A – Option 1 & 2).* Install a 2 phase traffic

signal. (This mitigation measure is new and not identified in the Kimley-Horn study.)

3.70 ***Table 105*** summarizes the Weekday Year 2040 Buildout Plus Project Alternative A – Option 1 LOS Comparisons to the Kimley-Horn study for comparable intersections. As shown in *Table 105*, LLG's analyses indicated that there are two (2) additional impacted locations that are new when compared to the Kimley-Horn study.

3.71 ***Table 106*** summarizes the Saturday Year 2040 Buildout Plus Project Alternative A – Option 1 LOS Comparisons to the Kimley-Horn study for comparable intersections. As shown in *Table 106*, LLG's analyses indicated that the impacted locations are similar when compared to the Kimley-Horn study.

3.72 Further review of *Tables 105* and *106* show that there is a discrepancy with the delay/LOS presented in the Kimley-Horn study versus LLG's analyses for Intersections #6 through #9. These discrepancies are attributable to the following:

- Kimley-Horn's study utilized a combination of Synchro and Vissum software, while LLG's analyses utilized the Vistro software throughout all scenarios.
- Kimley-Horn's Year 2040 volumes potentially didn't include the same cumulative projects analyzed. LLG's Year 2040 volumes come from the most current Year 2040 Shasta County Regional Travel Demand Model (SCRTDF) and post-processed against Year 2025 Cumulative traffic volumes.

Although delay/LOS may vary between the two studies, LLG's analyses show significant impacts at two additional intersections when compared to the Kimley-Horn's study intersections.

3.73 ***Tables 107*** and ***108*** summarize the Weekday and Saturday Year 2040 Buildout Plus Project Alternative A – Option 2 peak hour service level calculations for all thirty-five (35) intersections, respectively. As shown in *Tables 107* and *108*, the proposed Project Alternative A – Option 2 will have a significant impact at the following six (6) intersections during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours:

- Intersection #3: Bechelli Lane at S Bonnyview Road
- Intersection #6: Churn Creek Road at S Bonnyview Road
- Intersection #8: Victor Avenue at Churn Creek Road

- Intersection #9: Rancho Road at Churn Creek Road
- Intersection #27: I-5 Southbound Ramps at Knighton Road
- Intersection #28: I-5 Northbound Ramps at Knighton Road

Intersections #3, #6, #8 and #9 were significant traffic impacts that are consistent with the Kimley-Horn Study. Intersections #27 and #28 are new traffic impacts that were not analyzed in the Kimley-Horn study.

Since the proposed Project Alternative A – Option 2 is anticipated to impact six (6) intersections, the following mitigation measures are needed to improve the intersections to an acceptable LOS, which are all consistent with the improvements identified under Year 2025 Buildout Plus Project traffic conditions:

- Intersection #3: Bechelli Lane at S Bonnyview Road: No feasible mitigation.
- Intersection #6: Churn Creek Road at S Bonnyview Road: *(Same as Existing Plus Project Alternative A – Option 1 & 2).* Modify traffic signal and install a southbound overlap phase.
- Intersection #8: Victor Avenue at Churn Creek Road: Install a 2-phase traffic signal.
- Intersection #9: Victor Avenue at Churn Creek Road: Install a traffic signal. Construct a southbound left-turn lane. (This mitigation measure is new and not identified in the Kimley-Horn study.)
- Intersection #27: I-5 SB Ramps at Knighton Road: *(Same as Existing Plus Project Alternative A – Option 1 & 2).* Install a 2 phase traffic signal. (This mitigation measure is new and not identified in the Kimley-Horn study.)
- Intersection #28: I-5 NB Ramps at Knighton Road: *(Same as Existing Plus Project Alternative A – Option 1 & 2).* Install a 2 phase traffic signal. (This mitigation measure is new and not identified in the Kimley-Horn study.)

3.74 ***Table 109*** summarizes the Weekday Year 2040 Buildout Plus Project Alternative A – Option 2 LOS Comparisons to the Kimley-Horn study for comparable intersections. As shown in *Table 109*, LLG's analyses indicated that the impacted locations are the same when compared to the Kimley-Horn study.

In addition, the following two (2) intersections that were not analyzed in the Kimley-Horn study are significantly impacted under Weekday Year 2040 Buildout Plus Project Alternative A – Option 2 traffic conditions:

- Intersection #27: I-5 Southbound Ramps at Knighton Road
- Intersection #28: I-5 Northbound Ramps at Knighton Road

3.75 ***Table 110*** summarizes the Saturday Year 2040 Buildout Plus Project Alternative A – Option 2 LOS Comparisons to the Kimley-Horn study for comparable intersections. As shown in *Table 110*, LLG's analyses indicated that the impacted locations are similar when compared to the Kimley-Horn study.

3.76 Further review of *Tables 109* and *110* show that there is a discrepancy with the delay/LOS presented in the Kimley-Horn study versus LLG's analyses for Intersections #6 through #9. These discrepancies are attributable to the following:

- Kimley-Horn's study utilized a combination of Synchro and Vissum software, while LLG's analyses utilized the Vistro software throughout all scenarios.
- Kimley-Horn's Year 2040 volumes potentially didn't include the same cumulative projects analyzed. LLG's Year 2040 volumes come from the most current Year 2040 Shasta County Regional Travel Demand Model (SCRTDF) and post-processed against Year 2025 Cumulative traffic volumes.

Although delay/LOS may vary between the two studies, LLG's analyses show significant impacts at two additional intersections when compared to the Kimley-Horn's study intersections.

3.77 ***Tables 111*** and ***112*** summarize the Weekday and Saturday Year 2040 Buildout Plus Project Alternative E peak hour service level calculations for all thirty-five (35) intersections, respectively. As shown in *Tables 111* and *112*, the proposed Project Alternative E will have a significant impact at the following three (3) intersections during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours:

- Intersection #18: Oak Street at North Street
- Intersection #19: I-5 Southbound Off-Ramp at North Street
- Intersection #20: McMurray Drive/I-5 Northbound On-Ramp at North Street

Since the proposed Project Alternative E is anticipated to impact three (3) intersections, the following potential mitigation measures are needed to improve the intersection to an acceptable LOS:

- Intersection #18: Oak Street at North Street: *(Same as Year 2025 Plus Project Alternative E mitigation)* Consistent with the Kimley-Horn Study, install a 2 phase traffic signal.
- Intersection #19: I-5 Southbound Off-Ramp at North Street: Consistent with the Kimley-Horn Study, install a 2 phas traffic signal.
- Intersection #20: McMurray Drive/I-5 Northbound On-Ramp at North Street: Consistent with the Kimley-Horn Study, install a2 phas traffic signal.

3.78 ***Table 113*** summarizes the Weekday Year 2040 Buildout Plus Project Alternative E LOS Comparisons to the Kimley-Horn study for comparable intersections.

3.79 ***Table 114*** summarizes the Saturday Year 2040 Buildout Plus Project Alternative E LOS Comparisons to the Kimley-Horn study for comparable intersections.

3.80 ***Tables 115*** and ***116*** summarize the Weekday and Saturday Year 2040 Buildout Plus Project Alternative A – Option 1 peak hour service level calculations for all fourteen (14) roadway segments, respectively. As shown in *Tables 115* and *116,* the proposed Project Alternative A – Option 1 will have a significant impact at the following one (1) roadway segment during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours:

- Roadway Segment #1: Bechelli Lane, south of S Bonnyview Road

3.81 ***Table 117*** summarizes the Weekday Year 2040 Buildout Plus Project Alternative A – Option 1 LOS Comparisons to the Kimley-Horn study for comparable roadway segments. As shown in *Table 117*, LLG's analyses indicated that there is one (1) additional location where the proposed Project Alternative A – Option 1 would be significantly impacted:

- Roadway Segment #1: Bechelli Lane, south of S Bonnyview Road

3.82 ***Table 118*** summarizes the Saturday Year 2040 Buildout Plus Project Alternative A – Option 1 LOS Comparisons to the Kimley-Horn study for comparable roadway segments. As shown in *Table 118*, LLG's analyses indicated that there is one (1) additional location where the proposed Project Alternative A – Option 1 would be significantly impacted:

- Roadway Segment #1: Bechelli Lane, south of S Bonnyview Road

3.83 ***Tables 119*** and ***120*** summarize the Weekday and Saturday Year 2040 Buildout Plus Project Alternative A – Option 2 peak hour service level calculations for all fourteen (14) roadway segments, respectively. As shown in *Tables 119* and *120*, the proposed Project Alternative A – Option 2 will have a significant impact at the following two (2) roadway segments during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours:

- Roadway Segment #1: Bechelli Lane, south of S Bonnyview Road
- Roadway Segment #12: Knighton Road, between I-5 SB Ramps and I-5 NB Ramps

3.84 ***Table 121*** summarizes the Weekday Year 2040 Buildout Plus Project Alternative A – Option 2 LOS Comparisons to the Kimley-Horn study for comparable roadway segments. As shown in *Table 121*, LLG's analyses indicated that there are two (2) additional locations where the proposed Project Alternative A – Option 2 would be significantly impacted:

- Roadway Segment #1: Bechelli Lane, south of S Bonnyview Road
- Roadway Segment #12: Knighton Road, between I-5 SB Ramps and I-5 NB Ramps

3.85 ***Table 122*** summarizes the Saturday Year 2040 Buildout Plus Project Alternative A – Option 2 LOS Comparisons to the Kimley-Horn study for comparable roadway segments. As shown in *Table 122*, LLG's analyses indicated that there is one (1) additional location where the proposed Project Alternative A – Option 2 would be significantly impacted:

- Roadway Segment #1: Bechelli Lane, south of S Bonnyview Road

3.86 ***Tables 123*** and ***124*** summarize the Weekday and Saturday Year 2040 Buildout Plus Project Alternative E peak hour service level calculations for all fourteen (14) roadway segments, respectively. As shown in *Tables 123* and *124*, the proposed Project Alternative E will have a significant impact at the following two (2) roadway segments during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours:

- Roadway Segment #5: North Street, east of Oak Street
- Roadway Segment #7: Oak Street, north of North Street

3.87 ***Table 125*** summarizes the Weekday Year 2040 Buildout Plus Project Alternative E LOS Comparisons to the Kimley-Horn study for comparable

roadway segments. As shown in *Table 125*, LLG's analyses indicated that there are two (2) additional locations where the proposed Project Alternative E would be significantly impacted:

- Roadway Segment #5: North Street, east of Oak Street
- Roadway Segment #7: Oak Street, north of North Street

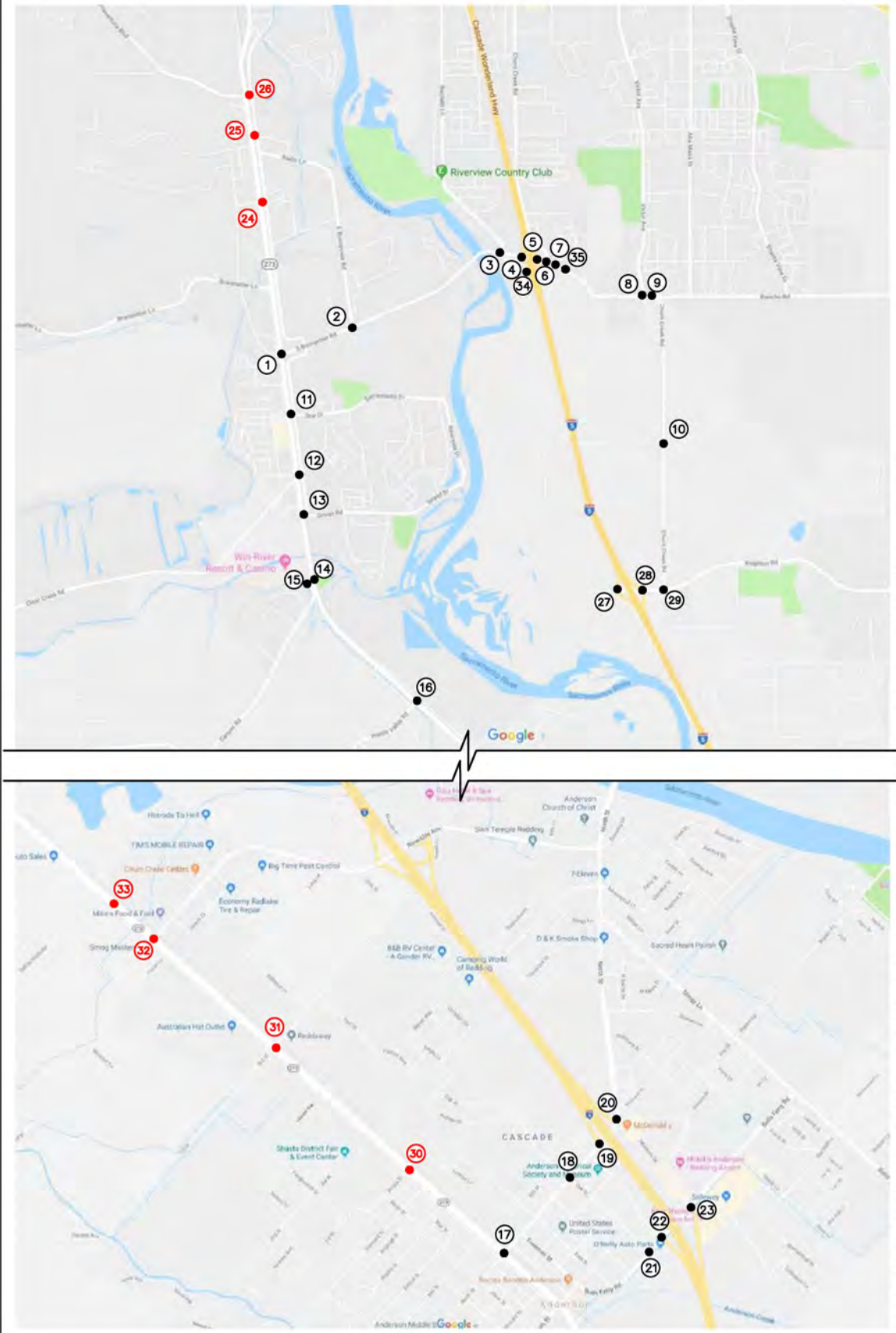
3.88 ***Table 126*** summarizes the Saturday Year 2040 Buildout Plus Project Alternative E LOS Comparisons to the Kimley-Horn study for comparable roadway segments. As shown in *Table 126*, LLG's analyses indicated that there are two (2) additional locations where the proposed Project Alternative E would be significantly impacted:

- Roadway Segment #5: North Street, east of Oak Street
- Roadway Segment #7: Oak Street, north of North Street

3.89 It should be noted that the following Year 2040 freeway mainline and merge/diverge analyses include the freeway planned improvements of three (3) mainline lanes in each direction south of S Bonnyview Road to Balls Ferry Road. These planned improvements are consistent with the freeway planned improvements identified in the Kimley-Horn Study.

Tables 127 through ***150*** summarize the Weekday and Saturday Year 2040 Buildout Plus Project Alternative A – Option 1, Project Alternative A – Option 2 and Project Alternative E peak hour service level calculations and comparisons for all sixteen (16) basic freeway mainline segments and twelve (12) freeway merge/diverge segments. In summary, the proposed Project Alternative A – Option 1, Project Alternative A – Option 2 and Project Alternative E will not have a significant impact at any of the freeway mainline segments and merge/diverge segments during the Weekday AM, Weekday PM, Saturday Midday and/or Saturday PM Peak Hours. These findings are consistent with the Kimley-Horn study.

* * * * * * * * * * *



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SOURCE: GOOGLE

KEY

(#) = STUDY INTERSECTIONS ANALYZED BY KIMLEY-HORN & LLG

(#) = ADDITIONAL STUDY INTERSECTIONS ANALYZED BY LLG ONLY

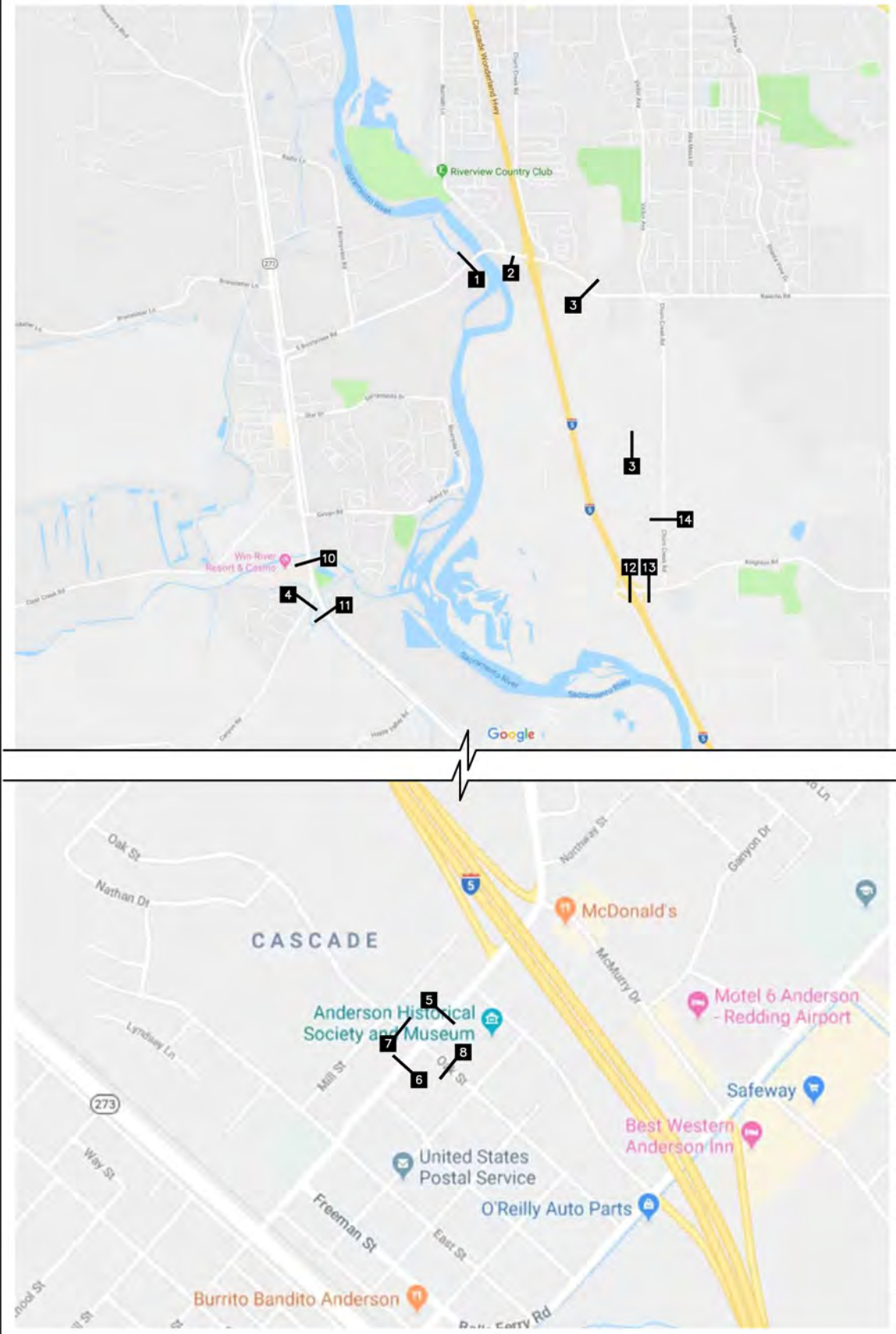
LLG

N NO SCALE

FIGURE 1

LOCATION OF STUDY INTERSECTIONS

REDDING RANCHERIA FEE-TO-TRUST & CASINO PROJECT, SHASTA COUNTY



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SOURCE: GOOGLE

KEY

= ROADWAY SEGMENTS ANALYZED BY KIMLEY-HORN & LLG

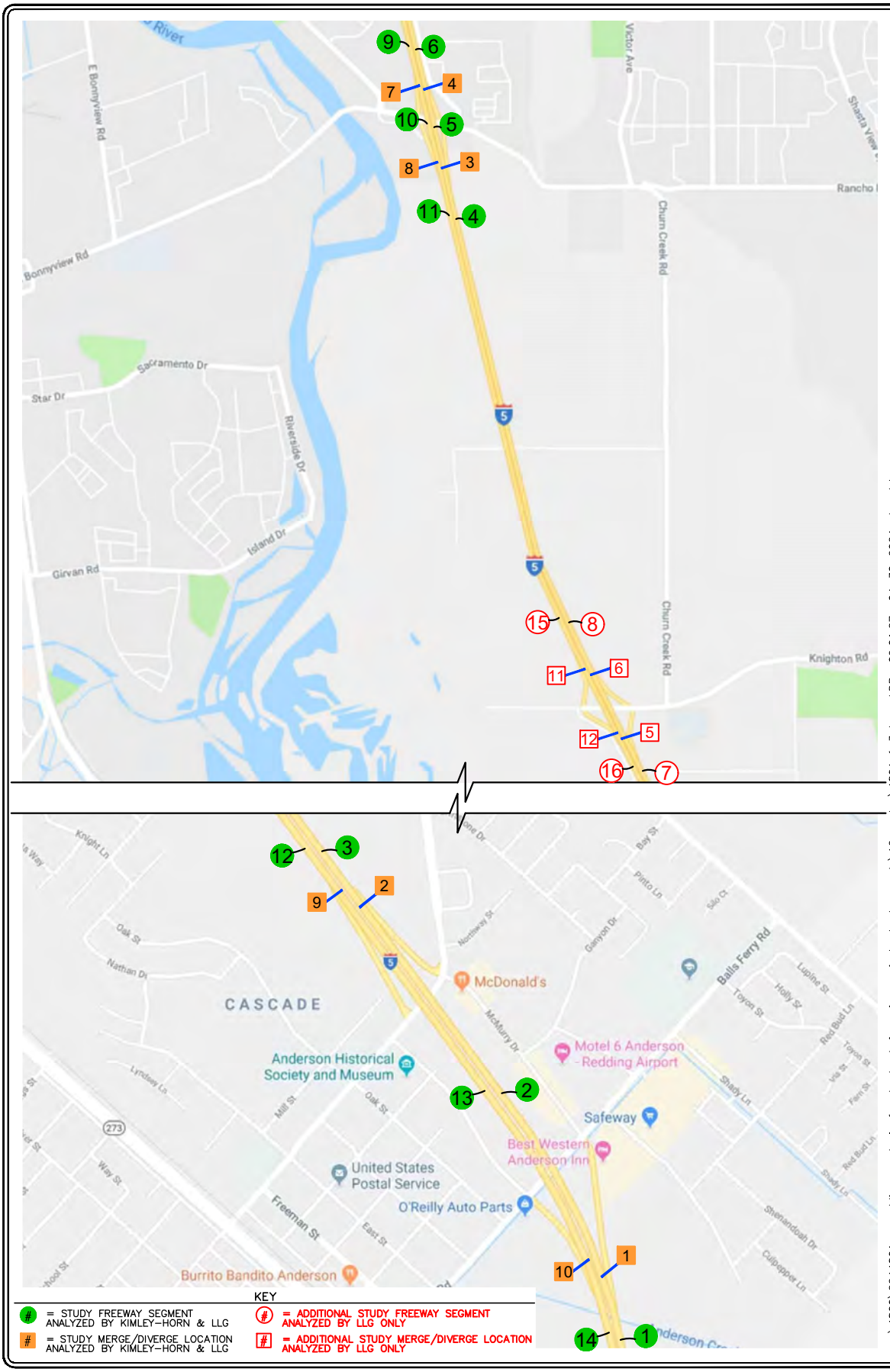
LLG

N NO SCALE

FIGURE 2

LOCATION OF STUDY ROADWAY SEGMENTS

REDDING RANCHERIA FEE-TO-TRUST & CASINO PROJECT, SHASTA COUNTY



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SOURCE: GOOGLE

LLG

N NO SCALE

FIGURE 3

LOCATION OF STUDY FREEWAY SEGMENTS AND RAMPS

REDDING RANCHERIA FEE-TO-TRUST & CASINO PROJECT, SHASTA COUNTY

TABLE 1

LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS (HCM 7 METHODOLOGY)[1]

Level of Service (LOS)	Control Delay Per Vehicle (seconds/vehicle)	Level of Service Description
A	≤ 10.0	This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
B	> 10.0 and ≤ 20.0	This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.
C	> 20.0 and ≤ 35.0	Average traffic delays. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
D	> 35.0 and ≤ 55.0	Long traffic delays At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high *v/c* ratios. Many vehicles stop and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	> 55.0 and ≤ 80.0	Very long traffic delays This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths and high *v/c* ratios. Individual cycle failures are frequent occurrences.
F	≥ 80.0	Severe congestion This level, considered to be unacceptable to most drivers, often occurs with over saturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high *v/c* ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.

[1] Source: *Highway Capacity Manual 7*, Chapter 19: Signalized Intersections.

TABLE 2

LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS (HCM 7 METHODOLOGY)[2,3]

Level of Service (LOS)	Highway Capacity Manual (HCM) Delay Per Vehicle (seconds/vehicle)	Level of Service Description
A	≤ 10.0	Little or no delay
B	> 10.0 and ≤ 15.0	Short traffic delays
C	> 15.0 and ≤ 25.0	Average traffic delays
D	> 25.0 and ≤ 35.0	Long traffic delays
E	> 35.0 and ≤ 50.0	Very long traffic delays
F	> 50.0	Severe congestion

2 Source: *Highway Capacity Manual 7*, Chapter 20: Two Way Stop-Controlled Intersections. The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole.

3 Source: *Highway Capacity Manual 7*, Chapter 21: All Way Stop-Controlled Intersections. For approaches and intersection-wide assessment, LOS is defined solely by control delay.

TABLE 3
EXISTING CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY – WEEKDAY (THURSDAY)

Key Intersection	Jurisdiction	Minimum Acceptable LOS	Time Period	Control Type	(1) Existing Traffic Conditions	
					Delay (s/v)	LOS
1. Market Street (SR 273) at Cedars Road/S Bonnyview Road	Redding/ Caltrans	D	AM	6∅ Traffic Signal	27.0	C
			PM		29.6	C
2. E Bonnyview Road at S Bonnyview Road	Redding	C	AM	6∅ Traffic Signal	22.1	C
			PM		18.4	B
3. Bechelli Lane at S Bonnyview Road	Redding	C	AM	Round about	16.7	C
			PM		21.4	C
4. I 5 SB Ramps at S Bonnyview Road	Redding/ Caltrans	D	AM	3∅ Traffic Signal	18.0	B
			PM		17.9	B
5. I 5 NB Ramps at S Bonnyview Road	Redding/ Caltrans	D	AM	3∅ Traffic Signal	26.5	C
			PM		23.2	C
6. Churn Creek Road at S Bonnyview Road	Redding	C	AM	6∅ Traffic Signal	**43.1**	**D**
			PM		**59.6**	**E**
7. Alrose Lane at Churn Creek Road	Redding	C	AM	Two-Way Stop	**25.4**	**D**
			PM		**39.8**	**E**
8. Victor Avenue at Churn Creek Road	Redding	C	AM	One-Way Stop	**41.5**	**E**
			PM		**57.8**	**F**
9. Rancho Road at Churn Creek Road	Redding	C	AM	One-Way Stop	**30.9**	**D**
			PM		**29.1**	**D**
10. Churn Creek Road at Smith Road	Shasta County	C	AM	One-Way Stop	11.4	B
			PM		10.9	B
11. Market Street (SR 273) at Westwood Avenue	Redding/ Caltrans	D	AM	3∅ Traffic Signal	12.6	B
			PM		12.5	B
12. Market Street (SR 273) at Clear Creek Road	Redding/ Caltrans	D	AM	3∅ Traffic Signal	8.8	A
			PM		8.0	A

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to *Tables 6* and *7* for the LOS definitions.
- **Bold Delay/LOS values** indicate adverse service levels.
- For One or Two-way Stop Controlled Intersections, the delay/LOS is reported for the worst-case movement.

TABLE 3 (CONTINUED)
EXISTING CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY – WEEKDAY (THURSDAY)

Key Intersection	Jurisdiction	Minimum Acceptable LOS	Time Period	Control Type	(1) Existing Traffic Conditions	
					Delay (s/v)	LOS
13. Market Street (SR 273) at Westside Road/Girvan Road	Redding/ Caltrans	D	AM	6∅ Traffic Signal	28.9	C
			PM		30.7	C
14. Market Street (SR 273) at Redding Rancheria Road	Redding/ Caltrans	D	AM	3∅ Traffic Signal	17.6	B
			PM		13.1	B
15. Redding Rancheria Road at Canyon Road	Redding	D	AM	3∅ Traffic Signal	28.4	C
			PM		29.7	C
16. Market Street (SR 273) at Happy Valley Road	Shasta County/ Caltrans	D	AM	3∅ Traffic Signal	14.5	B
			PM		13.1	B
17. Market Street (SR 273) at North Street	Anderson/ Caltrans	D	AM	6∅ Traffic Signal	31.4	C
			PM		25.1	C
18. Oak Street at North Street	Anderson	D	AM	Two-Way Stop	28.2	D
			PM		19.9	C
19. I 5 SB Off-Ramp at North Street	Anderson/ Caltrans	D	AM	All-Way Stop	11.0	B
			PM		11.4	B
20. McMurray Drive/I-5 NB On-Ramp at North Street	Anderson/ Caltrans	D	AM	All-Way Stop	16.7	C
			PM		15.0	C
21. Oak Street at Balls Ferry Road	Anderson	D	AM	Two-Way Stop	13.3	B
			PM		14.1	B
22. Ventura Street/I-5 SB On Ramp at Balls Ferry Road	Anderson/ Caltrans	D	AM	5∅ Traffic Signal	16.5	B
			PM		19.9	B
23. McMurray Drive/I-5 NB Off-Ramp at Balls Ferry Road	Anderson/ Caltrans	D	AM	4∅ Traffic Signal	18.4	B
			PM		19.2	B
24. Market Street (SR 273) at Kenyon Drive	Redding/ Caltrans	D	AM	One-Way Stop	16.1	C
			PM		22.3	C

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to *Tables 6* and *7* for the LOS definitions.
- **Bold Delay/LOS values** indicate adverse service levels.
- For One or Two-way Stop Controlled Intersections, the delay/LOS is reported for the worst-case movement.

TABLE 3 (CONTINUED)
EXISTING CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY – WEEKDAY (THURSDAY)

Key Intersection	Jurisdiction	Minimum Acceptable LOS	Time Period	Control Type	(1) Existing Traffic Conditions	
					Delay (s/v)	LOS
25. Market Street (SR 273) at Breslauer Way	Redding/ Caltrans	D	AM	6∅ Traffic Signal	23.8	C
			PM		20.6	C
26. Market Street (SR 273) at Buenaventura Boulevard	Redding/ Caltrans	D	AM	3∅ Traffic Signal	18.1	B
			PM		18.9	B
27. I 5 SB Ramps at Knighton Road	Shasta County/ Caltrans	D	AM	One-Way Stop	**36.8**	**E**
			PM		33.9	D
28. I 5 NB Ramps at Knighton Road	Shasta County/ Caltrans	D	AM	One-Way Stop	**167.7**	**F**
			PM		23.2	C
29. Churn Creek Road/Pacheco Road at Knighton Road	Shasta County	C	AM	3∅ Traffic Signal	13.6	B
			PM		14.4	B
30. Market Street (SR 273) at Briggs Street	Anderson/ Caltrans	D	AM	3∅ Traffic Signal	9.7	A
			PM		7.9	A
31. Market Street (SR 273) at 3rd Street	Anderson/ Caltrans	D	AM	6∅ Traffic Signal	32.0	C
			PM		32.7	C
32. Market Street (SR 273) at Ox Yoke Road	Anderson/ Caltrans	D	AM	6∅ Traffic Signal	45.0	D
			PM		34.0	C
33. Market Street (SR 273) at Spring Gulch Road	Anderson/ Caltrans	D	AM	3∅ Traffic Signal	4.8	A
			PM		5.1	A
34. Commercial Way at Churn Creek Road	Redding	C	AM	One-Way Stop	8.6	A
			PM		8.6	A
35. Bechelli Lane at Sunnyhill Lane	Redding	C	AM	One-Way Stop	23.6	C
			PM		**37.6**	**E**

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to *Tables 6* and *7* for the LOS definitions.
- **Bold Delay/LOS values** indicate adverse service levels.
- For One or Two-way Stop Controlled Intersections, the delay/LOS is reported for the worst-case movement.

TABLE 4

EXISTING CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS COMPARISON – WEEKDAY[4]

Key Intersection		Minimum Acceptable LOS	Time Period	(LLG) Existing (Year 2024) Traffic Conditions		(Kimley Horn) Existing (Year 2016) Traffic Conditions[5]	
				Delay (s/v)	LOS	Delay (s/v)	LOS
1.	Market Street (SR 273) at Cedars Road/S Bonnyview Road	D	AM	27.0	C	*Did Not Analyze*	
			PM	29.6	C	19.6	B
2.	E Bonnyview Road at S Bonnyview Road	C	AM	22.1	C	*Did Not Analyze*	
			PM	18.4	B	11.4	B
3.	Bechelli Lane at S Bonnyview Road	C	AM	16.7	C	*Did Not Analyze*	
			PM	21.4	C	20.4	C
4.	I 5 SB Ramps at S Bonnyview Road	D	AM	18.0	B	*Did Not Analyze*	
			PM	17.9	B	33.8	C
5.	I 5 NB Ramps at S Bonnyview Road	D	AM	26.5	C	*Did Not Analyze*	
			PM	23.2	C	30.5	C
6.	Churn Creek Road at S Bonnyview Road	C	AM	**43.1**	**D**	*Did Not Analyze*	
			PM	**59.6**	**E**	15.0	B
7.	Alrose Lane at Churn Creek Road	C	AM	**25.4**	**D**	*Did Not Analyze*	
			PM	**39.8**	**E**	12.7	B

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to *Tables 6* and *7* for the LOS definitions.
- **Bold Delay/LOS values** indicate adverse service levels.
- For One or Two way Stop Controlled Intersections, the delay/LOS is reported for the worst case movement.

LLG Existing (Year 2024) Traffic Conditions are based on Thursday AM Peak Period (7:00AM – 9:00AM) and PM Peak Period (4:00PM – 7:00 PM) counts. Kimley Horn Existing (Year 2016) Traffic Conditions are based on Friday PM Peak Period (5:00PM – 7:00PM) counts. Intersections #27 29 and #34 35 were collected in Year 2019.

Source: *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley Horn.

TABLE 4 (CONTINUED)

EXISTING CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS COMPARISON – WEEKDAY[6]

Key Intersection		Minimum Acceptable LOS	Time Period	(LLG) Existing (Year 2024) Traffic Conditions		(Kimley Horn) Existing (Year 2016) Traffic Conditions[7]	
				Delay (s/v)	LOS	Delay (s/v)	LOS
8.	Victor Avenue at Churn Creek Road	C	AM	**41.5**	**E**	*Did Not Analyze*	
			PM	**57.8**	**F**	24.5	C
9.	Rancho Road at Churn Creek Road	C	AM	**30.9**	**D**	*Did Not Analyze*	
			PM	**29.1**	**D**	12.9	B
10.	Churn Creek Road at Smith Road	C	AM	11.4	B	*Did Not Analyze*	
			PM	10.9	B	10.1	B
11.	Market Street (SR 273) at Westwood Avenue	D	AM	12.6	B	*Did Not Analyze*	
			PM	12.5	B	12.1	B
12.	Market Street (SR 273) at Clear Creek Road	D	AM	8.8	A	*Did Not Analyze*	
			PM	8.0	A	5.9	A
13.	Market Street (SR 273) at Westside Road/Girvan Road	D	AM	28.9	C	*Did Not Analyze*	
			PM	30.7	C	13.8	B
14.	Market Street (SR 273) at Redding Rancheria Road	D	AM	17.6	B	*Did Not Analyze*	
			PM	13.1	B	8.7	A

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to *Tables 6 and 7* for the LOS definitions.
- **Bold Delay/LOS values** indicate adverse service levels.
- For One or Two way Stop Controlled Intersections, the delay/LOS is reported for the worst case movement.

LLG Existing (Year 2024) Traffic Conditions are based on Thursday AM Peak Period (7:00AM – 9:00AM) and PM Peak Period (4:00PM – 7:00 PM) counts. Kimley Horn Existing (Year 2016) Traffic Conditions are based on Friday PM Peak Period (5:00PM – 7:00PM) counts. Intersections #27 29 and #34 35 were collected in Year 2019.

Source: *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley Horn.

TABLE 4 (CONTINUED)

EXISTING CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS COMPARISON – WEEKDAY[8]

Key Intersection	Minimum Acceptable LOS	Time Period	(LLG) Existing (Year 2024) Traffic Conditions		(Kimley Horn) Existing (Year 2016) Traffic Conditions[9]	
			Delay (s/v)	LOS	Delay (s/v)	LOS
15. Redding Rancheria Road at Canyon Road	D	AM	28.4	C	*Did Not Analyze*	
		PM	29.7	C	11.6	B
16. Market Street (SR 273) at Happy Valley Road	D	AM	14.5	B	*Did Not Analyze*	
		PM	13.1	B	7.3	A
17. Market Street (SR 273) at North Street	D	AM	31.4	C	*Did Not Analyze*	
		PM	25.1	C	14.9	B
18. Oak Street at North Street	D	AM	28.2	D	*Did Not Analyze*	
		PM	19.9	C	20.8	C
19. I 5 SB Off Ramp at North Street	D	AM	11.0	B	*Did Not Analyze*	
		PM	11.4	B	11.7	B
20. McMurray Drive/I 5 NB On Ramp at North Street	D	AM	16.7	C	*Did Not Analyze*	
		PM	15.0	C	22.6	C
21. Oak Street at Balls Ferry Road	D	AM	13.3	B	*Did Not Analyze*	
		PM	14.1	B	13.2	B

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to Tables 6 and 7 for the LOS definitions.
- **Bold Delay/LOS values** indicate adverse service levels.
- For One or Two way Stop Controlled Intersections, the delay/LOS is reported for the worst case movement.

LLG Existing (Year 2024) Traffic Conditions are based on Thursday AM Peak Period (7:00AM – 9:00AM) and PM Peak Period (4:00PM – 7:00 PM) counts. Kimley Horn Existing (Year 2016) Traffic Conditions are based on Friday PM Peak Period (5:00PM – 7:00PM) counts. Intersections #27 29 and #34 35 were collected in Year 2019.

Source: *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley Horn.

TABLE 4 (CONTINUED)

EXISTING CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS COMPARISON – WEEKDAY[10]

Key Intersection	Minimum Acceptable LOS	Time Period	(LLG) Existing (Year 2024) Traffic Conditions		(Kimley Horn) Existing (Year 2016) Traffic Conditions[11]	
			Delay (s/v)	LOS	Delay (s/v)	LOS
22. Ventura Street/I 5 SB On Ramp at Balls Ferry Road	D	AM	16.5	B	*Did Not Analyze*	
		PM	19.9	B	26.6	C
23. McMurray Drive/I 5 NB Off Ramp at Balls Ferry Road	D	AM	18.4	B	*Did Not Analyze*	
		PM	19.2	B	19.2	B
27. I 15 SB Ramps at Knighton Road	D	AM	**36.8**	**E**	*Did Not Analyze*	
		PM	33.9	D	15.8	C
28. I 15 NB Ramps at Knighton Road	D	AM	**167.7**	**F**	*Did Not Analyze*	
		PM	23.2	C	11.4	B
29. Churn Creek Road/Pacheco Road at Knighton Road	C	AM	13.6	B	*Did Not Analyze*	
		PM	14.4	B	8.3	A
34. Bechelli Lane at Sunnyhill Lane	C	AM	8.6	A	*Did Not Analyze*	
		PM	8.6	A	8.5	A
35. Commercial Way at Churn Creek Road	C	AM	23.6	C	*Did Not Analyze*	
		PM	**37.6**	**E**	24.5	C

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to Tables 6 and 7 for the LOS definitions.
- **Bold Delay/LOS values** indicate adverse service levels.
- For One or Two way Stop Controlled Intersections, the delay/LOS is reported for the worst case movement.

LLG Existing (Year 2024) Traffic Conditions are based on Thursday AM Peak Period (7:00AM – 9:00AM) and PM Peak Period (4:00PM – 7:00 PM) counts. Kimley Horn Existing (Year 2016) Traffic Conditions are based on Friday PM Peak Period (5:00PM – 7:00PM) counts. Intersections #27 29 and #34 35 were collected in Year 2019.

Source: *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley Horn.

TABLE 5

EXISTING CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS COMPARISON – SATURDAY[12]

Key Intersection	Minimum Acceptable LOS	Time Period	(LLG) Existing (Year 2024) Traffic Conditions		(Kimley Horn) Existing (Year 2016) Traffic Conditions[13]	
			Delay (s/v)	LOS	Delay (s/v)	LOS
1. Market Street (SR 273) at Cedars Road/S Bonnyview Road	D	MD	28.0	C	*Did Not Analyze*	
		PM	28.4	C	16.7	B
2. E Bonnyview Road at S Bonnyview Road	C	MD	9.3	A	*Did Not Analyze*	
		PM	8.5	A	5.2	B
3. Bechelli Lane at S Bonnyview Road	C	MD	9.0	A	*Did Not Analyze*	
		PM	7.4	A	10.9	B
4. I 5 SB Ramps at S Bonnyview Road	D	MD	18.5	B	*Did Not Analyze*	
		PM	18.1	B	25.6	C
5. I 5 NB Ramps at S Bonnyview Road	D	MD	20.5	C	*Did Not Analyze*	
		PM	21.4	C	15.5	B
6. Churn Creek Road at S Bonnyview Road	C	MD	**50.1**	**D**	*Did Not Analyze*	
		PM	**51.6**	**D**	32.3	C
7. Alrose Lane at Churn Creek Road	C	MD	22.7	C	*Did Not Analyze*	
		PM	17.6	C	10.2	B

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to *Tables 6* and *7* for the LOS definitions.
- **Bold Delay/LOS values** indicate adverse service levels.
- For One or Two way Stop Controlled Intersections, the delay/LOS is reported for the worst case movement.

LLG Existing (Year 2024) Traffic Conditions are based on Saturday Midday Peak Period (11:00AM – 1:00PM) and PM Peak Period (4:00PM – 7:00 PM) counts. Kimley Horn Existing (Year 2016) Traffic Conditions are based on Saturday PM Peak Period (5:00PM – 7:00PM) counts. Intersections #27 29 and #34 35 were collected in Year 2019.

Source: *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley Horn.

TABLE 5 (CONTINUED)

EXISTING CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS COMPARISON – SATURDAY[14]

Key Intersection	Minimum Acceptable LOS	Time Period	(LLG) Existing (Year 2024) Traffic Conditions		(Kimley Horn) Existing (Year 2016) Traffic Conditions[15]	
			Delay (s/v)	LOS	Delay (s/v)	LOS
8. Victor Avenue at Churn Creek Road	C	MD	22.1	C	*Did Not Analyze*	
		PM	18.8	C	12.5	B
9. Rancho Road at Churn Creek Road	C	MD	20.9	C	*Did Not Analyze*	
		PM	16.8	C	10.1	B
10. Churn Creek Road at Smith Road	C	MD	10.0	A	*Did Not Analyze*	
		PM	9.6	A	9.3	A
11. Market Street (SR 273) at Westwood Avenue	D	MD	12.7	B	*Did Not Analyze*	
		PM	12.8	B	9.9	A
12. Market Street (SR 273) at Clear Creek Road	D	MD	5.5	A	*Did Not Analyze*	
		PM	4.8	A	5.2	A
13. Market Street (SR 273) at Westside Road/Girvan Road	D	MD	30.1	C	*Did Not Analyze*	
		PM	31.1	C	11.8	B
14. Market Street (SR 273) at Redding Rancheria Road	D	MD	14.5	B	*Did Not Analyze*	
		PM	16.4	B	7.8	A

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to *Tables 6 and 7* for the LOS definitions.
- **Bold Delay/LOS values** indicate adverse service levels.
- For One or Two way Stop Controlled Intersections, the delay/LOS is reported for the worst case movement.

LLG Existing (Year 2024) Traffic Conditions are based on Saturday Midday Peak Period (11:00AM – 1:00PM) and PM Peak Period (4:00PM – 7:00 PM) counts. Kimley Horn Existing (Year 2016) Traffic Conditions are based on Saturday PM Peak Period (5:00PM – 7:00PM) counts. Intersections #27 29 and #34 35 were collected in Year 2019.

Source: *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley Horn.

TABLE 5 (CONTINUED)

EXISTING CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS COMPARISON – SATURDAY[16]

Key Intersection	Minimum Acceptable LOS	Time Period	(LLG) Existing (Year 2024) Traffic Conditions		(Kimley Horn) Existing (Year 2016) Traffic Conditions[17]	
			Delay (s/v)	LOS	Delay (s/v)	LOS
15. Redding Rancheria Road at Canyon Road	D	MD	27.0	C	*Did Not Analyze*	
		PM	28.5	C	10.0	B
16. Market Street (SR 273) at Happy Valley Road	D	MD	11.1	B	*Did Not Analyze*	
		PM	12.1	B	6.4	A
17. Market Street (SR 273) at North Street	D	MD	22.6	C	*Did Not Analyze*	
		PM	23.1	C	12.6	B
18. Oak Street at North Street	D	MD	15.2	C	*Did Not Analyze*	
		PM	15.0	B	13.7	B
19. I 5 SB Off Ramp at North Street	D	MD	9.6	A	*Did Not Analyze*	
		PM	9.7	A	8.8	A
20. McMurray Drive/I 5 NB On Ramp at North Street	D	MD	12.4	B	*Did Not Analyze*	
		PM	11.6	B	21.1	C
21. Oak Street at Balls Ferry Road	D	MD	13.0	B	*Did Not Analyze*	
		PM	11.8	B	11.5	B

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to Tables 6 and 7 for the LOS definitions.
- **Bold Delay/LOS values** indicate adverse service levels.
- For One or Two way Stop Controlled Intersections, the delay/LOS is reported for the worst case movement.

LLG Existing (Year 2024) Traffic Conditions are based on Saturday Midday Peak Period (11:00AM – 1:00PM) and PM Peak Period (4:00PM – 7:00 PM) counts. Kimley Horn Existing (Year 2016) Traffic Conditions are based on Saturday PM Peak Period (5:00PM – 7:00PM) counts. Intersections #27 29 and #34 35 were collected in Year 2019.

Source: *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley Horn.

TABLE 5 (CONTINUED)

EXISTING CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS COMPARISON – SATURDAY[18]

Key Intersection	Minimum Acceptable LOS	Time Period	(LLG) Existing (Year 2024) Traffic Conditions		(Kimley Horn) Existing (Year 2016) Traffic Conditions[19]	
			Delay (s/v)	LOS	Delay (s/v)	LOS
22. Ventura Street/I 5 SB On Ramp at Balls Ferry Road	D	MD	20.9	C	*Did Not Analyze*	
		PM	20.2	C	26.7	C
23. McMurray Drive/I 5 NB Off Ramp at Balls Ferry Road	D	MD	18.6	B	*Did Not Analyze*	
		PM	18.7	B	17.6	B
27. I 15 SB Ramps at Knighton Road	D	MD	14.1	B	*Did Not Analyze*	
		PM	12.7	B	11.1	B
28. I 15 NB Ramps at Knighton Road	D	MD	15.1	C	*Did Not Analyze*	
		PM	13.2	B	9.9	A
29. Churn Creek Road/Pacheco Road at Knighton Road	C	MD	15.1	B	*Did Not Analyze*	
		PM	13.0	B	7.6	A
34. Bechelli Lane at Sunnyhill Lane	C	MD	8.6	A	*Did Not Analyze*	
		PM	8.6	A	7.2	A
35. Commercial Way at Churn Creek Road	C	MD	19.1	C	*Did Not Analyze*	
		PM	15.3	C	12.8	B

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to Tables 6 and 7 for the LOS definitions.
- **Bold Delay/LOS values** indicate adverse service levels.
- For One or Two way Stop Controlled Intersections, the delay/LOS is reported for the worst case movement.

LLG Existing (Year 2024) Traffic Conditions are based on Saturday Midday Peak Period (11:00AM – 1:00PM) and PM Peak Period (4:00PM – 7:00 PM) counts. Kimley Horn Existing (Year 2016) Traffic Conditions are based on Saturday PM Peak Period (5:00PM – 7:00PM) counts. Intersections #27 29 and #34 35 were collected in Year 2019.

Source: *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley Horn.

TABLE 6

INTERSECTION VOLUME COMPARISON – WEEKDAY

Key Intersection	Time Period	Total Intersection Volume	Percent (%) Increase or Decrease
1. Market Street (SR 273) at S Bonnyview Road	Thursday PM (LLG)	2,654	
	Friday PM (KH)	2,492	
	Comparison (LLG) (KH)	*+162*	*+7%*
2. E Bonnyview Road at S Bonnyview Road	Thursday PM (LLG)	2,488	
	Friday PM (KH)	2,332	
	Comparison (LLG) (KH)	*+156*	*+7%*
3. Bechelli Lane at S Bonnyview Road	Thursday PM (LLG)	3,325	
	Friday PM (KH)	2,684	
	Comparison (LLG) (KH)	*+641*	*+24%*
4. I 5 Southbound Ramps at S Bonnyview Road	Thursday PM (LLG)	2,748	
	Friday PM (KH)	2,690	
	Comparison (LLG) (KH)	*+58*	*+2%*
5. I 5 Northbound Ramps at S Bonnyview Road	Thursday PM (LLG)	3,051	
	Friday PM (KH)	2,194	
	Comparison (LLG) (KH)	*+857*	*+39%*
6. Churn Creek Road at S Bonnyview Road	Thursday PM (LLG)	2,453	
	Friday PM (KH)	1,637	
	Comparison (LLG) (KH)	*+816*	*+50%*
7. Alrose Lane at Churn Creek Road	Thursday PM (LLG)	1,373	
	Friday PM (KH)	1,122	
	Comparison (LLG) (KH)	*+251*	*+22%*
8. Victor Avenue at Churn Creek Road	Thursday PM (LLG)	1,250	
	Friday PM (KH)	982	
	Comparison (LLG) (KH)	*+268*	*+27%*

Notes:

- Thursday PM (LLG) = Total intersection peak hour volume based on Existing (Year 2024) Counts collected in April 2024.
- Friday PM (KH) = Total intersection peak hour volume from the *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley-Horn. Existing Counts collected in 2016 and 2019.
- + / - = LLG volume greater than KH / LLG volume less than KH

TABLE 6 (CONTINUED)

INTERSECTION VOLUME COMPARISON – WEEKDAY

Key Intersection	Time Period	Total Intersection Volume	Percent (%) Increase or Decrease
9. Rancho Road at Churn Creek Road	Thursday PM (LLG)	975	
	Friday PM (KH)	776	
	Comparison (LLG) (KH)	*+199*	*+26%*
10. Churn Creek Road at Smith Road	Thursday PM (LLG)	364	
	Friday PM (KH)	296	
	Comparison (LLG) (KH)	*+68*	*+23%*
11. Market Street (SR 273) at Westwood Avenue	Thursday PM (LLG)	2,268	
	Friday PM (KH)	2,299	
	Comparison (LLG) (KH)	*31*	*1%*
12. Market Street (SR 273) at Clear Creek Road	Thursday PM (LLG)	1,872	
	Friday PM (KH)	1,676	
	Comparison (LLG) (KH)	*+196*	*+12%*
13. Market Street (SR 273) at Westside Road/Girvan Road	Thursday PM (LLG)	2,124	
	Friday PM (KH)	1,858	
	Comparison (LLG) (KH)	*+266*	*+14%*
14. Market Street (SR 273) at Redding Rancheria Road	Thursday PM (LLG)	1,912	
	Friday PM (KH)	1,831	
	Comparison (LLG) (KH)	*+81*	*+4%*
15. Redding Rancheria Road at Canyon Road	Thursday PM (LLG)	998	
	Friday PM (KH)	942	
	Comparison (LLG) (KH)	*+56*	*+6%*
16. Market Street (SR 273) at Happy Valley Road	Thursday PM (LLG)	1,134	
	Friday PM (KH)	1,017	
	Comparison (LLG) (KH)	*+117*	*+12%*

Notes:

- Thursday PM (LLG) = Total intersection peak hour volume based on Existing (Year 2024) Counts collected in April 2024.
- Friday PM (KH) = Total intersection peak hour volume from the *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley-Horn. Existing Counts collected in 2016 and 2019.
- + / - = LLG volume greater than KH / LLG volume less than KH

TABLE 6 (CONTINUED)

INTERSECTION VOLUME COMPARISON – WEEKDAY

Key Intersection	Time Period	Total Intersection Volume	Percent (%) Increase or Decrease
17. Market Street (SR 273) at North Street	Thursday PM (LLG)	1,252	
	Friday PM (KH)	1,170	
	Comparison (LLG) (KH)	*+82*	*+7%*
18. Oak Street at North Street	Thursday PM (LLG)	862	
	Friday PM (KH)	846	
	Comparison (LLG) (KH)	*+16*	*+2%*
19. I-5 Southbound Off-Ramp at North Street	Thursday PM (LLG)	1,231	
	Friday PM (KH)	1,096	
	Comparison (LLG) (KH)	*+135*	*+12%*
20. McMurray Drive/I-5 Northbound On-Ramp at North Street	Thursday PM (LLG)	1,531	
	Friday PM (KH)	1,402	
	Comparison (LLG) (KH)	*+129*	*+9%*
21. Oak Street at Balls Ferry Road	Thursday PM (LLG)	593	
	Friday PM (KH)	603	
	Comparison (LLG) (KH)	*10*	*2%*
22. Ventura Street/I-5 Southbound On-Ramp at Balls Ferry Road	Thursday PM (LLG)	974	
	Friday PM (KH)	944	
	Comparison (LLG) (KH)	*+30*	*+3%*
23. McMurray Drive/I-5 Northbound Off-Ramp at Balls Ferry Road	Thursday PM (LLG)	1,473	
	Friday PM (KH)	1,566	
	Comparison (LLG) (KH)	*93*	*6%*
27. I-5 Southbound Ramps at Knighton Road	Thursday PM (LLG)	631	
	Friday PM (KH)	539	
	Comparison (LLG) (KH)	*+92*	*+17%*

Notes:

- Thursday PM (LLG) = Total intersection peak hour volume based on Existing (Year 2024) Counts collected in April 2024.
- Friday PM (KH) = Total intersection peak hour volume from the *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley-Horn. Existing Counts collected in 2016 and 2019.
- + / - = LLG volume greater than KH / LLG volume less than KH

TABLE 6 (CONTINUED)

INTERSECTION VOLUME COMPARISON – WEEKDAY

Key Intersection	Time Period	Total Intersection Volume	Percent (%) Increase or Decrease
28. I 5 Northbound Ramps at Knighton Road	Thursday PM (LLG)	949	
	Friday PM (KH)	771	
	Comparison (LLG) (KH)	*+178*	*+23%*
29. Churn Creek Road/Pacheco Road at Knighton Road	Thursday PM (LLG)	886	
	Friday PM (KH)	690	
	Comparison (LLG) (KH)	*+196*	*+28%*

Notes:

- Thursday PM (LLG) = Total intersection peak hour volume based on Existing (Year 2024) Counts collected in April 2024.
- Friday PM (KH) = Total intersection peak hour volume from the *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley-Horn. Existing Counts collected in 2016 and 2019.
- + / - = LLG volume greater than KH / LLG volume less than KH

TABLE 7

INTERSECTION VOLUME COMPARISON – SATURDAY PM PEAK HOURS

Key Intersection	Time Period	Total Intersection Volume	Percent (%) Increase or Decrease
1. Market Street (SR 273) at S Bonnyview Road	Saturday PM (LLG)	1,816	
	Saturday PM (KH)	1,716	
	Comparison (LLG) (KH)	*+100*	*+6%*
2. E Bonnyview Road at S Bonnyview Road	Saturday PM (LLG)	1,693	
	Saturday PM (KH)	1,479	
	Comparison (LLG) (KH)	*+214*	*+14%*
3. Bechelli Lane at S Bonnyview Road	Saturday PM (LLG)	2,377	
	Saturday PM (KH)	1,674	
	Comparison (LLG) (KH)	*+703*	*+42%*
4. I 5 Southbound Ramps at S Bonnyview Road	Saturday PM (LLG)	2,973	
	Saturday PM (KH)	1,709	
	Comparison (LLG) (KH)	*+1,264*	*+74%*
5. I 5 Northbound Ramps at S Bonnyview Road	Saturday PM (LLG)	2,543	
	Saturday PM (KH)	1,431	
	Comparison (LLG) (KH)	*+1,112*	*+78%*
6. Churn Creek Road at S Bonnyview Road	Saturday PM (LLG)	1,980	
	Saturday PM (KH)	1,037	
	Comparison (LLG) (KH)	*+943*	*+91%*
7. Alrose Lane at Churn Creek Road	Saturday PM (LLG)	977	
	Saturday PM (KH)	707	
	Comparison (LLG) (KH)	*+270*	*+38%*
8. Victor Avenue at Churn Creek Road	Saturday PM (LLG)	934	
	Saturday PM (KH)	637	
	Comparison (LLG) (KH)	*+297*	*+47%*

Notes:

- Saturday PM (LLG) = Total intersection peak hour volume based on Existing (Year 2024) Counts collected in April 2024.
- Saturday PM (KH) = Total intersection peak hour volume from the *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley-Horn, Existing Counts collected in 2016 and 2019.
- + / - = LLG volume greater than KH / LLG volume less than KH

TABLE 7 (CONTINUED)

INTERSECTION VOLUME COMPARISON – SATURDAY PM PEAK HOURS

Key Intersection	Time Period	Total Intersection Volume	Percent (%) Increase or Decrease
9. Rancho Road at Churn Creek Road	Saturday PM (LLG)	800	
	Saturday PM (KH)	465	
	Comparison (LLG) (KH)	*+335*	*+72%*
10. Churn Creek Road at Smith Road	Saturday PM (LLG)	239	
	Saturday PM (KH)	184	
	Comparison (LLG) (KH)	*+55*	*+30%*
11. Market Street (SR 273) at Westwood Avenue	Saturday PM (LLG)	1,527	
	Saturday PM (KH)	1,563	
	Comparison (LLG) (KH)	*36*	*2%*
12. Market Street (SR 273) at Clear Creek Road	Saturday PM (LLG)	1,272	
	Saturday PM (KH)	1,146	
	Comparison (LLG) (KH)	*+126*	*+11%*
13. Market Street (SR 273) at Westside Road/Girvan Road	Saturday PM (LLG)	1,525	
	Saturday PM (KH)	1,291	
	Comparison (LLG) (KH)	*+234*	*+18%*
14. Market Street (SR 273) at Redding Rancheria Road	Saturday PM (LLG)	1,408	
	Saturday PM (KH)	1,260	
	Comparison (LLG) (KH)	*+148*	*+12%*
15. Redding Rancheria Road at Canyon Road	Saturday PM (LLG)	819	
	Saturday PM (KH)	776	
	Comparison (LLG) (KH)	*+43*	*+6%*
16. Market Street (SR 273) at Happy Valley Road	Saturday PM (LLG)	803	
	Saturday PM (KH)	659	
	Comparison (LLG) (KH)	*+144*	*+22%*

Notes:

- Saturday PM (LLG) = Total intersection peak hour volume based on Existing (Year 2024) Counts collected in April 2024.
- Saturday PM (KH) = Total intersection peak hour volume from the *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley-Horn. Existing Counts collected in 2016 and 2019.
- + / - = LLG volume greater than KH / LLG volume less than KH

TABLE 7 (CONTINUED)

INTERSECTION VOLUME COMPARISON – SATURDAY PM PEAK HOURS

Key Intersection	Time Period	Total Intersection Volume	Percent (%) Increase or Decrease
17. Market Street (SR 273) at North Street	Saturday PM (LLG)	1,243	
	Saturday PM (KH)	778	
	Comparison (LLG) (KH)	*+465*	*+60%*
18. Oak Street at North Street	Saturday PM (LLG)	746	
	Saturday PM (KH)	533	
	Comparison (LLG) (KH)	*+213*	*+40%*
19. I-5 Southbound Off-Ramp at North Street	Saturday PM (LLG)	970	
	Saturday PM (KH)	684	
	Comparison (LLG) (KH)	*+286*	*+42%*
20. McMurray Drive/I-5 Northbound On-Ramp at North Street	Saturday PM (LLG)	1,304	
	Saturday PM (KH)	937	
	Comparison (LLG) (KH)	*+367*	*+39%*
21. Oak Street at Balls Ferry Road	Saturday PM (LLG)	478	
	Saturday PM (KH)	429	
	Comparison (LLG) (KH)	*+49*	*+11%*
22. Ventura Street/I-5 Southbound On-Ramp at Balls Ferry Road	Saturday PM (LLG)	854	
	Saturday PM (KH)	700	
	Comparison (LLG) (KH)	*+154*	*+22%*
23. McMurray Drive/I-5 Northbound Off-Ramp at Balls Ferry Road	Saturday PM (LLG)	1,349	
	Saturday PM (KH)	1,098	
	Comparison (LLG) (KH)	*+251*	*+23%*
27. I-5 Southbound Ramps at Knighton Road	Saturday PM (LLG)	395	
	Saturday PM (KH)	351	
	Comparison (LLG) (KH)	*+44*	*+13%*

Notes:

- Saturday PM (LLG) = Total intersection peak hour volume based on Existing (Year 2024) Counts collected in April 2024.
- Saturday PM (KH) = Total intersection peak hour volume from the *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley-Horn. Existing Counts collected in 2016 and 2019.
- + / - = LLG volume greater than KH / LLG volume less than KH

TABLE 7 (CONTINUED)

INTERSECTION VOLUME COMPARISON – SATURDAY PM PEAK HOURS

Key Intersection	Time Period	Total Intersection Volume	Percent (%) Increase or Decrease
28. I 5 Northbound Ramps at Knighton Road	Saturday PM (LLG)	538	
	Saturday PM (KH)	485	
	Comparison (LLG) (KH)	*+53*	*+11%*
29. Churn Creek Road/Pacheco Road at Knighton Road	Saturday PM (LLG)	501	
	Saturday PM (KH)	408	
	Comparison (LLG) (KH)	*+93*	*+23%*

Notes:

- Saturday PM (LLG) = Total intersection peak hour volume based on Existing (Year 2024) Counts collected in April 2024.
- Saturday PM (KH) = Total intersection peak hour volume from the *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley-Horn. Existing Counts collected in 2016 and 2019.
- + / - = LLG volume greater than KH / LLG volume less than KH

TABLE 8

INTERSECTION VOLUME COMPARISON – SATURDAY MIDDAY/PM PEAK HOURS

Key Intersection	Time Period	Total Intersection Volume	Percent (%) Increase or Decrease
1. Market Street (SR 273) at S Bonnyview Road	Saturday MD (LLG)	2,010	
	Saturday PM (KH)	1,716	
	Comparison (LLG) (KH)	*+294*	*+17%*
2. E Bonnyview Road at S Bonnyview Road	Saturday MD (LLG)	1,740	
	Saturday PM (KH)	1,479	
	Comparison (LLG) (KH)	*+261*	*+18%*
3. Bechelli Lane at S Bonnyview Road	Saturday MD (LLG)	2,618	
	Saturday PM (KH)	1,674	
	Comparison (LLG) (KH)	*+944*	*+56%*
4. I 5 Southbound Ramps at S Bonnyview Road	Saturday MD (LLG)	3,237	
	Saturday PM (KH)	1,709	
	Comparison (LLG) (KH)	*+1,528*	*+89%*
5. I 5 Northbound Ramps at S Bonnyview Road	Saturday MD (LLG)	2,745	
	Saturday PM (KH)	1,431	
	Comparison (LLG) (KH)	*+1,314*	*+92%*
6. Churn Creek Road at S Bonnyview Road	Saturday MD (LLG)	2,232	
	Saturday PM (KH)	1,037	
	Comparison (LLG) (KH)	*+1,195*	*+115%*
7. Alrose Lane at Churn Creek Road	Saturday MD (LLG)	1,185	
	Saturday PM (KH)	707	
	Comparison (LLG) (KH)	*+478*	*+68%*
8. Victor Avenue at Churn Creek Road	Saturday MD (LLG)	1,131	
	Saturday PM (KH)	637	
	Comparison (LLG) (KH)	*+494*	*+78%*

Notes:

- Saturday MD (LLG) = Total intersection peak hour volume based on Existing (Year 2024) Counts collected in April 2024.
- Saturday PM (KH) = Total intersection peak hour volume from the *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley-Horn, Existing Counts collected in 2016 and 2019.
- + / - = LLG volume greater than KH / LLG volume less than KH

TABLE 8 (CONTINUED)

INTERSECTION VOLUME COMPARISON – SATURDAY MIDDAY/PM PEAK HOURS

Key Intersection	Time Period	Total Intersection Volume	Percent (%) Increase or Decrease
9. Rancho Road at Churn Creek Road	Saturday MD (LLG)	1,007	
	Saturday PM (KH)	465	
	Comparison (LLG) (KH)	*+542*	*+117%*
10. Churn Creek Road at Smith Road	Saturday MD (LLG)	309	
	Saturday PM (KH)	184	
	Comparison (LLG) (KH)	*+125*	*+68%*
11. Market Street (SR 273) at Westwood Avenue	Saturday MD (LLG)	1,708	
	Saturday PM (KH)	1,563	
	Comparison (LLG) (KH)	*+145*	*+9%*
12. Market Street (SR 273) at Clear Creek Road	Saturday MD (LLG)	1,392	
	Saturday PM (KH)	1,146	
	Comparison (LLG) (KH)	*+246*	*+21%*
13. Market Street (SR 273) at Westside Road/Girvan Road	Saturday MD (LLG)	1,678	
	Saturday PM (KH)	1,291	
	Comparison (LLG) (KH)	*+387*	*+30%*
14. Market Street (SR 273) at Redding Rancheria Road	Saturday MD (LLG)	1,472	
	Saturday PM (KH)	1,260	
	Comparison (LLG) (KH)	*+212*	*+17%*
15. Redding Rancheria Road at Canyon Road	Saturday MD (LLG)	716	
	Saturday PM (KH)	776	
	Comparison (LLG) (KH)	*60*	*8%*
16. Market Street (SR 273) at Happy Valley Road	Saturday MD (LLG)	951	
	Saturday PM (KH)	659	
	Comparison (LLG) (KH)	*+292*	*+44%*

Notes:

- Saturday MD (LLG) = Total intersection peak hour volume based on Existing (Year 2024) Counts collected in April 2024.
- Saturday PM (KH) = Total intersection peak hour volume from the *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley-Horn. Existing Counts collected in 2016 and 2019.
- + / - = LLG volume greater than KH / LLG volume less than KH

TABLE 8 (CONTINUED)

INTERSECTION VOLUME COMPARISON – SATURDAY MIDDAY/PM PEAK HOURS

Key Intersection	Time Period	Total Intersection Volume	Percent (%) Increase or Decrease
17. Market Street (SR 273) at North Street	Saturday MD (LLG)	1,494	
	Saturday PM (KH)	778	
	Comparison (LLG) (KH)	*+716*	*+92%*
18. Oak Street at North Street	Saturday MD (LLG)	899	
	Saturday PM (KH)	533	
	Comparison (LLG) (KH)	*+366*	*+69%*
19. I-5 Southbound Off-Ramp at North Street	Saturday MD (LLG)	1,123	
	Saturday PM (KH)	684	
	Comparison (LLG) (KH)	*+439*	*+64%*
20. McMurray Drive/I-5 Northbound On-Ramp at North Street	Saturday MD (LLG)	1,553	
	Saturday PM (KH)	937	
	Comparison (LLG) (KH)	*+616*	*+66%*
21. Oak Street at Balls Ferry Road	Saturday MD (LLG)	590	
	Saturday PM (KH)	429	
	Comparison (LLG) (KH)	*+161*	*+38%*
22. Ventura Street/I-5 Southbound On-Ramp at Balls Ferry Road	Saturday MD (LLG)	1,034	
	Saturday PM (KH)	700	
	Comparison (LLG) (KH)	*+334*	*+48%*
23. McMurray Drive/I-5 Northbound Off-Ramp at Balls Ferry Road	Saturday MD (LLG)	1,665	
	Saturday PM (KH)	1,098	
	Comparison (LLG) (KH)	*+567*	*+52%*
27. I-5 Southbound Ramps at Knighton Road	Saturday MD (LLG)	452	
	Saturday PM (KH)	351	
	Comparison (LLG) (KH)	*+101*	*+29%*

Notes:

- Saturday MD (LLG) = Total intersection peak hour volume based on Existing (Year 2024) Counts collected in April 2024.
- Saturday PM (KH) = Total intersection peak hour volume from the *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley-Horn. Existing Counts collected in 2016 and 2019.
- + / - = LLG volume greater than KH / LLG volume less than KH

TABLE 8 (CONTINUED)

INTERSECTION VOLUME COMPARISON – SATURDAY MIDDAY/PM PEAK HOURS

Key Intersection	Time Period	Total Intersection Volume	Percent (%) Increase or Decrease
28. I 5 Northbound Ramps at Knighton Road	Saturday MD (LLG)	650	
	Saturday PM (KH)	485	
	Comparison (LLG) (KH)	*+165*	*+34%*
29. Churn Creek Road/Pacheco Road at Knighton Road	Saturday MD (LLG)	599	
	Saturday PM (KH)	408	
	Comparison (LLG) (KH)	*+191*	*+47%*

Notes:

- Saturday MD (LLG) = Total intersection peak hour volume based on Existing (Year 2024) Counts collected in April 2024.
- Saturday PM (KH) = Total intersection peak hour volume from the *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley-Horn. Existing Counts collected in 2016 and 2019.
- + / - = LLG volume greater than KH / LLG volume less than KH

TABLE 9
ROADWAY SEGMENT VOLUME COMPARISON – WEEKDAY

Key Roadway Segment	Time Period	Total Roadway Segment Volume	Percent (%) Increase or Decrease
1. S Bonnyview Road, *west of* Bechelli Lane	Thursday (LLG)	29,184	
	Friday (KH)	28,339	
	Comparison (LLG) (KH)	*+845*	*+3%*
2. Bechelli Lane, *south of* S Bonnyview Road	Thursday (LLG)	47	
	Friday (KH)	1,021	
	Comparison (LLG) (KH)	*974*	*95%*
3. Churn Creek Road, *east of* Alrose Lane	Thursday (LLG)	14,133	
	Friday (KH)	10,847	
	Comparison (LLG) (KH)	*+3,286*	*+30%*
4. Smith Road, *west of* Churn Creek Road	Thursday (LLG)	775	
	Friday (KH)	451	
	Comparison (LLG) (KH)	*+324*	*+72%*
5. North Street, *west of* Oak Street	Thursday (LLG)	9,706	
	Friday (KH)	8,436	
	Comparison (LLG) (KH)	*+1,270*	*+15%*
6. Oak Street, *south of* North Street	Thursday (LLG)	792	
	Friday (KH)	580	
	Comparison (LLG) (KH)	*+212*	*+37%*
7. North Street, *east of* Oak Street	Thursday (LLG)	10,686	
	Friday (KH)	9,710	
	Comparison (LLG) (KH)	*+976*	*+10%*
8. Oak Street, *north of* North Street	Thursday (LLG)	1,426	
	Friday (KH)	1,186	
	Comparison (LLG) (KH)	*+240*	*+20%*

Notes:

- Thursday (LLG) = 24 Hour Daily roadway segment volume based on Existing (Year 2024) Counts collected in April 2024.
- Friday (KH) = 24 Hour Daily roadway segment volume from the *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley-Horn. Existing Counts collected in 2016.
- + / - = LLG volume greater than KH / LLG volume less than KH

TABLE 9 (CONTINUED)

ROADWAY SEGMENT VOLUME COMPARISON – WEEKDAY

Key Roadway Segment	Time Period	Total Roadway Segment Volume	Percent (%) Increase or Decrease
9. Market Street (SR 273), *north of* Redding Rancheria Road	Thursday (LLG)	21,398	
	Friday (KH)	21,851	
	Comparison (LLG) (KH)	*453*	*2%*
10. Market Street (SR 273), *south of* Redding Rancheria Road	Thursday (LLG)	12,715	
	Friday (KH)	10,843	
	Comparison (LLG) (KH)	*+1,872*	*+17%*
11. Canyon Road, *south of* Redding Rancheria Road	Thursday (LLG)	7,732	
	Friday (KH)	7,099	
	Comparison (LLG) (KH)	*+633*	*+9%*

Notes:

- Thursday (LLG) = 24 Hour Daily roadway segment volume based on Existing (Year 2024) Counts collected in April 2024.
- Friday (KH) = 24 Hour Daily roadway segment volume from the *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley-Horn. Existing Counts collected in 2016.
- + / - = LLG volume greater than KH / LLG volume less than KH

TABLE 10

ROADWAY SEGMENT VOLUME COMPARISON – SATURDAY

Key Roadway Segment	Time Period	Total Roadway Segment Volume	Percent (%) Increase or Decrease
1. S Bonnyview Road, *west of* Bechelli Lane	Saturday (LLG)	21,613	
	Saturday (KH)	21,051	
	Comparison (LLG) (KH)	*+562*	*+3%*
2. Bechelli Lane, *south of* S Bonnyview Road	Saturday (LLG)	53	
	Saturday (KH)	756	
	Comparison (LLG) (KH)	*703*	*93%*
3. Churn Creek Road, *east of* Alrose Lane	Saturday (LLG)	10,105	
	Saturday (KH)	8,357	
	Comparison (LLG) (KH)	*+1,748*	*+21%*
4. Smith Road, *west of* Churn Creek Road	Saturday (LLG)	507	
	Saturday (KH)	376	
	Comparison (LLG) (KH)	*+131*	*+35%*
5. North Street, *west of* Oak Street	Saturday (LLG)	6,600	
	Saturday (KH)	6,122	
	Comparison (LLG) (KH)	*+478*	*+8%*
6. Oak Street, *south of* North Street	Saturday (LLG)	468	
	Saturday (KH)	464	
	Comparison (LLG) (KH)	*+4*	*+1%*
7. North Street, *east of* Oak Street	Saturday (LLG)	7,328	
	Saturday (KH)	7,157	
	Comparison (LLG) (KH)	*+171*	*+2%*
8. Oak Street, *north of* North Street	Saturday (LLG)	1,104	
	Saturday (KH)	1,164	
	Comparison (LLG) (KH)	*60*	*5%*

Notes:

- Saturday (LLG) = 24-Hour Daily roadway segment volume based on Existing (Year 2024) Counts collected in April 2024.
- Saturday (KH) = 24-Hour Daily roadway segment volume from the *Traffic Impact Study for Redding Rancheria dated February 2023* prepared by Kimley-Horn. Existing Counts collected in 2016.
- + / - = LLG volume greater than KH / LLG volume less than KH

TABLE 10 (CONTINUED)

ROADWAY SEGMENT VOLUME COMPARISON – SATURDAY

Key Roadway Segment	Time Period	Total Roadway Segment Volume	Percent (%) Increase or Decrease
9. Market Street (SR 273), *north of* Redding Rancheria Road	Saturday (LLG)	15,133	
	Saturday (KH)	17,754	
	Comparison (LLG) (KH)	*2,621*	*15%*
10. Market Street (SR 273), *south of* Redding Rancheria Road	Saturday (LLG)	8,549	
	Saturday (KH)	9,199	
	Comparison (LLG) (KH)	*650*	*7%*
11. Canyon Road, *south of* Redding Rancheria Road	Saturday (LLG)	5,534	
	Saturday (KH)	5,688	
	Comparison (LLG) (KH)	*154*	*3%*

Notes:

- Saturday (LLG) = 24-Hour Daily roadway segment volume based on Existing (Year 2024) Counts collected in April 2024.
- Saturday (KH) = 24-Hour Daily roadway segment volume from the *Traffic Impact Study for Redding Rancheria dated February 2023* prepared by Kimley-Horn. Existing Counts collected in 2016.
- + / - = LLG volume greater than KH / LLG volume less than KH

TABLE 11

EXISTING CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY – SATURDAY

Key Intersection	Jurisdiction	Minimum Acceptable LOS	Time Period	Control Type	(1) Existing Traffic Conditions	
					Delay (s/v)	LOS
1. Market Street (SR 273) at Cedars Road/S Bonnyview Road	Redding/ Caltrans	D	MD	6∅ Traffic Signal	28.0	C
			PM		28.4	C
2. E Bonnyview Road at S Bonnyview Road	Redding	C	MD	6∅ Traffic Signal	9.3	A
			PM		8.5	A
3. Bechelli Lane at S Bonnyview Road	Redding	C	MD	Round about	9.0	A
			PM		7.4	A
4. I 5 SB Ramps at S Bonnyview Road	Redding/ Caltrans	D	MD	3∅ Traffic Signal	18.5	B
			PM		18.1	B
5. I 5 NB Ramps at S Bonnyview Road	Redding/ Caltrans	D	MD	3∅ Traffic Signal	20.5	C
			PM		21.4	C
6. Churn Creek Road at S Bonnyview Road	Redding	C	MD	6∅ Traffic Signal	**50.1**	**D**
			PM		**51.6**	**D**
7. Alrose Lane at Churn Creek Road	Redding	C	MD	Two-Way Stop	22.7	C
			PM		17.6	C
8. Victor Avenue at Churn Creek Road	Redding	C	MD	One-Way Stop	22.1	C
			PM		18.8	C
9. Rancho Road at Churn Creek Road	Redding	C	MD	One-Way Stop	20.9	C
			PM		16.8	C
10. Churn Creek Road at Smith Road	Shasta County	C	MD	One-Way Stop	10.0	A
			PM		9.6	A
11. Market Street (SR 273) at Westwood Avenue	Redding/ Caltrans	D	MD	3∅ Traffic Signal	12.7	B
			PM		12.8	B
12. Market Street (SR 273) at Clear Creek Road	Redding/ Caltrans	D	MD	3∅ Traffic Signal	5.5	A
			PM		4.8	A

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to *Tables 6* and *7* for the LOS definitions.
- **Bold Delay/LOS values** indicate adverse service levels.
- For One or Two-way Stop Controlled Intersections, the delay/LOS is reported for the worst-case movement.

TABLE 11 (CONTINUED)
EXISTING CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY – SATURDAY

Key Intersection	Jurisdiction	Minimum Acceptable LOS	Time Period	Control Type	(1) Existing Traffic Conditions	
					Delay (s/v)	LOS
13. Market Street (SR 273) at Westside Road/Girvan Road	Redding/ Caltrans	D	MD	6∅ Traffic Signal	30.1	C
			PM		31.1	C
14. Market Street (SR 273) at Redding Rancheria Road	Redding/ Caltrans	D	MD	3∅ Traffic Signal	14.5	B
			PM		16.4	B
15. Redding Rancheria Road at Canyon Road	Redding	D	MD	3∅ Traffic Signal	27.0	C
			PM		28.5	C
16. Market Street (SR 273) at Happy Valley Road	Shasta County/ Caltrans	D	MD	3∅ Traffic Signal	11.1	B
			PM		12.1	B
17. Market Street (SR 273) at North Street	Anderson/ Caltrans	D	MD	6∅ Traffic Signal	22.6	C
			PM		23.1	C
18. Oak Street at North Street	Anderson	D	MD	Two-Way Stop	15.2	C
			PM		15.0	B
19. I-5 SB Off-Ramp at North Street	Anderson/ Caltrans	D	MD	All-Way Stop	9.6	A
			PM		9.7	A
20. McMurray Drive/I-5 NB On-Ramp at North Street	Anderson/ Caltrans	D	MD	All-Way Stop	12.4	B
			PM		11.6	B
21. Oak Street at Balls Ferry Road	Anderson	D	MD	Two-Way Stop	13.0	B
			PM		11.8	B
22. Ventura Street/I-5 SB On Ramp at Balls Ferry Road	Anderson/ Caltrans	D	MD	5∅ Traffic Signal	20.9	C
			PM		20.2	C
23. McMurray Drive/I-5 NB Off-Ramp at Balls Ferry Road	Anderson/ Caltrans	D	MD	4∅ Traffic Signal	18.6	B
			PM		18.7	B
24. Market Street (SR 273) at Kenyon Drive	Redding/ Caltrans	D	MD	One-Way Stop	12.5	B
			PM		12.0	B

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to *Tables 6* and *7* for the LOS definitions.
- **Bold Delay/LOS values** indicate adverse service levels.
- For One or Two-way Stop Controlled Intersections, the delay/LOS is reported for the worst-case movement.

TABLE 11 (CONTINUED)
EXISTING CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY – SATURDAY

Key Intersection	Jurisdiction	Minimum Acceptable LOS	Time Period	Control Type	(1) Existing Traffic Conditions	
					Delay (s/v)	LOS
25. Market Street (SR 273) at Breslauer Way	Redding/ Caltrans	D	MD	6∅ Traffic Signal	15.6	B
			PM		13.3	B
26. Market Street (SR 273) at Buenaventura Boulevard	Redding/ Caltrans	D	MD	3∅ Traffic Signal	15.7	B
			PM		17.3	B
27. I 5 SB Ramps at Knighton Road	Shasta County/ Caltrans	D	MD	One-Way Stop	14.1	B
			PM		12.7	B
28. I 5 NB Ramps at Knighton Road	Shasta County/ Caltrans	D	MD	One-Way Stop	15.1	C
			PM		13.2	B
29. Churn Creek Road/Pacheco Road at Knighton Road	Shasta County	C	MD	3∅ Traffic Signal	15.1	B
			PM		13.0	B
30. Market Street (SR 273) at Briggs Street	Anderson/ Caltrans	D	MD	3∅ Traffic Signal	8.9	A
			PM		16.1	B
31. Market Street (SR 273) at 3rd Street	Anderson/ Caltrans	D	MD	6∅ Traffic Signal	34.9	C
			PM		34.2	C
32. Market Street (SR 273) at Ox Yoke Road	Anderson/ Caltrans	D	MD	6∅ Traffic Signal	21.0	C
			PM		23.3	C
33. Market Street (SR 273) at Spring Gulch Road	Anderson/ Caltrans	D	MD	3∅ Traffic Signal	4.5	A
			PM		4.8	A
34. Commercial Way at Churn Creek Road	Redding	C	MD	One-Way Stop	8.6	A
			PM		8.6	A
35. Bechelli Lane at Sunnyhill Lane	Redding	C	MD	One-Way Stop	19.1	C
			PM		15.3	C

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to *Tables 6* and *7* for the LOS definitions.
- **Bold Delay/LOS values** indicate adverse service levels.
- For One or Two-way Stop Controlled Intersections, the delay/LOS is reported for the worst-case movement.

TABLE 12

EXISTING CONDITIONS PEAK HOUR ROADWAY SEGMENT ANALYSIS SUMMARY[20] – WEEKDAY

Roadway Segment	Roadway Type	Time Period	Direction	Existing (Year 2024)		
				Demand (veh/h)	Max Demand (veh/h) or Density (pc/mi/ln)	LOS
1. Bechelli Lane, south of S Bonnyview Road	Collector	AM	NB	27	27	A
			SB	12		
		PM	NB	29	29	A
			SB	6		
2. Churn Creek Road, east of Alrose Lane	Undivided Arterial	AM	EB	450	**618**	**E**
			WB	618		
		PM	EB	645	**645**	**E**
			WB	532		
3. Smith Road, west of Churn Creek Road	Collector	AM	EB	38	38	A
			WB	25		
		PM	EB	31	31	A
			WB	31		
4. Canyon Road, south of Redding Rancheria Road	Collector	AM	NB	537	**537**	**E**
			SB	170		
		PM	NB	237	431	D
			SB	431		
5. North Street, east of Oak Street	Divided Arterial	AM	EB	491	491	A
			WB	458		
		PM	EB	370	432	A
			WB	432		
6. North Street, west of Oak Street	Divided Arterial	AM	EB	440	440	A
			WB	427		
		PM	EB	352	387	A
			WB	387		

[20] Roadway Segments #1 through #8 and #12 through #14 LOS based on maximum peak hour volume (veh/h). Roadway Segments #9 through #11 LOS based on density (pc/mi/ln).

TABLE 12 (CONTINUED)
EXISTING CONDITIONS PEAK HOUR ROADWAY SEGMENT ANALYSIS SUMMARY[21] – WEEKDAY

Roadway Segment	Roadway Type	Time Period	Direction	Existing (Year 2024) Demand (veh/h)	Max Demand (veh/h) or Density (pc/mi/ln)	LOS
7. Oak Street, north of North Street	Collector	AM	NB	52	79	A
			SB	79		
		PM	NB	68	68	A
			SB	48		
8. Oak Street, south of North Street	Collector	AM	NB	18	25	A
			SB	25		
		PM	NB	30	37	A
			SB	37		
9. S Bonnyview Road, west of Bechelli Lane	Arterial	AM	EB	1,349	15.8	B
			WB	1,050	12.3	B
		PM	EB	1,432	13.6	B
			WB	1,143	10.9	A
10. Market Street (SR 273), north of Redding Rancheria Rd	Arterial	AM	NB	1,040	10.6	A
			SB	603	6.2	A
		PM	NB	754	7.0	A
			SB	1,047	9.7	A
11. Market Street (SR 273), south of Redding Rancheria Rd	Arterial	AM	NB	526	5.3	A
			SB	400	4.1	A
		PM	NB	478	4.7	A
			SB	569	5.6	A

[21] Roadway Segments #1 through #8 and #12 through #14 LOS based on maximum peak hour volume (veh/h). Roadway Segments #9 through #11 LOS based on density (pc/mi/ln).

TABLE 12 (CONTINUED)

EXISTING CONDITIONS PEAK HOUR ROADWAY SEGMENT ANALYSIS SUMMARY[22] – WEEKDAY

Roadway Segment	Roadway Type	Time Period	Direction	Existing (Year 2024)		
				Demand (veh/h)	Max Demand (veh/h) or Density (pc/mi/ln)	LOS
12. Knighton Road, between I-15 SB Ramps and I 5 NB Ramps	Collector	AM	NB	331	397	C
			SB	397		
		PM	NB	251	251	A
			SB	232		
13. Knighton Road, between I-15 NB Ramps and Churn Creek Road	Collector	AM	EB	277	**527**	**E**
			WB	527		
		PM	EB	353	**501**	**E**
			WB	501		
14. Churn Creek Road, between Knighton Road and Smith Road	Collector	AM	EB	154	189	A
			WB	189		
		PM	EB	155	155	A
			WB	146		

[22] Roadway Segments #1 through #8 and #12 through #14 LOS based on maximum peak hour volume (veh/h). Roadway Segments #9 through #11 LOS based on density (pc/mi/ln).

TABLE 13
EXISTING CONDITIONS PEAK HOUR ROADWAY SEGMENT ANALYSIS SUMMARY[23] – SATURDAY

Roadway Segment	Roadway Type	Time Period	Direction	Existing (Year 2024) Demand (veh/h)	Existing (Year 2024) Max Demand (veh/h) or Density (pc/mi/ln)	Existing (Year 2024) LOS
1. Bechelli Lane, south of S Bonnyview Road	Collector	MD	NB	15	15	A
			SB	7		
		PM	NB	14	14	A
			SB	5		
2. Churn Creek Road, east of Alrose Lane	Undivided Arterial	MD	EB	416	469	B
			WB	469		
		PM	EB	390	390	A
			WB	348		
3. Smith Road, west of Churn Creek Road	Collector	MD	EB	24	24	A
			WB	19		
		PM	EB	19	19	A
			WB	14		
4. Canyon Road, south of Redding Rancheria Road	Collector	MD	NB	222	222	A
			SB	222		
		PM	NB	177	231	A
			SB	231		
5. North Street, east of Oak Street	Divided Arterial	MD	EB	346	346	A
			WB	302		
		PM	EB	282	282	A
			WB	262		
6. North Street, west of Oak Street	Divided Arterial	MD	EB	320	320	A
			WB	269		
		PM	EB	249	249	A
			WB	233		

[23] Roadway Segments #1 through #8 and #12 through #14 LOS based on maximum peak hour volume (veh/h). Roadway Segments #9 through #11 LOS based on density (pc/mi/ln).

TABLE 13 (CONTINUED)

EXISTING CONDITIONS PEAK HOUR ROADWAY SEGMENT ANALYSIS SUMMARY[24] – SATURDAY

Roadway Segment	Roadway Type	Time Period	Direction	Existing (Year 2024) Demand (veh/h)	Max Demand (veh/h) or Density (pc/mi/ln)	LOS
7. Oak Street, north of North Street	Collector	MD	NB	53	53	A
			SB	53		
		PM	NB	40	46	A
			SB	46		
8. Oak Street, south of North Street	Collector	MD	NB	15	22	A
			SB	22		
		PM	NB	15	17	A
			SB	17		
9. S Bonnyview Road, west of Bechelli Lane	Arterial	MD	EB	828	8.3	A
			WB	657	6.6	A
		PM	EB	693	6.7	A
			WB	532	5.2	A
10. Market Street (SR 273), north of Redding Rancheria Rd	Arterial	MD	NB	611	5.5	A
			SB	593	5.3	A
		PM	NB	532	5.2	A
			SB	608	6.0	A
11. Market Street (SR 273), south of Redding Rancheria Rd	Arterial	MD	NB	384	3.6	A
			SB	355	3.3	A
		PM	NB	300	2.9	A
			SB	326	3.2	A

[24] Roadway Segments #1 through #8 and #12 through #14 LOS based on maximum peak hour volume (veh/h). Roadway Segments #9 through #11 LOS based on density (pc/mi/ln).

TABLE 13 (CONTINUED)

EXISTING CONDITIONS PEAK HOUR ROADWAY SEGMENT ANALYSIS SUMMARY[25] – SATURDAY

Roadway Segment	Roadway Type	Time Period	Direction	Existing (Year 2024) Demand (veh/h)	Max Demand (veh/h) or Density (pc/mi/ln)	LOS
12. Knighton Road, between I-15 SB Ramps and I 5 NB Ramps	Collector	MD	NB	183	183	A
			SB	133		
		PM	NB	152	152	A
			SB	118		
13. Knighton Road, between I-15 NB Ramps and Churn Creek Road	Collector	MD	EB	248	272	B
			WB	272		
		PM	EB	189	225	A
			WB	225		
14. Churn Creek Road, between Knighton Road and Smith Road	Collector	MD	EB	89	117	A
			WB	117		
		PM	EB	76	80	A
			WB	80		

[25] Roadway Segments #1 through #8 and #12 through #14 LOS based on maximum peak hour volume (veh/h). Roadway Segments #9 through #11 LOS based on density (pc/mi/ln).

TABLE 14
EXISTING CONDITIONS PEAK HOUR ROADWAY SEGMENT ANALYSIS COMPARISON – WEEKDAY

Roadway Segment	Roadway Type	Time Period	Direction	(Kimley Horn) Existing (Year 2016) LOS	(LLG) Existing (Year 2024) LOS
1. Bechelli Lane, south of S Bonnyview Road	Collector	AM	NB		A
			SB		
		PM	NB	A	A
			SB	A	
2. Churn Creek Road, east of Alrose Lane	Undivided Arterial	AM	EB		**E**
			WB		
		PM	EB	C	**E**
			WB	C	
3. Smith Road, west of Churn Creek Road	Collector	AM	EB		A
			WB		
		PM	EB	A	A
			WB	A	
4. Canyon Road, south of Redding Rancheria Road	Collector	AM	NB		**E**
			SB		
		PM	NB	B	D
			SB	B	
5. North Street, east of Oak Street	Divided Arterial	AM	EB		A
			WB		
		PM	EB	A	A
			WB	A	
6. North Street, west of Oak Street	Divided Arterial	AM	EB		A
			WB		
		PM	EB	B	A
			WB	B	

TABLE 14 (CONTINUED)

EXISTING CONDITIONS PEAK HOUR ROADWAY SEGMENT ANALYSIS COMPARISON – WEEKDAY

Roadway Segment	Roadway Type	Time Period	Direction	(Kimley Horn) Existing (Year 2016) LOS	(LLG) Existing (Year 2024) LOS
7. Oak Street, north of North Street	Collector	AM	NB		A
			SB		
		PM	NB	B	A
			SB	B	
8. Oak Street, south of North Street	Collector	AM	NB		A
			SB		
		PM	NB	A	A
			SB	A	
9. S Bonnyview Road, west of Bechelli Lane	Arterial	AM	EB		B
			WB		B
		PM	EB	B	B
			WB	B	A
10. Market Street (SR 273), north of Redding Rancheria Rd	Arterial	AM	NB		A
			SB		A
		PM	NB	A	A
			SB	A	A
11. Market Street (SR-273), south of Redding Rancheria Rd	Arterial	AM	NB		A
			SB		A
		PM	NB	A	A
			SB	A	A

TABLE 14 (CONTINUED)

EXISTING CONDITIONS PEAK HOUR ROADWAY SEGMENT ANALYSIS COMPARISON – WEEKDAY

Roadway Segment	Roadway Type	Time Period	Direction	(Kimley Horn) Existing (Year 2016)[26] LOS	(LLG) Existing (Year 2024) LOS
12. Knighton Road, between I-15 SB Ramps and I 5 NB Ramps	Collector	AM	NB		C
			SB		
		PM	NB	B	A
			SB	B	
13. Knighton Road, between I-15 NB Ramps and Churn Creek Road	Collector	AM	EB		**E**
			WB		
		PM	EB	B	**E**
			WB	B	
14. Churn Creek Road, between Knighton Road and Smith Road	Collector	AM	EB		A
			WB		
		PM	EB	B	A
			WB	B	

[26] Kimley-Horn roadway segments #12 14 were collected in Year 2019.

TABLE 15

EXISTING CONDITIONS PEAK HOUR ROADWAY SEGMENT ANALYSIS COMPARISON – SATURDAY

Roadway Segment	Roadway Type	Time Period	Direction	(Kimley Horn) Existing (Year 2016) LOS	(LLG) Existing (Year 2024) LOS
1. Bechelli Lane, south of S Bonnyview Road	Collector	MD	NB		A
			SB		
		PM	NB	A	A
			SB	A	
2. Churn Creek Road, east of Alrose Lane	Undivided Arterial	MD	EB		B
			WB		
		PM	EB	B	A
			WB	B	
3. Smith Road, west of Churn Creek Road	Collector	MD	EB		A
			WB		
		PM	EB	A	A
			WB	A	
4. Canyon Road, south of Redding Rancheria Road	Collector	MD	NB		A
			SB		
		PM	NB	B	A
			SB	B	
5. North Street, east of Oak Street	Divided Arterial	MD	EB		A
			WB		
		PM	EB	A	A
			WB	A	
6. North Street, west of Oak Street	Divided Arterial	MD	EB		A
			WB		
		PM	EB	B	A
			WB	B	

TABLE 15 (CONTINUED)

EXISTING CONDITIONS PEAK HOUR ROADWAY SEGMENT ANALYSIS COMPARISON – SATURDAY

Roadway Segment	Roadway Type	Time Period	Direction	(Kimley Horn) Existing (Year 2016) LOS	(LLG) Existing (Year 2024) LOS
7. Oak Street, north of North Street	Collector	MD	NB		A
			SB		
		PM	NB	B	A
			SB	B	
8. Oak Street, south of North Street	Collector	MD	NB		A
			SB		
		PM	NB	A	A
			SB	A	
9. S Bonnyview Road, west of Bechelli Lane	Arterial	MD	EB		A
			WB		A
		PM	EB	A	A
			WB	A	A
10. Market Street (SR 273), north of Redding Rancheria Rd	Arterial	MD	NB		A
			SB		A
		PM	NB	A	A
			SB	A	A
11. Market Street (SR 273), south of Redding Rancheria Rd	Arterial	MD	NB		A
			SB		A
		PM	NB	A	A
			SB	A	A

TABLE 15 (CONTINUED)

EXISTING CONDITIONS PEAK HOUR ROADWAY SEGMENT ANALYSIS COMPARISON – SATURDAY

Roadway Segment	Roadway Type	Time Period	Direction	(Kimley Horn) Existing (Year 2016)[27] LOS	(LLG) Existing (Year 2024) LOS
12. Knighton Road, between I-15 SB Ramps and I-5 NB Ramps	Collector	AM	NB		A
			SB		
		PM	NB	B	A
			SB	B	
13. Knighton Road, between I-15 NB Ramps and Churn Creek Road	Collector	AM	EB		B
			WB		
		PM	EB	B	A
			WB	B	
14. Churn Creek Road, between Knighton Road and Smith Road	Collector	AM	EB		A
			WB		
		PM	EB	B	A
			WB	B	

[27] Kimley-Horn roadway segments #12-14 were collected in Year 2019.

TABLE 16

BASIC FREEWAY SEGMENTS LEVEL OF SERVICE CRITERIA (HCM METHODOLOGY)[28]

LOS	Basic Freeway Segment Density (pc/mi/ln)
A	≤ 11.0
B	> 11.0 – 18.0
C	> 18.0 – 26.0
D	> 26.0 – 35.0
E	> 35.0 – 45.0
F	> 45.0

[28] Source: *Highway Capacity Manual 7,* Chapter 12: Basic Freeway and Multilane Highway Segments.

TABLE 17

FREEWAY MERGE AND DIVERGE SEGMENTS LEVEL OF SERVICE CRITERIA (HCM METHODOLOGY)[29]

LOS	Freeway Ramp Density (pc/mi/ln)	Level of Service Description
A	≤ 10.0	Unrestricted operations
B	> 10.0 – 20.0	Merging and diverging maneuvers noticeable to drivers
C	> 20.0 – 28.0	Influence area speeds begin to decline
D	> 28.0 – 35.0	Influence area turbulence becomes intrusive
E	> 35.0	Turbulence felt by virtually all drivers
F	Demand Exceeds Capacity	Ramp and freeway queues form

[29] Source: *Highway Capacity Manual 7,* Chapter 14: Freeway Merge and Diverge Segments.

TABLE 18
EXISTING CONDITIONS PEAK HOUR BASIC FREEWAY SEGMENTS CAPACITY ANALYSIS SUMMARY – WEEKDAY

Key Basic Freeway Segment		Time Period	(1) Existing (Year 2024) Traffic Conditions		
			Peak Hour Volume	Density (pc/mi/ln)	LOS
1.	I 5 Northbound, south of Balls Ferry Road	Weekday AM	2543	16.3	B
		Weekday PM	2447	15.7	B
2.	I 5 Northbound, from Balls Ferry Road to North Street	Weekday AM	2113	13.5	B
		Weekday PM	2111	13.5	B
3.	I 5 Northbound, north of North Street	Weekday AM	2637	16.9	B
		Weekday PM	2486	15.9	B
4.	I 5 Northbound, south of S Bonnyview Road	Weekday AM	2762	17.7	B
		Weekday PM	1878	12.0	B
5.	I 5 Northbound, from S Bonnyview Road Off-Ramp to On-Ramp	Weekday AM	2117	13.6	B
		Weekday PM	1303	8.4	A
6.	I 5 Northbound, north of S Bonnyview Road	Weekday AM	3033	19.4	C
		Weekday PM	2161	13.8	B
7.	I 5 Northbound, south of Knighton Road	Weekday AM	2578	16.5	B
		Weekday PM	1711	11.0	A
8.	I 5 Northbound, north of Knighton Road	Weekday AM	2762	17.7	B
		Weekday PM	1878	12.0	B
9.	I 5 Southbound, north of S Bonnyview Road	Weekday AM	1874	12.0	B
		Weekday PM	2939	18.8	C
10.	I 5 Southbound, from S Bonnyview Road Off-Ramp to On-Ramp	Weekday AM	1185	7.6	A
		Weekday PM	2284	14.6	B
11.	I 5 Southbound, south of S Bonnyview Road	Weekday AM	1621	10.4	A
		Weekday PM	2713	17.4	B

Notes:

- pc/mi/ln = Passenger cars per mile per lane (density)
- LOS = Level of Service
- **Bold Volume/Density/LOS values** indicate adverse service levels based on the Caltrans LOS Criteria

TABLE 18 (CONTINUED)

EXISTING CONDITIONS PEAK HOUR BASIC FREEWAY SEGMENTS CAPACITY ANALYSIS SUMMARY – WEEKDAY

Key Basic Freeway Segment		Time Period	(1) Existing (Year 2024) Traffic Conditions		
			Peak Hour Volume	Density (pc/mi/ln)	LOS
12.	I 5 Southbound, north of North Street	Weekday AM	1633	10.5	A
		Weekday PM	2726	17.5	B
13.	I 5 Southbound, from Balls Ferry Road to North Street	Weekday AM	1266	8.1	A
		Weekday PM	2234	14.3	B
14.	I 5 Southbound, south of Balls Ferry Road	Weekday AM	1566	10.0	A
		Weekday PM	2680	17.2	B
15.	I 5 Southbound, north of Knighton Road	Weekday AM	1621	10.4	A
		Weekday PM	2713	17.4	B
16.	I 5 Southbound, south of Knighton Road	Weekday AM	1577	10.1	A
		Weekday PM	2624	16.8	B

Notes:

- pc/mi/ln = Passenger cars per mile per lane (density)
- LOS = Level of Service
- **Bold Volume/Density/LOS values** indicate adverse service levels based on the Caltrans LOS Criteria

TABLE 19
EXISTING CONDITIONS PEAK HOUR BASIC FREEWAY SEGMENTS CAPACITY ANALYSIS SUMMARY – SATURDAY

Key Basic Freeway Segment		Time Period	(1) Existing (Year 2024) Traffic Conditions		
			Peak Hour Volume	Density (pc/mi/ln)	LOS
1.	I 5 Northbound, south of Balls Ferry Road	Saturday MD	2360	15.1	B
		Saturday PM	1899	12.2	B
2.	I 5 Northbound, from Balls Ferry Road to North Street	Saturday MD	2015	12.9	B
		Saturday PM	1621	10.4	A
3.	I 5 Northbound, north of North Street	Saturday MD	2373	15.2	B
		Saturday PM	1909	12.2	B
4.	I 5 Northbound, south of S Bonnyview Road	Saturday MD	1609	10.3	A
		Saturday PM	1475	9.4	A
5.	I 5 Northbound, from S Bonnyview Road Off-Ramp to On-Ramp	Saturday MD	1151	7.4	A
		Saturday PM	1043	6.7	A
6.	I 5 Northbound, north of S Bonnyview Road	Saturday MD	1909	12.2	B
		Saturday PM	1730	11.1	B
7.	I 5 Northbound, south of Knighton Road	Saturday MD	1535	9.8	A
		Saturday PM	1405	9.0	A
8.	I 5 Northbound, north of Knighton Road	Saturday MD	1609	10.3	A
		Saturday PM	1475	9.4	A
9.	I 5 Southbound, north of S Bonnyview Road	Saturday MD	3285	21.0	C
		Saturday PM	3141	20.1	C
10.	I 5 Southbound, from S Bonnyview Road Off-Ramp to On-Ramp	Saturday MD	2553	16.4	B
		Saturday PM	2441	15.6	B
11.	I 5 Southbound, south of S Bonnyview Road	Saturday MD	3054	19.6	C
		Saturday PM	2883	18.5	C

Notes:

- pc/mi/ln = Passenger cars per mile per lane (density)
- LOS = Level of Service
- **Bold Volume/Density/LOS values** indicate adverse service levels based on the Caltrans LOS Criteria

TABLE 19 (CONTINUED)

EXISTING CONDITIONS PEAK HOUR BASIC FREEWAY SEGMENTS CAPACITY ANALYSIS SUMMARY – SATURDAY

Key Basic Freeway Segment		Time Period	(1) Existing (Year 2024) Traffic Conditions		
			Peak Hour Volume	Density (pc/mi/ln)	LOS
12.	I 5 Southbound, north of North Street	Saturday MD	1684	10.8	A
		Saturday PM	1795	11.5	B
13.	I 5 Southbound, from Balls Ferry Road to North Street	Saturday MD	1380	8.8	A
		Saturday PM	1471	9.4	A
14.	I 5 Southbound, south of Balls Ferry Road	Saturday MD	1761	11.3	B
		Saturday PM	1774	11.4	B
15.	I 5 Southbound, north of Knighton Road	Saturday MD	3054	19.6	C
		Saturday PM	2883	18.5	C
16.	I 5 Southbound, south of Knighton Road	Saturday MD	2975	19.1	C
		Saturday PM	2833	18.3	C

Notes:

- pc/mi/ln = Passenger cars per mile per lane (density)
- LOS = Level of Service
- **Bold Volume/Density/LOS values** indicate adverse service levels based on the Caltrans LOS Criteria

TABLE 20

EXISTING CONDITIONS PEAK HOUR MERGE AND DIVERGE SEGMENTS CAPACITY ANALYSIS SUMMARY – WEEKDAY

Key Freeway Merge or Diverge Segment		(1) Analysis Type	(2) Time Period	(3) Existing (Year 2024) Traffic Conditions			
				Freeway Pk Hr Volume	Ramp Pk Hr Volume	Density (pc/mi/ln)	LOS
1.	I 5 Northbound Off-Ramp *to* Balls Ferry Road	Diverge Analysis	Weekday AM	2543	430	18.2	C
			Weekday PM	2447	336	17.4	C
2.	I 5 Northbound On-Ramp *from* North Street	Merge Analysis	Weekday AM	2113	524	18.3	C
			Weekday PM	2111	375	17.1	B
3.	I 5 Northbound Off-Ramp *to* S Bonnyview Road	Diverge Analysis	Weekday AM	2762	645	20.0	C
			Weekday PM	1878	575	13.6	B
4.	I 5 Northbound On-Ramp *from* S Bonnyview Road	Merge Analysis	Weekday AM	2117	916	21.2	C
			Weekday PM	1303	575	12.5	B
5.	I 5 Northbound Off-Ramp *to* Knighton Road	Diverge Analysis	Weekday AM	2578	233	18.3	C
			Weekday PM	1711	197	12.2	B
6.	I 5 Northbound On-Ramp *from* Knighton Road	Merge Analysis	Weekday AM	2345	417	19.7	C
			Weekday PM	1514	364	13.1	B
7.	I 5 Southbound Off-Ramp *to* S Bonnyview Road	Diverge Analysis	Weekday AM	1874	689	13.8	B
			Weekday PM	2939	655	21.2	C
8.	I 5 Southbound On-Ramp *from* S Bonnyview Road	Merge Analysis	Weekday AM	1185	436	11.2	B
			Weekday PM	2284	429	19.0	C
9.	I 5 Southbound Off-Ramp *to* North Street	Diverge Analysis	Weekday AM	1633	367	11.8	B
			Weekday PM	2726	492	19.5	C

Notes:

- Pk Hr = Peak Hour
- pc/mi/ln = Passenger cars per mile per lane (density)
- LOS = Level of Service
- **Bold Volume/Density/LOS values** indicate adverse service levels based on the Caltrans LOS Criteria

TABLE 20 (CONTINUED)

EXISTING CONDITIONS PEAK HOUR MERGE AND DIVERGE SEGMENTS CAPACITY ANALYSIS SUMMARY – WEEKDAY

Key Freeway Merge or Diverge Segment		(1) Analysis Type	(2) Time Period	(3) Existing (Year 2024) Traffic Conditions			
				Freeway Pk Hr Volume	Ramp Pk Hr Volume	Density (pc/mi/ln)	LOS
10.	I 5 Southbound On-Ramp *from* Balls Ferry Road	Merge Analysis	Weekday AM	1266	300	10.8	B
			Weekday PM	2234	446	18.4	B
11.	I 5 Southbound Off-Ramp *to* Knighton Road	Diverge Analysis	Weekday AM	1621	253	11.6	B
			Weekday PM	2713	282	19.3	C
12.	I 5 Southbound On-Ramp *from* Knighton Road	Merge Analysis	Weekday AM	1368	209	10.9	B
			Weekday PM	2431	193	18.4	B

Notes:

- Pk Hr = Peak Hour
- pc/mi/ln = Passenger cars per mile per lane (density)
- LOS = Level of Service
- **Bold Volume/Density/LOS values** indicate adverse service levels based on the Caltrans LOS Criteria

TABLE 21
EXISTING CONDITIONS PEAK HOUR MERGE AND DIVERGE SEGMENTS CAPACITY ANALYSIS SUMMARY – SATURDAY

Key Freeway Merge or Diverge Segment		(1) Analysis Type	(2) Time Period	(3) Existing (Year 2024) Traffic Conditions			
				Freeway Pk Hr Volume	Ramp Pk Hr Volume	Density (pc/mi/ln)	LOS
1.	I 5 Northbound Off-Ramp *to* Balls Ferry Road	Diverge Analysis	Saturday MD	2360	345	16.8	B
			Saturday PM	1899	278	13.6	B
2.	I 5 Northbound On-Ramp *from* North Street	Merge Analysis	Saturday MD	2015	358	16.2	B
			Saturday PM	1621	288	13.1	B
3.	I 5 Northbound Off-Ramp *to* S Bonnyview Road	Diverge Analysis	Saturday MD	1609	458	11.7	B
			Saturday PM	1475	432	10.7	B
4.	I 5 Northbound On-Ramp *from* S Bonnyview Road	Merge Analysis	Saturday MD	1151	758	12.5	B
			Saturday PM	1730	687	16.4	B
5.	I 5 Northbound Off-Ramp *to* Knighton Road	Diverge Analysis	Saturday MD	1535	133	10.9	B
			Saturday PM	1405	108	10.0	B
6.	I 5 Northbound On-Ramp *from* Knighton Road	Merge Analysis	Saturday MD	1402	207	11.2	B
			Saturday PM	1297	364	11.3	B
7.	I 5 Southbound Off-Ramp *to* S Bonnyview Road	Diverge Analysis	Saturday MD	3285	732	23.7	C
			Saturday PM	3141	700	22.6	C
8.	I 5 Southbound On-Ramp *from* S Bonnyview Road	Merge Analysis	Saturday MD	2553	501	21.2	C
			Saturday PM	2441	442	20.0	C
9.	I 5 Southbound Off-Ramp *to* North Street	Diverge Analysis	Saturday MD	1684	304	12.1	B
			Saturday PM	1795	324	12.9	B

Notes:

- Pk Hr = Peak Hour
- pc/mi/ln = Passenger cars per mile per lane (density)
- LOS = Level of Service
- **Bold Volume/Density/LOS values** indicate adverse service levels based on the Caltrans LOS Criteria

TABLE 21 (CONTINUED)

EXISTING CONDITIONS PEAK HOUR MERGE AND DIVERGE SEGMENTS CAPACITY ANALYSIS SUMMARY – SATURDAY

Key Freeway Merge or Diverge Segment		(1) Analysis Type	(2) Time Period	(3) Existing (Year 2024) Traffic Conditions			
				Freeway Pk Hr Volume	Ramp Pk Hr Volume	Density (pc/mi/ln)	LOS
10.	I 5 Southbound On-Ramp *from* Balls Ferry Road	Merge Analysis	Saturday MD	1380	381	12.0	B
			Saturday PM	1471	303	12.4	B
11.	I 5 Southbound Off-Ramp *to* Knighton Road	Diverge Analysis	Saturday MD	3054	188	21.6	C
			Saturday PM	2833	152	20.0	C
12.	I 5 Southbound On-Ramp *from* Knighton Road	Merge Analysis	Saturday MD	2866	109	21.0	C
			Saturday PM	2431	193	18.4	B

Notes:

- Pk Hr = Peak Hour
- pc/mi/ln = Passenger cars per mile per lane (density)
- LOS = Level of Service
- **Bold Volume/Density/LOS values** indicate adverse service levels based on the Caltrans LOS Criteria

TABLE 22

EXISTING CONDITIONS PEAK HOUR BASIC FREEWAY SEGMENTS CAPACITY ANALYSIS COMPARISON – WEEKDAY[30]

Key Basic Freeway Segment	Time Period	(LLG) Existing (Year 2024) Traffic Conditions		(Kimley-Horn) Existing (Year 2016) Traffic Conditions[31]	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
1. I 5 Northbound, south of Balls Ferry Road	Weekday AM	16.3	B	*Did Not Analyze*	
	Weekday PM	15.7	B	17.1	B
2. I 5 Northbound, from Balls Ferry Road to North Street	Weekday AM	13.5	B	*Did Not Analyze*	
	Weekday PM	13.5	B	13.5	B
3. I 5 Northbound, north of North Street	Weekday AM	16.9	B	*Did Not Analyze*	
	Weekday PM	15.9	B	16.0	B
4. I 5 Northbound, south of S Bonnyview Road	Weekday AM	17.7	B	*Did Not Analyze*	
	Weekday PM	12.0	B	15.1	B
5. I 5 Northbound, from S Bonnyview Road Off-Ramp to On- Ramp	Weekday AM	13.6	B	*Did Not Analyze*	
	Weekday PM	8.4	A	8.3	A
6. I 5 Northbound, north of S Bonnyview Road	Weekday AM	19.4	C	*Did Not Analyze*	
	Weekday PM	13.8	B	11.4	B
9. I 5 Southbound, north of S Bonnyview Road	Weekday AM	12.0	B	*Did Not Analyze*	
	Weekday PM	18.8	C	14.0	B
10. I 5 Southbound, from S Bonnyview Road Off-Ramp to On- Ramp	Weekday AM	7.6	A	*Did Not Analyze*	
	Weekday PM	14.6	B	10.9	A
11. I 5 Southbound, south of S Bonnyview Road	Weekday AM	10.4	A	*Did Not Analyze*	
	Weekday PM	17.4	B	21.1	C
12. I 5 Southbound, north of North Street	Weekday AM	10.5	A	*Did Not Analyze*	
	Weekday PM	17.5	B	22.1	C

Notes:

- pc/mi/ln = Passenger cars per mile per lane (density)
- LOS = Level of Service
- **Bold Volume/Density/LOS values** indicate adverse service levels based on the Caltrans LOS Criteria

30 LLG Existing (Year 2024) Traffic Conditions are based on Thursday AM Peak Period (7:00AM – 9:00AM) and PM Peak Period (4:00PM – 7:00 PM) counts. Kimley-Horn Existing (Year 2016) Traffic Conditions are based on Friday PM Peak Period (5:00PM – 7:00PM) counts.

31 Source: *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley Horn.

TABLE 22 (CONTINUED)

EXISTING CONDITIONS PEAK HOUR BASIC FREEWAY SEGMENTS CAPACITY ANALYSIS COMPARISON – WEEKDAY[32]

Key Basic Freeway Segment	Time Period	(LLG) Existing (Year 2024) Traffic Conditions		(Kimley-Horn) Existing (Year 2016) Traffic Conditions[33]	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
13. I 5 Southbound, from Balls Ferry Road to North Street	Weekday AM	8.1	A	*Did Not Analyze*	
	Weekday PM	14.3	B	18.8	C
14. I 5 Southbound, south of Balls Ferry Road	Weekday AM	10.0	A	*Did Not Analyze*	
	Weekday PM	17.2	B	22.0	C

Notes:

- pc/mi/ln = Passenger cars per mile per lane (density)
- LOS = Level of Service
- **Bold Volume/Density/LOS values** indicate adverse service levels based on the Caltrans LOS Criteria

32 LLG Existing (Year 2024) Traffic Conditions are based on Thursday AM Peak Period (7:00AM – 9:00AM) and PM Peak Period (4:00PM – 7:00 PM) counts. Kimley-Horn Existing (Year 2016) Traffic Conditions are based on Friday PM Peak Period (5:00PM – 7:00PM) counts.

33 Source: *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley Horn.

TABLE 23

EXISTING CONDITIONS PEAK HOUR BASIC FREEWAY SEGMENTS CAPACITY ANALYSIS COMPARISON – SATURDAY[34]

Key Basic Freeway Segment	Time Period	(LLG) Existing (Year 2024) Traffic Conditions		(Kimley-Horn) Existing (Year 2016) Traffic Conditions[35]	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
1. I 5 Northbound, south of	Saturday MD	15.1	B	*Did Not Analyze*	
Balls Ferry Road	Saturday PM	12.2	B	12.9	B
2. I 5 Northbound, from	Saturday MD	12.9	B	*Did Not Analyze*	
Balls Ferry Road to North Street	Saturday PM	10.4	A	10.4	A
3. I 5 Northbound, north of	Saturday MD	15.2	B	*Did Not Analyze*	
North Street	Saturday PM	12.2	B	12.0	B
4. I 5 Northbound, south of	Saturday MD	10.3	A	*Did Not Analyze*	
S Bonnyview Road	Saturday PM	9.4	A	10.7	A
5. I 5 Northbound, from	Saturday MD	7.4	A	*Did Not Analyze*	
S Bonnyview Road Off-Ramp to On-Ramp	Saturday PM	6.7	A	6.1	A
6. I 5 Northbound, north of	Saturday MD	12.2	B	*Did Not Analyze*	
S Bonnyview Road	Saturday PM	11.1	B	8.2	A
9. I 5 Southbound, north of	Saturday MD	21.0	C	*Did Not Analyze*	
S Bonnyview Road	Saturday PM	20.1	C	9.9	A
10. I 5 Southbound, from	Saturday MD	16.4	B	*Did Not Analyze*	
S Bonnyview Road Off-Ramp to On-Ramp	Saturday PM	15.6	B	7.9	A
11. I 5 Southbound, south of	Saturday MD	19.6	C	*Did Not Analyze*	
S Bonnyview Road	Saturday PM	18.5	C	13.6	B
12. I 5 Southbound, north of	Saturday MD	10.8	A	*Did Not Analyze*	
North Street	Saturday PM	11.5	B	15.5	B

Notes:

- pc/mi/ln = Passenger cars per mile per lane (density)
- LOS = Level of Service
- **Bold Volume/Density/LOS values** indicate adverse service levels based on the Caltrans LOS Criteria

[34] LLG Existing (Year 2024) Traffic Conditions are based on Thursday AM Peak Period (7:00AM – 9:00AM) and PM Peak Period (4:00PM – 7:00 PM) counts. Kimley-Horn Existing (Year 2016) Traffic Conditions are based on Friday PM Peak Period (5:00PM – 7:00PM) counts.

[35] Source: *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley Horn.

TABLE 23 (CONTINUED)

EXISTING CONDITIONS PEAK HOUR BASIC FREEWAY SEGMENTS CAPACITY ANALYSIS COMPARISON – SATURDAY[36]

Key Basic Freeway Segment		Time Period	(LLG) Existing (Year 2024) Traffic Conditions		(Kimley-Horn) Existing (Year 2016) Traffic Conditions[37]	
			Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
13.	I 5 Southbound, from Balls Ferry Road to North Street	Saturday MD	8.8	A	*Did Not Analyze*	
		Saturday PM	9.4	A	13.7	B
14.	I 5 Southbound, south of Balls Ferry Road	Saturday MD	11.3	B	*Did Not Analyze*	
		Saturday PM	11.4	B	16.0	B

Notes:

- pc/mi/ln = Passenger cars per mile per lane (density)
- LOS = Level of Service
- **Bold Volume/Density/LOS values** indicate adverse service levels based on the Caltrans LOS Criteria

[36] LLG Existing (Year 2024) Traffic Conditions are based on Thursday AM Peak Period (7:00AM – 9:00AM) and PM Peak Period (4:00PM – 7:00 PM) counts. Kimley-Horn Existing (Year 2016) Traffic Conditions are based on Friday PM Peak Period (5:00PM – 7:00PM) counts.

[37] Source: *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley Horn.

TABLE 24

EXISTING CONDITIONS PEAK HOUR MERGE AND DIVERGE SEGMENTS CAPACITY ANALYSIS COMPARISON – WEEKDAY[38]

Key Freeway Merge or Diverge Segment	(1) Analysis Type	(2) Time Period	(LLG) Existing (Year 2024) Traffic Conditions		(Kimley-Horn) Existing (Year 2016) Traffic Conditions[39]	
			Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
1. I-5 Northbound Off-Ramp *to* Balls Ferry Road	Diverge Analysis	Weekday AM	18.2	C	*Did Not Analyze*	
		Weekday PM	17.4	C	20.3	C
2. I-5 Northbound On-Ramp *from* North Street	Merge Analysis	Weekday AM	18.3	C	*Did Not Analyze*	
		Weekday PM	17.1	B	19.1	B
3. I-5 Northbound Off-Ramp *to* S Bonnyview Road	Diverge Analysis	Weekday AM	20.0	C	*Did Not Analyze*	
		Weekday PM	13.6	B	13.2	B
4. I-5 Northbound On-Ramp *from* S Bonnyview Road	Merge Analysis	Weekday AM	21.2	C	*Did Not Analyze*	
		Weekday PM	12.5	B	16.5	B
7. I-5 Southbound Off-Ramp *to* S Bonnyview Road	Diverge Analysis	Weekday AM	13.8	B	*Did Not Analyze*	
		Weekday PM	21.2	C	22.4	C
8. I-5 Southbound On-Ramp *from* S Bonnyview Road	Merge Analysis	Weekday AM	11.2	B	*Did Not Analyze*	
		Weekday PM	19.0	C	18.7	B
9. I-5 Southbound Off-Ramp *to* North Street	Diverge Analysis	Weekday AM	11.8	B	*Did Not Analyze*	
		Weekday PM	19.5	C	27.6	C
10. I-5 Southbound On-Ramp *from* Balls Ferry Road	Merge Analysis	Weekday AM	10.8	B	*Did Not Analyze*	
		Weekday PM	18.4	B	25.7	C

Notes:

- Pk Hr = Peak Hour
- pc/mi/ln = Passenger cars per mile per lane (density)
- LOS = Level of Service
- **Bold Volume/Density/LOS values** indicate adverse service levels based on the Caltrans LOS Criteria

38 LLG Existing (Year 2024) Traffic Conditions are based on Thursday AM Peak Period (7:00AM – 9:00AM) and PM Peak Period (4:00PM – 7:00 PM) counts. Kimley-Horn Existing (Year 2016) Traffic Conditions are based on Friday PM Peak Period (5:00PM – 7:00PM) counts.

39 Source: *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley Horn.

TABLE 25

EXISTING CONDITIONS PEAK HOUR MERGE AND DIVERGE SEGMENTS CAPACITY ANALYSIS COMPARISON – SATURDAY[40]

Key Freeway Merge or Diverge Segment	(1) Analysis Type	(2) Time Period	(LLG) Existing (Year 2024) Traffic Conditions		(Kimley-Horn) Existing (Year 2016) Traffic Conditions[41]	
			Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
1. I-5 Northbound Off-Ramp *to* Balls Ferry Road	Diverge Analysis	Saturday MD	16.8	B	*Did Not Analyze*	
		Saturday PM	13.6	B	15.3	B
2. I-5 Northbound On-Ramp *from* North Street	Merge Analysis	Saturday MD	16.2	B	*Did Not Analyze*	
		Saturday PM	13.1	B	17.3	B
3. I-5 Northbound Off-Ramp *to* S Bonnyview Road	Diverge Analysis	Saturday MD	11.7	B	*Did Not Analyze*	
		Saturday PM	10.7	B	10.1	B
4. I-5 Northbound On-Ramp *from* S Bonnyview Road	Merge Analysis	Saturday MD	12.5	B	*Did Not Analyze*	
		Saturday PM	16.4	B	12.3	B
7. I-5 Southbound Off-Ramp *to* S Bonnyview Road	Diverge Analysis	Saturday MD	23.7	C	*Did Not Analyze*	
		Saturday PM	22.6	C	16.9	B
8. I-5 Southbound On-Ramp *from* S Bonnyview Road	Merge Analysis	Saturday MD	21.2	C	*Did Not Analyze*	
		Saturday PM	20.0	C	13.4	B
9. I-5 Southbound Off-Ramp *to* North Street	Diverge Analysis	Saturday MD	12.1	B	*Did Not Analyze*	
		Saturday PM	12.9	B	21.9	C
10. I-5 Southbound On-Ramp *from* Balls Ferry Road	Merge Analysis	Saturday MD	12.0	B	*Did Not Analyze*	
		Saturday PM	12.4	B	19.4	B

Notes:

- Pk Hr = Peak Hour
- pc/mi/ln = Passenger cars per mile per lane (density)
- LOS = Level of Service
- **Bold Volume/Density/LOS values** indicate adverse service levels based on the Caltrans LOS Criteria

[40] LLG Existing (Year 2024) Traffic Conditions are based on Thursday AM Peak Period (7:00AM – 9:00AM) and PM Peak Period (4:00PM – 7:00 PM) counts. Kimley-Horn Existing (Year 2016) Traffic Conditions are based on Friday PM Peak Period (5:00PM – 7:00PM) counts.

[41] Source: *Traffic Impact Study for Redding Rancheria dated February 2023*, prepared by Kimley Horn.

TABLE 26

PROJECT TRIP GENERATION RATES AND FORECAST – ALTERNATIVE A

	Weekday							Saturday						
	Daily	AM Peak Hour			PM Peak Hour			Daily	Midday Peak Hour			PM Peak Hour		
Project Description	**2-Way**	**Enter**	**Exit**	**Total**	**Enter**	**Exit**	**Total**	**2-Way**	**Enter**	**Exit**	**Total**	**Enter**	**Exit**	**Total**
Project Trip Generation Factors [1]:														
▪ Casino (TE/TSF) [2]	193.03	5.72	4.53	10.25	6.28	6.31	12.59	172.14	6.59	2.91	9.50	7.24	4.43	11.67
▪ Conference Center (TE/TSF) [2]	95.73	5.51	0.54	6.05	11.01	1.09	12.10	95.73	5.51	0.54	6.05	11.01	1.09	12.10
▪ Event Center (TE/Seats) [2]	0.59	0.04	0.00	0.04	0.07	0.01	0.08	0.59	0.04	0.00	0.04	0.07	0.01	0.08
▪ Hotel (TE/Rooms) [3]	2.04	0.07	0.05	0.12	0.08	0.07	0.15	2.05	0.09	0.05	0.14	0.10	0.08	0.18
▪ Sporting Goods Store (TE/TSF) [4]	22.52	0.27	0.07	0.34	0.88	0.96	1.84	29.38	0.60	0.11	0.71	1.96	1.88	3.84
Project Trip Generation Forecast [1]:														
▪ Casino (48.060 TSF)	9,277	275	218	493	302	303	605	8,273	317	140	457	348	213	561
▪ Conference Center (10.080 TSF)	965	56	5	61	111	11	122	965	56	5	61	111	11	122
▪ Event Center (1,800 Seats)	1,063	72	0	72	123	12	135	1,063	72	0	72	123	12	135
▪ Hotel (250 Rooms)	511	18	11	29	19	19	38	512	23	12	35	25	20	45
▪ Sporting Goods Store (130 TSF)	2,927	35	9	44	115	124	239	3,819	78	14	92	255	244	499
Proposed Project Subtotal	*14,743*	*456*	*243*	*699*	*670*	*469*	*1,139*	*14,632*	*546*	*171*	*717*	*862*	*500*	*1,362*
Diverted Link Trips (10%) [5]	*(1,220)*	*(31)*	*(23)*	*(54)*	*(42)*	*(42)*	*(84)*	*(1,209)*	*(40)*	*(15)*	*(55)*	*(60)*	*(46)*	*(106)*
Net Proposed Project Total Trip Generation Forecast	***13,523***	***425***	***220***	***645***	***628***	***427***	***1,055***	***13,423***	***506***	***156***	***662***	***802***	***454***	***1,256***

Notes:

[1] Source: *Traffic Impact Study for Redding Rancheria, prepared by Kimley-Horn, dated June 2018* . Trip Generation rates/forecast come directly from the Kimley-Horn study, unless otherwise noted.

[2] Source: *San Manuel Hotel and Casino Expansion TIA prepared by LLG Engineers, dated March 18, 2018.*

- Weekday Daily, Weekday PM Peak Hour, and Saturday PM Peak Hour come directly from the Kimley-Horn study.
- Weekday AM and Saturday Midday Peak Hours were based on the relationship between the Weekday AM/PM rates identifed in the LLG Engineers Study and the Weekday PM/Saturday PM rates identified in the Kimley-Horn Study.

[3] Source: *ITE Trip Generation Manual, 10th Edition [2017].*

- Weekday Daily, Weekday PM Peak Hour, and Saturday PM Peak Hour come directly from the Kimley-Horn study.
- Weekday AM Peak Hour rates come from the ITE Trip Generation Manual 10th Edition, and the Saturday Midday rates were based on the relationship of the Weekday AM/PM Peak Hours and the Saturday PM Peak Hour.
- To be consistent with the Kimley-Horn Study, a 75% reduction was applied to the Hotel Trip Generation Rates to account for internal capture to/from the casino.

[4] Source: *ITE Trip Generation Manual, 10th Edition [2017].*

- Weekday Daily, Weekday PM Peak Hour, and Saturday PM Peak Hour come directly from the Kimley-Horn study.
- Weekday AM Peak Hour rates come from the ITE Trip Generation Manual 10th Edition, and the Saturday Midday rates were based on the relationship of the Weekday AM/PM Peak Hours and the Saturday PM Peak Hour.

[5] To be consistent with the Kimley-Horn Study, a 10% reduction to account for diverted link trips were applied to the Casino and Sporting Goods Store only.

TABLE 27

PROJECT TRIP GENERATION RATES AND FORECAST – ALTERNATIVE E

	Weekday							Saturday						
	Daily	AM Peak Hour			PM Peak Hour			Daily	Midday Peak Hour			PM Peak Hour		
Project Description	**2-Way**	**Enter**	**Exit**	**Total**	**Enter**	**Exit**	**Total**	**2-Way**	**Enter**	**Exit**	**Total**	**Enter**	**Exit**	**Total**
Project Trip Generation Factors [1]:														
▪ Casino (TE/TSF) [2]	193.03	5.72	4.53	10.25	6.28	6.31	12.59	172.14	6.59	2.91	9.50	7.24	4.43	11.67
▪ Conference Center (TE/TSF) [2]	95.73	5.51	0.54	6.05	11.01	1.09	12.10	95.73	5.51	0.54	6.05	11.01	1.09	12.10
▪ Event Center (TE/Seats) [2]	0.59	0.04	0.00	0.04	0.07	0.01	0.08	0.59	0.04	0.00	0.04	0.07	0.01	0.08
▪ Hotel (TE/Rooms) [3]	2.04	0.07	0.05	0.12	0.08	0.07	0.15	2.05	0.09	0.05	0.14	0.10	0.08	0.18
▪ Sporting Goods Store (TE/TSF) [4]	22.52	0.27	0.07	0.34	0.88	0.96	1.84	29.38	0.60	0.11	0.71	1.96	1.88	3.84
Project Trip Generation Forecast [1]:														
▪ Casino (48.060 TSF)	9,277	275	218	493	302	303	605	8,273	317	140	457	348	213	561
▪ Conference Center (10.080 TSF)	965	56	5	61	111	11	122	965	56	5	61	111	11	122
▪ Event Center (1,800 Seats)	1,063	72	0	72	123	12	135	1,063	72	0	72	123	12	135
▪ Hotel (250 Rooms)	511	18	11	29	19	19	38	512	23	12	35	25	20	45
▪ Sporting Goods Store (120 TSF)	2,702	32	9	41	106	115	221	3,525	72	13	85	235	226	461
Proposed Project Subtotal	*14,518*	*453*	*243*	*696*	*661*	*460*	*1,121*	*14,338*	*540*	*170*	*710*	*842*	*482*	*1,324*
Diverted Link Trips (10%) [5]	*(1,198)*	*(31)*	*(22)*	*(53)*	*(41)*	*(42)*	*(83)*	*(1,180)*	*(39)*	*(15)*	*(54)*	*(58)*	*(44)*	*(102)*
Net Proposed Project Total Trip Generation Forecast	***13,320***	***422***	***221***	***643***	***620***	***418***	***1,038***	***13,158***	***501***	***155***	***656***	***784***	***438***	***1,222***

Notes:

[1] Source: *Traffic Impact Study for Redding Rancheria, prepared by Kimley-Horn, dated June 2018* . Trip Generation rates/forecast come directly from the Kimley-Horn study, unless otherwise noted.

[2] Source: *San Manuel Hotel and Casino Expansion TIA prepared by LLG Engineers, dated March 18, 2018.*

- Weekday Daily, Weekday PM Peak Hour, and Saturday PM Peak Hour come directly from the Kimley-Horn study.
- Weekday AM and Saturday Midday Peak Hours were based on the relationship between the Weekday AM/PM rates identifed in the LLG Engineers Study and the Weekday PM/Saturday PM rates identified in the Kimley-Horn Study.

[3] Source: *ITE Trip Generation Manual, 10th Edition [2017].*

- Weekday Daily, Weekday PM Peak Hour, and Saturday PM Peak Hour come directly from the Kimley-Horn study.
- Weekday AM Peak Hour rates come from the ITE Trip Generation Manual 10th Edition, and the Saturday Midday rates were based on the relationship of the Weekday AM/PM Peak Hours and the Saturday PM Peak Hour.
- To be consistent with the Kimley-Horn Study, a 75% reduction was applied to the Hotel Trip Generation Rates to account for internal capture to/from the casino.

[4] Source: *ITE Trip Generation Manual, 10th Edition [2017].*

- Weekday Daily, Weekday PM Peak Hour, and Saturday PM Peak Hour come directly from the Kimley-Horn study.
- Weekday AM Peak Hour rates come from the ITE Trip Generation Manual 10th Edition, and the Saturday Midday rates were based on the relationship of the Weekday AM/PM Peak Hours and the Saturday PM Peak Hour.

[5] To be consistent with the Kimley-Horn Study, a 10% reduction to account for diverted link trips were applied to the Casino and Sporting Goods Store only.

TABLE 28

EXISTING WIN RIVER CASINO RESORT ADJUSTMENTS

	Weekday							Saturday						
	Daily	AM Peak Hour			PM Peak Hour			Daily	Midday Peak Hour			PM Peak Hour		
Project Description	**2-Way**	**Enter**	**Exit**	**Total**	**Enter**	**Exit**	**Total**	**2-Way**	**Enter**	**Exit**	**Total**	**Enter**	**Exit**	**Total**
Existing Site Trip Generation [1]:														
▪ Existing Win River Casino [2]		121	64	185	203	208	411		142	29	171	238	143	381
Proposed Land Use Changes Trip Generation [1]:														
▪ Mid-Rise Apartment (180 DU) [3]	1,198	17	48	65	41	29	70	884	12	40	52	28	28	56
▪ General Office Building (45 TSF) [3]	498	45	7	52	11	56	67	99	13	2	15	10	9	19
Proposed Land Use Changes Subtotal	*1,696*	*62*	*55*	*117*	*52*	*85*	*137*	*983*	*25*	*42*	*67*	*38*	*37*	*75*
Net Proposed Minus Existing Trip Generation Forecast		***(59)***	***(9)***	***(68)***	***(151)***	***(123)***	***(274)***		***(117)***	***13***	***(104)***	***(200)***	***(106)***	***(306)***

Notes:

[1] Source: *Traffic Impact Study for Redding Rancheria, prepared by Kimley-Horn, dated June 2018*. Trip Generation rates/forecast come directly from the Kimley-Horn study, unless otherwise noted.

[2] Daily Weekday and Saturday not provided in the Kimley-Horn Study. The following assumptions were made to forecast for the Weekday AM Peak Hour and Saturday Midday Peak Hour.

- Weekday AM Peak Hour comes from Existing Year 2019 counts collected by Counts Unlimited.
- Saturday Midday is based on the relationship between Weekday AM/PM and Saturday PM existing trip generation.

[3] Source: *ITE Trip Generation Manual, 10th Edition [2017].*

- Weekday Daily, Weekday PM Peak Hour, and Saturday PM Peak Hour come directly from the Kimley-Horn study.
- Weekday AM Peak Hour rates come from the ITE Trip Generation Manual 10th Edition, and the Saturday Midday rates were based on the relationship of the Weekday AM/PM Peak Hours and the Saturday PM Peak Hour.

TABLE 29

EXISTING PLUS PROJECT ALTERNATIVE A – OPTION 1 CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY – WEEKDAY

Key Intersection	Time Period	(1) Existing Traffic Conditions		(2) Existing Plus Project Alternative A – Option 1 Traffic Conditions		(3) Significant Impact		(4) Existing Plus Project Alternative A – Option 1 With Mitigation	
		Delay (s/v)	LOS	Delay (s/v)	LOS	Increase	Yes/No	Delay (s/v)	LOS
1. Market Street (SR 273) at	AM	27.0	C	26.4	C	0.0	No		
Cedars Road/S Bonnyview Road	PM	29.6	C	29.4	C	0.0	No		
2. E Bonnyview Road at	AM	22.1	C	22.5	C	0.4	No		
S Bonnyview Road	PM	18.4	B	18.5	B	0.1	No		
3. Bechelli Lane at	AM	16.7	C	**97.4**	**F**	**80.7**	**Yes**	**Not Feasible**	
S Bonnyview Road	PM	21.4	C	**160.6**	**F**	**139.2**	**Yes**		
4. I 5 SB Ramps at	AM	18.0	B	21.2	C	3.2	No		
S Bonnyview Road	PM	17.9	B	19.6	B	1.7	No		
5. I 5 NB Ramps at	AM	26.5	C	37.9	D	11.4	No		
S Bonnyview Road	PM	23.2	C	29.7	C	6.5	No		
6. Churn Creek Road at	AM	**43.1**	**D**	**42.2**	**D**	0.0	No	28.9	C
S Bonnyview Road	PM	**59.6**	**E**	**65.6**	**E**	**6.0**	**Yes**	31.2	C
7. Alrose Lane at	AM	**25.4**	**D**	**26.3**	**D**	0.9	No		
Churn Creek Road	PM	**39.8**	**E**	**41.8**	**E**	2.0	No		

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to Tables 6 and 7 for the LOS definitions.
- **Bold Delay/LOS values** indicate adverse service levels.

TABLE 29 (CONTINUED)

EXISTING PLUS PROJECT ALTERNATIVE A – OPTION 1 CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY – WEEKDAY

Key Intersection	Time Period	(1) Existing Traffic Conditions		(2) Existing Plus Project Alternative A – Option 1 Traffic Conditions		(3) Significant Impact		(4) Existing Plus Project Alternative A – Option 1 With Mitigation	
		Delay (s/v)	LOS	Delay (s/v)	LOS	Increase	Yes/No	Delay (s/v)	LOS
8. Victor Avenue at Churn Creek Road	AM	**41.5**	**E**	**44.4**	**E**	2.9	No		
	PM	**57.8**	**F**	**64.8**	**F**	7.0	No		
9. Rancho Road at Churn Creek Road	AM	**30.9**	**D**	**33.0**	**D**	2.1	No		
	PM	**29.1**	**D**	**31.0**	**D**	1.9	No		
10. Churn Creek Road at Smith Road	AM	11.4	B	11.4	B	0.0	No		
	PM	10.9	B	10.9	B	0.0	No		
11. Market Street (SR 273) at Westwood Avenue	AM	12.6	B	12.7	B	0.1	No		
	PM	12.5	B	12.7	B	0.2	No		
12. Market Street (SR 273) at Clear Creek Road	AM	8.8	A	8.9	A	0.1	No		
	PM	8.0	A	8.0	A	0.0	No		
13. Market Street (SR 273) at Westside Road/Girvan Road	AM	28.9	C	29.6	C	0.7	No		
	PM	30.7	C	30.8	C	0.1	No		
14. Market Street (SR 273) at Redding Rancheria Road	AM	17.6	B	17.2	B	0.0	No		
	PM	13.1	B	9.6	A	0.0	No		

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to Tables 6 and 7 for the LOS definitions.
- **Bold Delay/LOS values** indicate adverse service levels.

TABLE 29 (CONTINUED)

EXISTING PLUS PROJECT ALTERNATIVE A – OPTION 1 CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY – WEEKDAY

Key Intersection	Time Period	(1) Existing Traffic Conditions		(2) Existing Plus Project Alternative A – Option 1 Traffic Conditions		(3) Significant Impact		(4) Existing Plus Project Alternative A – Option 1 With Mitigation	
		Delay (s/v)	LOS	Delay (s/v)	LOS	Increase	Yes/No	Delay (s/v)	LOS
15. Redding Rancheria Road at Canyon Road	AM	28.4	C	27.8	C	0.0	No		
	PM	29.7	C	32.6	C	2.9	No		
16. Market Street (SR 273) at Happy Valley Road	AM	14.5	B	14.4	B	0.0	No		
	PM	13.1	B	13.5	B	0.4	No		
17. Market Street (SR 273) at North Street	AM	31.4	C	31.4	C	0.0	No		
	PM	25.1	C	25.4	C	0.3	No		
18. Oak Street at North Street	AM	28.2	D	28.2	D	0.0	No		
	PM	19.9	C	19.9	C	0.0	No		
19. I 5 SB Off Ramp at North Street	AM	11.0	B	11.0	B	0.0	No		
	PM	11.4	B	11.4	B	0.0	No		
20. McMurray Drive/I 5 NB On Ramp at North Street	AM	16.7	C	16.7	C	0.0	No		
	PM	15.0	C	15.0	C	0.0	No		
21. Oak Street at Balls Ferry Road	AM	13.3	B	13.3	B	0.0	No		
	PM	14.1	B	14.1	B	0.0	No		

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to Tables 6 and 7 for the LOS definitions.
- **Bold Delay/LOS values** indicate adverse service levels.