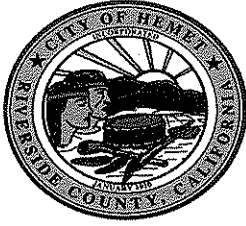


#15



Staff Report

TO: Honorable Mayor and Members of the City Council

FROM: Mike Gow, Public Works Director/City Engineer; Brian Nakamura, ^{BSN} City Manager

DATE: January 12, 2010

RE: Agreement with Soboba Band of Luiseño Indians for Mitigation of Traffic Impacts for the Oaks Retreat Project

RECOMMENDATION: Approve the attached Intergovernmental Agreement with the City of San Jacinto, the Soboba Band of Luiseño Indians, and the City of Hemet regarding the mitigation of traffic impacts from the Oaks Retreat Project.

BACKGROUND: The Soboba Band of Luiseño Indians (Tribe) developed the Oaks Retreat on property recently acquired in trust adjacent to their reservation. The Oaks Retreat consists of 4 softball fields, a baseball field, and support facilities. The traffic impacts from the Oaks Retreat were analyzed and found to contribute 40.8% toward the need for a signal at Soboba Road and Mountain in the City of Hemet. To mitigate the impacts, the Tribe will contribute 40.8% (\$142,963) of the estimated \$350,400 cost to construct a traffic signal at that intersection by paying this amount to the City now for deposit in the City's street fund. The agreement was drafted with review and input from the City Attorney. The City of San Jacinto reached a similar agreement for the two other intersections included in the study.

The City of Hemet will coordinate the construction of the signal when the adjacent vacant area is developed or when the Ramona Expressway is realigned along the San Jacinto River.

FISCAL IMPACT: No impact to General Fund. Funds will be deposited into the Street Development Impact Fund No. 329 to offset future street infrastructure costs.

Respectfully submitted,

Mike Gow
Public Works Director/City Engineer

Legal Review:

Eric S. Vail
City Attorney

Fiscal Review:

Thomas M. Kanarr
Interim Finance Director

**INTERGOVERNMENTAL AGREEMENT
AMONG THE CITY OF SAN JACINTO,
THE CITY OF HEMET AND
THE SOBOBA BAND OF LUISEÑO INDIANS
REGARDING MITIGATION OF TRAFFIC IMPACTS
OF THE OAKS RETREAT**

This Agreement ("Agreement") is made as of this _____ day of _____, 2010, among the CITY OF SAN JACINTO, an incorporated State of California general law city ("San Jacinto"), the CITY OF HEMET, an incorporated State of California general law city ("Hemet"), and the SOBOBA BAND OF LUISEÑO INDIANS, a federally recognized Indian Tribe ("Tribe"). Hemet and San Jacinto are collectively referred to as the "Cities", and the Cities and the Tribe are collectively referred to as the "Parties".

RECITALS

A. The City Councils of the Cities and the Tribal Council of the Tribe recognize that each is a governmental body with responsibility for the welfare of its people.

B. The Tribe has submitted to the United States Department of Interior, Bureau of Indian Affairs ("BIA") an application ("Fee-to-Trust Application") requesting the United States to acquire two (2) parcels of land, consisting of approximately 477.65 acres, located in the unincorporated area of the County of Riverside (the "Subject Property"), in trust for the benefit of the Tribe.

C. The Subject Property contains classrooms, maintenance areas, agricultural buildings, fallowed agricultural plots and athletic fields and facilities. The Tribe also recently developed the Subject Property with a four-field softball complex, a baseball park and supporting facilities (the "Oaks Retreat").

D. In connection with its review of the Fee-to-Trust Application, the BIA prepared an environmental assessment ("EA") of the proposed trust acquisition of the Subject Property pursuant to the National Environmental Policy Act (42 U.S.C. § 4321 *et seq.*, hereinafter, "NEPA").

E. The EA concluded that, when operating at full capacity, the Oaks Retreat could be anticipated to have a significant impact on the present traffic patterns, and that the following intersections would be projected to operate at unacceptable levels of service during the evening peak hour:

- San Jacinto Street (NS) at Ramona Blvd/ Main Street (EW), Florida Ave (EW); and
- Ramona Expressway (NS) at 7th Street (EW); and
- Mountain Avenue (NS) at Esplanade Ave (EW); and
- Soboba Street (NS) at Mountain Ave (EW); and
- Soboba Road (NS) at Lake Park Drive (EW), Castile Canyon Road (EW).

F. To mitigate the anticipated impact on present traffic patterns, the EA required that the Tribe participate in the phased construction of off-site traffic signals through payment of traffic signal mitigation fees to construct traffic signals at the following intersections:

- Soboba Road (NS) at Lake Park Drive (EW) in San Jacinto; and
- Ramona Expressway (NS) at 7th Street in San Jacinto; and
- Soboba Street (NS) at Mountain Ave (EW) in Hemet.

G. On June 27, 2008, the BIA Pacific Regional Office issued a notice of decision to acquire the Subject Property in trust for the Tribe, which San Jacinto subsequently appealed to the Interior Board of Indian Appeals (Case No. 08-122-A) (the "Pending Appeal").

H. Having reviewed the aforementioned matters, the Parties now wish to provide for certain traffic mitigation required by the EA and to resolve and dismiss the Pending Appeal.

NOW, THEREFORE, the Tribe and the Cities hereby agree as follows.

A. MITIGATION OF SIGNIFICANT EFFECTS ON TRANSPORTATION

1. Payment of Signalization Costs. In order to mitigate the impacts as identified in the EA, the Tribe shall pay for signalization and related roadway and intersection improvements, as set forth below. A map depicting the following intersections is attached as Exhibit "A", and incorporated by reference herein.
 - a. Soboba Road (NS) at Lake Park Drive (EW) (Intersection #8 on Exhibit "A"). The Tribe shall pay to San Jacinto the amount of Two Hundred Ninety Nine Thousand Four Hundred Dollars (\$299,400.00), which shall be used by San Jacinto for the installation of a traffic signal, including curb returns and ramps in compliance with the Americans with Disabilities Act ("ADA"), at the intersection of Soboba Road and Lake Park Drive.
 - b. Ramona Expressway (NS) at 7th Street (Intersection #5 on Exhibit "A"). The tribe shall pay to San Jacinto the amount of Four Hundred Forty Nine Thousand Four Hundred Dollars (\$449,400.00), which shall be used by San Jacinto for the installation of a traffic signal, including related roadway improvements, at the intersection of Ramona Expressway at 7th Street.
 - c. Soboba Street (NS) at Mountain Ave (EW) (Intersection #7 on Exhibit "A"). The Tribe shall pay to Hemet the amount of One Hundred Forty-Two Thousand Nine Hundred Sixty-Three Dollars (\$142,963.00), for traffic improvements to the intersection of Soboba Street and Mountain Avenue. The Parties recognize that a realignment of Ramona Expressway, known as the "Ramona Expressway Gap Closure" project, is currently being considered by Hemet and the County of Riverside. A map depicting the currently proposed realignment is attached hereto as Exhibit "B", and incorporated by reference herein. The Parties agree that the funds required by this Section A.1.c may, in Hemet's sole and absolute discretion, be used for either the existing intersection or a relocated intersection at the realigned Ramona Expressway.
2. Time of Payment. The estimated costs of designing and installing the improvements referenced in Section A.1 are attached hereto as Exhibit "C" and incorporated by reference herein. The total costs identified in Exhibit "C" for each of the improvements described in Sections A.1.a and A.1.b, and the Tribe's fair share portion of the improvements described in Section A.1.c, shall be paid by the Tribe

upon the execution of this Agreement by all three Parties, in consideration of which San Jacinto shall contemporaneously dismiss the pending appeal.

3. Use of Funds by the Cities.

- a. The funds required by Section A.1 shall be used by the Cities solely for signal and related traffic improvements associated with the intersections set forth therein, and no other intersections. San Jacinto shall exercise its best efforts to require or otherwise cause the design, construction and installation of the improvements described in Sections A.1.a and A.1.b within eighteen (18) months following the full execution of this Agreement. Hemet shall exercise its best efforts to require or otherwise cause the design, construction and installation of the improvements described in Section A.1.c within thirty-six (36) months following the full execution of this Agreement. If the improvements are not completed by either City within the designated time period, that City shall meet and confer in good faith with the Tribe to adjust the time period or other aspects of the improvements that may need to be modified, and where the Tribe has paid the City an amount in excess of its fair share contribution, the City and the Tribe shall discuss appropriate compensation to the Tribe for the time value of money during the period of any substantial delay beyond the designated time period.
- b. The Parties acknowledge that this Agreement is purely a funding mechanism and does not constitute the Cities' final approval of any intersection improvements, or any particular intersection design, and that implementation of the improvements set forth herein is contingent on prior completion of any applicable environmental review pursuant to the California Environmental Quality Act. In addition to the monetary contributions required by Section A.1, where the Tribe is the owner of real property interests that are required for the installation of the intersection improvements, the Tribe shall provide those necessary real property interests, without cost to the Cities.

4. Signalization Cost Reimbursement.

- a. The Tribe and San Jacinto agree that, for a period of ten (10) years after the date this agreement is fully executed, San Jacinto shall impose a fee on future development projects benefitting from the above-referenced intersections (the "Fair-Share Contribution Fee"), which shall be used to reimburse the Tribe up to an amount equal to the costs paid by the Tribe pursuant to Section A.1 above, plus interest (the "Reimbursement Balance"). Simple interest shall accrue on the Reimbursement Balance at a per annum rate equal to the lesser of (i) the Prime Interest Rate (or if the Prime Interest Rate ceases to exist such other rate of interest established for an equivalent purpose) as established by the Bank of America (or Bank of America's successor, or if Bank of America or its successor ceases to exist such equivalent banking institution having a branch in the County of Riverside), or (ii) the maximum legal rate.
- b. The amount of the Fair-Share Contribution Fee shall be determined based upon Exhibit "D" attached hereto and incorporated by reference herein, plus interest calculated in accordance with Section A.4.a. If, as, and when development within the area results in land uses that are more intense than that contemplated by San Jacinto's General Plan in effect as of the date of this Agreement, such development shall be required to recalculate the Fair-Share Contribution Fee.

- c. All Fair-Share Contribution Fees received by San Jacinto shall be deposited into a fund established by it for the purpose of making the reimbursements described herein (the "Reimbursement Fund"). Within fifteen (15) days following receipt of a payment of a Fair-Share Contribution Fee, San Jacinto shall reimburse the Tribe in an amount equal to that payment.
 - d. The source of the Reimbursement Fund shall be exclusively from future development projects benefitting from the improvements described in Sections A.1.a and A.1.b. In no event shall any fund other than the Reimbursement Fund be deemed obligated for payments to the Tribe under this paragraph.
5. Satisfaction and Release. The Cities acknowledge and agree that this Agreement fully resolves all matters arising from or related to the EA, mitigation measures required thereunder, and the decision of the BIA to acquire the Subject Property in trust for the Tribe. Upon payment by the Tribe as provided in Section A.2, therefore, the Cities fully release the Tribe from any and all claims, whether known or unknown, related in any way to such matters. The Cities acknowledge that they have been advised by legal counsel regarding, are familiar with, and expressly waive, all rights and benefits conferred by California Civil Code Section 1542, which reads as follows: "A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor."

B. NOTICE

1. Notices. All notices permitted or required by this Agreement will be deemed to have been given when made in writing and delivered or mailed to the respective representatives of the Cities and Tribe at their respective addresses as follows:

<p>For San Jacinto: City Manager City of San Jacinto 595 S. San Jacinto Avenue, Bldg. A San Jacinto, CA 92583</p>	<p>With a Copy to: Jeff Ballinger, City Attorney Best Best and Krieger, LLP 3500 Porsche Way, Suite 200 Ontario, CA 91764</p>
---	---

<p>For Hemet: City Manager City of Hemet 445 E. Florida Avenue Hemet, CA 92543</p>	<p>With a Copy to: Eric Vail, City Attorney Burke, Williams & Sorensen, LLP 3403 Tenth Street, Suite 300 Riverside, CA 92501</p>
--	--

<p>For the Tribe: Chairman Soboba Band of Luiseno Indians 23904 Soboba Road P.O. Box 487 San Jacinto, CA 92581</p>	<p>With a Copy to: Karl Johnson, General Counsel Luebben Johnson & Barnhouse LLP 7424 4th Street N.W. Los Ranchos de Albuquerque, NM 87107</p>
---	---

In lieu of written notice to the above addresses, any party may provide notices through the use of facsimile machines provided confirmation of delivery is obtained

at the time of transmission of the notices and provided the following facsimile telephone numbers are used:

To San Jacinto: City Manager Office, Fax: (951) 654-3728
Jeff Ballinger, Fax: (909) 944-1441

To Hemet: City Manager Office, Fax (951) 765-3785
Eric Vail, Fax (951) 788-5785

To Tribe: Soboba Band of Luiseño Indians, Fax: (951) 654-4198
Karl Johnson, Fax: (505) 842-6124

Any party may change the address or facsimile number to which such communications are to be given by providing the other party with written notice of such change at least fifteen (15) calendar days prior to the effective date of the change. All notices will be effective upon receipt and will be deemed received through delivery if personally served or served using facsimile machines, or on the fifth (5th) day following deposit in the mail if sent by first class mail.

C. MISCELLANEOUS PROVISIONS

1. Term of Agreement. The term of this Agreement commences on the date of full execution of this Agreement by the Parties hereto ("Effective Date"), and shall expire upon the date that is ten (10) years following the Effective Date.
2. No Third Party Beneficiaries. This Agreement is not intended to, and will not be construed to, confer a benefit or create any right on any third party. As such, no third party shall have any power or right to bring an action to enforce any of the terms of this Agreement.
3. Amendments. This Agreement may be amended only by written instrument duly signed and executed by the Cities and the Tribe.
4. Waiver. Any waiver by any party of a breach by another party of any of the covenants of this Agreement must be express and in writing. No waiver of a breach of any of the covenants of this Agreement shall be construed to be a waiver of any succeeding breach of the same or any other covenant of this Agreement.
5. Successors in Interest. The terms of this Agreement will be binding on all successors in interest of each party.
6. Attorneys Fees. The prevailing party in any litigation brought to enforce or interpret this Agreement shall be entitled to recover its attorneys' fees and all costs of litigation including, but not limited to, expert witness fees, in addition to any other relief to which it may be entitled. Fees and costs not included within those allowed by Code of Civil Procedure § 1033.5 shall be set forth in the parties' pleadings and shall be proved in a bifurcated trial before the trial judge alone, the right to trial by jury being hereby waived, after the conclusion of the trial on all other issues.
7. Severability. The provisions of this Agreement are severable, such that the invalidity of any provision or portion of this Agreement shall not in and of itself affect the validity of any other provision or portion of this Agreement so that the

remaining provisions of the Agreement shall remain in full force and effect. If a court of competent jurisdiction determines that a provision of this Agreement is invalid or unenforceable, then the Parties agree to promptly use good faith efforts to amend this Agreement to reflect the original intent of the Parties in accordance with applicable law and consistent with the BIA's review of the Fee-to-Trust Application.

8. Construction of Agreement. This Agreement shall be construed and interpreted in accordance with the laws of the United States and, to the extent not inconsistent therewith, the laws of the State of California. This provision is not intended and shall not be construed as consent by any party to the jurisdiction of any court, nor shall anything in this Agreement be construed to constitute a waiver of the Tribe's sovereign immunity.
9. Entire Agreement. This Agreement constitutes the entire understanding and agreement between the Cities and the Tribe concerning the matters addressed in this Agreement, and supersedes any and all prior negotiations, understandings or other agreements, whether written or oral, in regard thereto.
10. Advice of Attorneys. The Parties to this Agreement hereby acknowledge that they have executed this Agreement with the consent, and upon the advice, of their own attorneys.
11. Authority to Execute. Each individual signing this Agreement represents and warrants that he or she has been authorized to do so by proper action of the party on whose behalf he or she has signed.
12. Counterparts. This Agreement may be signed in one or more counterparts and, when all parties have signed the original or a counterpart, such counterparts together shall constitute one original document.

[The rest of this page intentionally left blank.]

CITY OF SAN JACINTO

APPROVED AS TO FORM:
BEST, BEST & KRIEGER, LLP

By: _____
Barry McClellan
City Manager

By: _____
Jeffrey S. Ballinger
City Attorney

Date: _____

Date: _____

CITY OF HEMET

APPROVED AS TO FORM:
BURKE, WILLIAMS & SORENSON, LLP

By: _____
Brian Nakamara
City Manager

By: _____
Eric Vail
City Attorney

Date: _____

Date: _____

SOBOBA BAND OF LUISEÑO INDIANS

APPROVED AS TO FORM:
LUEBBEN JOHNSON & BARNHOUSE LLP

By: _____
Rosemary Morillo
Vice Chairwoman

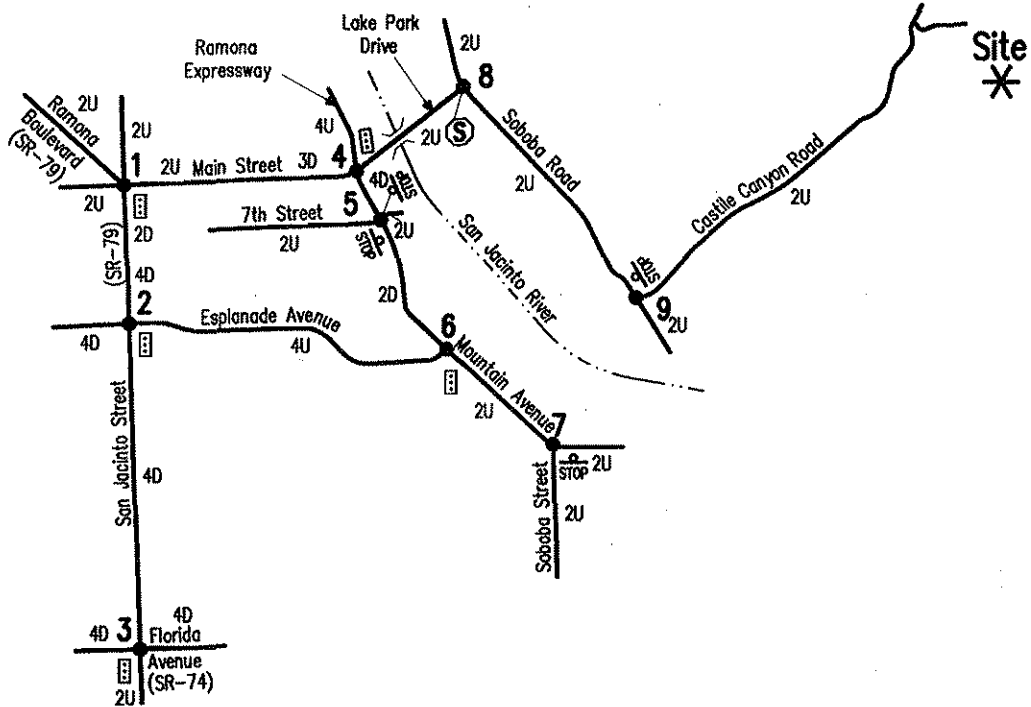
By: _____
Karl E. Johnson
Tribal Attorney

Date: _____

Date: _____

EXHIBIT "A"

MAP INCLUDING SIGNIFICANTLY AFFECTED INTERSECTIONS



Legend

- = Traffic Signal
- = All Way Stop
- = Stop Sign
- 4 = Through Travel Lanes
- D = Divided
- U = Undivided

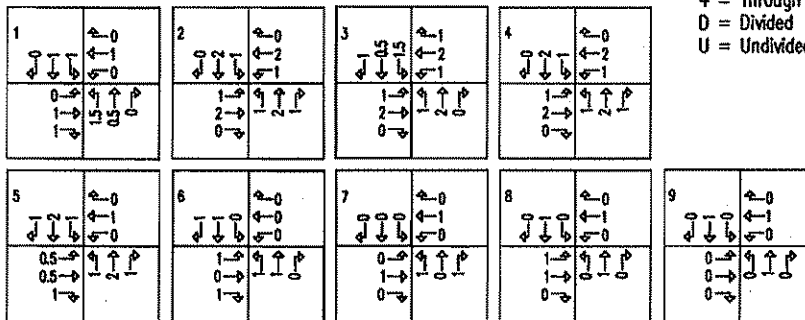
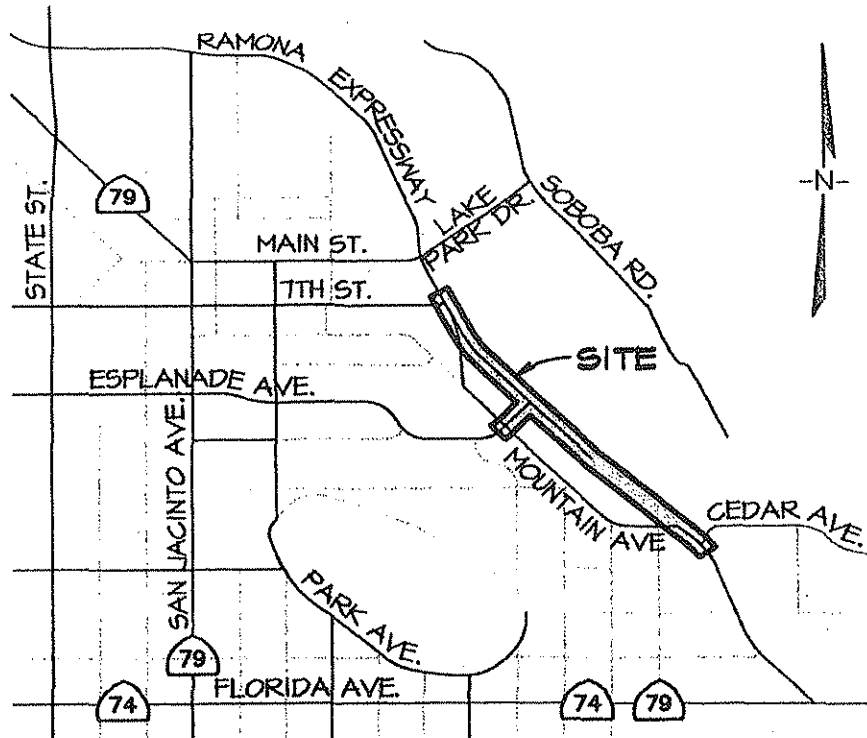


EXHIBIT "B"

RAMONA EXPRESSWAY GAP CLOSURE



VICINITY MAP
T.5S., R.1E., SECTION 6
N.T.S.

EXHIBIT "C"
COST ESTIMATES

Cost Estimate for Soboba Road and Lake Park Drive Signalization

ITEM	UNIT COST/QUANTITY	COST	
Traffic Signal Installation (Includes all poles, mast arms, controller, meter, loops, conduits, pull boxes, etc.)		\$200,000.00	lump sum
Pedestrian ADA Ramps	4 ea x \$3,000 ea	\$12,000.00	
Striping & Signage		\$15,000.00	lump sum
Pavement Widening/Transitions and minor grading	\$2.50/ft. ² x 7,000/ft. ²	\$17,500.00	
SCE Cost (Extension of Electrical Serv.)		<u>\$5,000.00</u>	lump sum
	Subtotal	\$249,500.00	
10% Design Cost		\$24,950.00	
10% Contingency		<u>\$24,950.00</u>	
	Total	\$299,400.00	

Cost Estimate for Ramona Expressway and 7th Street Signalization

ITEM	UNIT COST/QUANTITY	COST	
Traffic Signal Installation (Includes all poles, mast arms, controller, meter, loops, conduits, pull boxes, etc.)		\$250,000.00	lump sum
Pedestrian ADA Ramps	4 ea @ \$3,000 ea	\$12,000.00	
Striping & Signage		\$20,000.00	lump sum
Pavement Widening/Transitions	\$2.50/ft ² x 25,000 ft ²	\$62,500.00	
Minor Drainage Structures (Includes inlets, outlets, pipe (24" diameter), curbing)		\$25,000.00	lump sum
SCE Cost (Extension of Electrical Serv.)		<u>\$5,000.00</u>	lump sum
	Subtotal	\$374,500.00	
10% Design Cost		\$37,450.00	
10% Contingency		<u>\$37,450.00</u>	
	Total	\$449,400.00	

Cost Estimate for Soboba Street and Mountain Ave Signalization

ITEM	UNIT COST/QUANTITY	COST	
Traffic Signal Installation		\$200,000.00	lump sum
Pedestrian ADA Ramps	4 ea x \$3,000 ea	\$12,000.00	
SCE Cost (Extension of Electrical Serv.)		\$5,000.00	lump sum
Pavement Widening/Transitions and minor grading	\$2.50/ft. ² x 30,000 ft. ²	\$75,000.00	
	Subtotal	\$292,000.00	
10% Design Cost		\$29,200.00	
10% Contingency		<u>\$29,200.00</u>	
	Subtotal	\$350,400.00	
Less Non-Tribal Project Cost Share		-\$207,437.00	
	Total	\$142,963.00	

EXHIBIT "D"

FAIR SHARE CALCULATION



KUNZMAN ASSOCIATES

OVER 30 YEARS OF EXCELLENT SERVICE

April 27, 2009

Mr. Karl E. Johnson
LUEBBEN JOHNSON & BARNHOUSE LLP
7424 4th Street NW
Los Ranchos de Albuquerque, NM 87107

Dear Mr. Johnson:

INTRODUCTION

The firm of Kunzman Associates is pleased to submit this revised fair share analysis for The Oaks Retreat project. This report contains the fair share analysis for the Soboba Softball Fields Project Traffic Impact Analysis prepared by Kunzman Associates (April 9, 2007). The project site is located east of Castile Canyon Road on the Kwiila Indian Reservation in the County of Riverside.

Although this is a technical report, every effort has been made to write the report clearly and concisely. To assist the reader with those terms unique to transportation engineering, a glossary of terms is provided within Appendix A.

PROJECT DESCRIPTION

The recently completed project site has been developed with four softball fields and a baseball diamond.

METHODOLOGY

The project fair share contributions have been calculated for Opening Year (2009) study area intersections. The project fair share percentages have been based on the proportion of project evening peak hour traffic contributed to the study area intersections relative to the total new peak hour Opening Year (2009) traffic volumes. The existing and Opening Year (2009) evening peak hour intersection turning movement volumes were obtained from the Soboba Softball Fields Project Traffic Impact Analysis prepared by Kunzman Associates (April 9, 2007), except for those intersections in which more updated traffic counts are present. The Horseshoe Grande Property Traffic Impact Analysis (Revised) prepared by Kunzman Associates (April 24, 2008) contains the most updated traffic counts for the roadway area network for some intersections as well as Year 2025 traffic conditions which were interpolated to provide Opening Year (2009) traffic conditions. Evening peak hour intersection turning movement volumes were utilized to provide a more conservative analysis for the report rather than daily traffic volumes.

1111 TOWN & COUNTRY ROAD, SUITE 34, ORANGE, CA 92868
PHONE: (714) 973-8383 • FAX: (714) 973-8821

WWW.TRAFFIC-ENGINEER.COM

Mr. Karl E. Johnson
LUEBBEN JOHNSON & BARNHOUSE LLP
April 27, 2009

FAIR SHARE CALCULATION

Table 1 shows the evening peak hour traffic for existing traffic conditions and Opening Year (2009) with project traffic conditions. These calculations reveal the percentage of the new traffic from the project during the evening peak hour for each study area intersection.


CONCLUSION

The cost estimates for the intersections of Ramona Expressway/7th Street, Soboba Street/Mountain Avenue, and Soboba Road/Lake Park Drive are included in Appendix C. These cost estimates were provided by the City of San Jacinto. As shown in Table 2, the total project cost share for these three intersections is \$412,766.

It has been a pleasure to service your needs on this project. Should you have any questions or if we can be of further assistance, please do not hesitate to call at (714) 973-8383.

Sincerely,

KUNZMAN ASSOCIATES

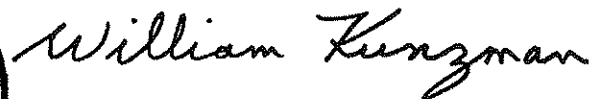


Carl Ballard
Principal Associate

#3836b



KUNZMAN ASSOCIATES



William Kunzman, P.E.
Principal
Professional Registration
Expiration Date 3-31-2010

Table 1

Project Fair Share Intersection Traffic Contribution

Intersection	Peak Hour	Existing Traffic	Opening Year (2009) Project Traffic	Project Traffic	Total New Traffic	Project % of New Traffic
San Jacinto Street (NS) at:						
Ramona Boulevard/Main Street (EW)	Evening	1,562	2,790	444	1,228	36.2%
Esplanade Avenue (EW)	Evening	2,964	4,335	396	1,371	28.9%
Florida Avenue (EW)	Evening	3,498	5,136	346	1,638	21.1%
Ramona Expressway (NS) at:						
Main Street/Lake Park Drive (EW)	Evening	1,753	3,086	640	1,333	48.0%
7th Street (EW)	Evening	1,575	2,254	98	679	14.4%
Mountain Avenue (NS) at:						
Esplanade Avenue (EW)	Evening	1,824	2,601	98	777	12.6%
Soboba Street (NS) at:						
Mountain Avenue (EW)	Evening	1,048	1,538	200	490	40.8%
Soboba Road (NS) at:						
Lake Park Drive (EW)	Evening	1,019	2,459	986	1,440	68.5%
Castile Canyon Road (EW)	Evening	118	1,208	986	1,090	90.5%

Table 2

Project Fair Share Intersection Cost Share

Intersection	Total Cost ¹	Project % of New Traffic ²	Project Cost Share
Ramona Expressway (NS) at: 7th Street (EW)	\$ 449,400	14.4%	\$ 64,714
Soboba Street (NS) at: Mountain Avenue (EW)	\$ 350,400	40.8%	\$ 142,963
Soboba Road (NS) at: Lake Park Drive (EW)	\$ 299,400	68.5%	\$ 205,089
Total			\$ 412,766

¹ See Appendix C.

² See Table 1.

APPENDIX A

GLOSSARY OF TRANSPORTATION TERMS

GLOSSARY OF TRANSPORTATION TERMS

COMMON ABBREVIATIONS

AC:	Acres
ADT:	Average Daily Traffic
Caltrans:	California Department of Transportation
DU:	Dwelling Unit
ICU:	Intersection Capacity Utilization
LOS:	Level of Service
TSF:	Thousand Square Feet
V/C:	Volume/Capacity
VMT:	Vehicle Miles Traveled

TERMS

AVERAGE DAILY TRAFFIC: The total volume during a year divided by the number of days in a year. Usually only weekdays are included.

BANDWIDTH: The number of seconds of green time available for through traffic in a signal progression.

BOTTLENECK: A constriction along a travelway that limits the amount of traffic that can proceed downstream from its location.

CAPACITY: The maximum number of vehicles that can be reasonably expected to pass over a given section of a lane or a roadway in a given time period.

CHANNELIZATION: The separation or regulation of conflicting traffic movements into definite paths of travel by the use of pavement markings, raised islands, or other suitable means to facilitate the safe and orderly movements of both vehicles and pedestrians.

CLEARANCE INTERVAL: Nearly same as yellow time. If there is an all red interval after the end of a yellow, then that is also added into the clearance interval.

CORDON: An imaginary line around an area across which vehicles, persons, or other items are counted (in and out).

CYCLE LENGTH: The time period in seconds required for one complete signal cycle.

CUL-DE-SAC STREET: A local street open at one end only, and with special provisions for turning around.

DAILY CAPACITY: The daily volume of traffic that will result in a volume during the peak hour equal to the capacity of the roadway.

DELAY: The time consumed while traffic is impeded in its movement by some element over which it has no control, usually expressed in seconds per vehicle.

DEMAND RESPONSIVE SIGNAL: Same as traffic-actuated signal.

DENSITY: The number of vehicles occupying in a unit length of the through traffic lanes of a roadway at any given instant. Usually expressed in vehicles per mile.

DETECTOR: A device that responds to a physical stimulus and transmits a resulting impulse to the signal controller.

DESIGN SPEED: A speed selected for purposes of design. Features of a highway, such as curvature, superelevation, and sight distance (upon which the safe operation of vehicles is dependent) are correlated to design speed.

DIRECTIONAL SPLIT: The percent of traffic in the peak direction at any point in time.

DIVERSION: The rerouting of peak hour traffic to avoid congestion.

FORCED FLOW: Opposite of free flow.

FREE FLOW: Volumes are well below capacity. Vehicles can maneuver freely and travel is unimpeded by other traffic.

GAP: Time or distance between successive vehicles in a traffic stream, rear bumper to front bumper.

HEADWAY: Time or distance spacing between successive vehicles in a traffic stream, front bumper to front bumper.

INTERCONNECTED SIGNAL SYSTEM: A number of intersections that are connected to achieve signal progression.

LEVEL OF SERVICE: A qualitative measure of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs.

LOOP DETECTOR: A vehicle detector consisting of a loop of wire embedded in the roadway, energized by alternating current and producing an output circuit closure when passed over by a vehicle.

MINIMUM ACCEPTABLE GAP: Smallest time headway between successive vehicles in a traffic stream into which another vehicle is willing and able to cross or merge.

MULTI-MODAL: More than one mode; such as automobile, bus transit, rail rapid transit, and bicycle transportation modes.

OFFSET: The time interval in seconds between the beginning of green at one intersection and the beginning of green at an adjacent intersection.

PLATOON: A closely grouped component of traffic that is composed of several vehicles moving, or standing ready to move, with clear spaces ahead and behind.

ORIGIN-DESTINATION SURVEY: A survey to determine the point of origin and the point of destination for a given vehicle trip.

PASSENGER CAR EQUIVALENTS (PCE): One car is one Passenger Car Equivalent. A truck is equal to 2 or 3 Passenger Car Equivalents in that a truck requires longer to start, goes slower, and accelerates slower. Loaded trucks have a higher Passenger Car Equivalent than empty trucks.

PEAK HOUR: The 60 consecutive minutes with the highest number of vehicles.

PRETIMED SIGNAL: A type of traffic signal that directs traffic to stop and go on a predetermined time schedule without regard to traffic conditions. Also, fixed time signal.

PROGRESSION: A term used to describe the progressive movement of traffic through several signalized intersections.

SCREEN-LINE: An imaginary line or physical feature across which all trips are counted, normally to verify the validity of mathematical traffic models.

SIGNAL CYCLE: The time period in seconds required for one complete sequence of signal indications.

SIGNAL PHASE: The part of the signal cycle allocated to one or more traffic movements.

STARTING DELAY: The delay experienced in initiating the movement of queued traffic from a stop to an average running speed through a signalized intersection.

TRAFFIC-ACTUATED SIGNAL: A type of traffic signal that directs traffic to stop and go in accordance with the demands of traffic, as registered by the actuation of detectors.

TRIP: The movement of a person or vehicle from one location (origin) to another (destination). For example, from home to store to home is two trips, not one.

TRIP-END: One end of a trip at either the origin or destination; i.e. each trip has two trip-ends. A trip-end occurs when a person, object, or message is transferred to or from a vehicle.

TRIP GENERATION RATE: The quality of trips produced and/or attracted by a specific land use stated in terms of units such as per dwelling, per acre, and per 1,000 square feet of floor space.

TRUCK: A vehicle having dual tires on one or more axles, or having more than two axles.

UNBALANCED FLOW: Heavier traffic flow in one direction than the other. On a daily basis, most facilities have balanced flow. During the peak hours, flow is seldom balanced in an urban area.

VEHICLE MILES OF TRAVEL: A measure of the amount of usage of a section of highway, obtained by multiplying the average daily traffic by length of facility in miles.

APPENDIX B

TRAFFIC COUNT WORKSHEETS

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: San Jacinto Ave./Ramona

DATE: 4/4/2007

LOCATION: City of San Jacinto

E-W STREET: Main St.

DAY: WEDNESDAY

PROJECT# 07-3127-001

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	48	36	14	1	49	2	1	12	52	11	15	6	247
4:15 PM	59	52	17	3	53	1	0	10	50	14	9	4	272
4:30 PM	58	38	9	5	63	1	1	21	56	19	14	4	289
4:45 PM	42	63	16	6	58	3	0	21	61	11	11	9	301
5:00 PM	62	51	11	4	67	1	1	17	72	13	15	7	321
5:15 PM	78	69	20	9	60	4	2	25	63	17	19	4	370
5:30 PM	54	60	17	7	79	2	1	20	55	20	12	3	330
5:45 PM	43	49	15	10	68	2	0	22	58	16	15	6	304
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	444	418	119	45	497	16	6	148	467	121	110	43	2434

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	237	229	63	30	274	9	4	84	248	66	61	20	1325
PEAK HR. FACTOR:		0.792			0.889			0.933			0.919		0.895

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: San Jacinto Ave./Ramona DATE: 4/4/2007 LOCATION: City of San Jacinto
 E-W STREET: Main St. West leg DAY: WEDNESDAY PROJECT# 07-3127-001

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	5					5	5	11	5		11		42
4:15 PM	7					5	3	15	3		13		46
4:30 PM	8					3	6	16	5		15		53
4:45 PM	9					5	8	18	6		18		64
5:00 PM	9					7	7	17	8		20		68
5:15 PM	11					6	6	11	7		11		52
5:30 PM	8					5	5	13	6		10		47
5:45 PM	6					2	4	12	5		13		42
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	63	0	0	0	0	38	44	113	45	0	111	0	414

PM Peak Hr Begins at: 4:30 PM

PEAK VOLUMES =	37	0	0	0	0	21	27	62	26	0	64	0	237
PEAK HR. FACTOR:	0.841			0.750			0.898			0.800			0.871

CONTROL: NL=CARS FROM SAN JACINTO TO MAIN
 SR=CARS FROM SAN JACINTO TO MAIN
 WT=CARS FROM MAIN TO W-LEG MAIN
 EL=CARS FROM W-LEG MAIN TO SAN JACINTO
 ER=CARS FROM W-LEG MAIN TO SAN JACINTO
 ET=CARS FROM W-LEG MAIN TO MAIN

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: San Jacinto (SR-79)

DATE: 10/25/2007

LOCATION: City of San Jacinto

E-W STREET: Esplanade Ave

DAY: THURSDAY

PROJECT# 07-3324-002

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 1.5	WR 0.5	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	45	126	36	33	131	19	30	117	46	40	98	15	736
4:15 PM	44	123	26	45	113	28	30	120	35	44	87	20	715
4:30 PM	48	139	28	40	128	21	39	110	52	36	107	21	769
4:45 PM	46	137	36	45	111	26	28	126	47	25	99	18	744
5:00 PM	27	144	34	47	114	26	42	129	42	35	81	13	734
5:15 PM	47	132	28	37	101	18	29	114	41	28	98	15	688
5:30 PM	39	139	33	49	112	17	34	91	47	35	96	12	704
5:45 PM	57	123	28	34	99	16	31	72	46	29	86	23	644
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL 353	NT 1063	NR 249	SL 330	ST 909	SR 171	EL 263	ET 879	ER 356	WL 272	WT 752	WR 137	TOTAL 5734
-----------------	-----------	------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	---------------

PM Peak Hr Begins at: 400 PM

PEAK VOLUMES =	183	525	126	163	483	94	127	473	180	145	391	74	2964
PEAK HR. FACTOR:		0.952			0.979			0.970			0.930		0.964

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: San Jacinto St

DATE: 4/4/2007

LOCATION: City of San Jacinto

E-W STREET: Florida Ave.

DAY: WEDNESDAY

PROJECT# 07-3127-003

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1.5	.5	1	1	2	0	1	2	1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	21	55	13	50	59	35	61	220	4	23	188	12	741
4:15 PM	11	59	24	90	75	42	40	201	10	29	149	11	741
4:30 PM	12	79	28	61	56	43	47	235	24	20	220	20	845
4:45 PM	11	59	30	95	74	36	34	184	18	30	215	20	806
5:00 PM	14	73	28	94	80	34	52	221	27	36	232	15	906
5:15 PM	20	87	24	108	74	35	41	230	18	31	224	10	902
5:30 PM	17	73	32	64	55	59	49	238	22	39	222	14	884
5:45 PM	17	56	25	57	69	36	47	191	17	30	189	12	746
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	123	541	204	619	542	320	371	1720	140	238	1639	114	6571

PM Peak Hr Begins at: 4:45 PM

PEAK VOLUMES =	62	292	114	361	283	164	176	873	85	136	893	59	3498
PEAK HR. FACTOR:		0.893		0.931				0.917			0.961		0.965

CONTROL: signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Ramona Exwy.

DATE: 4/3/2007

LOCATION: City of San Jacinto

E-W STREET: Main St./ Lake Park Dr.

DAY: TUESDAY

PROJECT# 07-3127-004

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	2	0	1	1.5	.5	1	1.5	.5	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	11	70	45	17	104	1	2	28	12	60	25	18	393
4:15 PM	4	62	42	21	103	5	1	26	18	77	40	29	428
4:30 PM	13	70	51	24	125	5	1	36	6	67	41	20	459
4:45 PM	6	61	43	30	97	1	1	32	11	70	22	24	398
5:00 PM	7	72	50	23	121	1	3	29	8	69	44	17	444
5:15 PM	9	50	56	27	95	3	5	36	10	93	39	29	452
5:30 PM	5	50	56	34	101	4	0	24	13	68	40	27	422
5:45 PM	6	41	45	25	106	5	1	35	10	66	37	23	400
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	61	476	388	201	852	25	14	246	88	570	288	187	3396

PM Peak Hr Begins at: 430 PM

PEAK VOLUMES =	35	253	200	104	438	10	10	133	35	299	146	90	1753
PEAK HR. FACTOR:		0.910		0.896				0.873			0.831		0.955

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Ramona Exwy./Mountain Ave. DATE: 4/3/2007

LOCATION: City of San Jacinto

E-W STREET: 7th St

DAY: TUESDAY

PROJECT# 07-3127-005

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 2	ER 0	WL 0	WT 1	WR 0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	14	101		5	101	4	6		21	0		0	252
4:15 PM	26	124		9	132	8	14		29	0		2	344
4:30 PM	17	109		12	208	6	9		37	2		1	401
4:45 PM	22	117		11	213	8	14		40	0		0	425
5:00 PM	9	94		15	150	5	16		57	1		0	347
5:15 PM	12	102		3	196	17	18		48	0		3	399
5:30 PM	5	92		6	186	13	12		56	2		1	373
5:45 PM	6	72		12	180	9	9		48	0		2	338
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL 111	NT 811	NR 0	SL 73	ST 1366	SR 70	EL 98	ET 0	ER 336	WL 5	WT 0	WR 9	TOTAL 2879
-----------------	-----------	-----------	---------	----------	------------	----------	----------	---------	-----------	---------	---------	---------	---------------

PM Peak Hr Begins at: 430 PM

PEAK VOLUMES =	60	422	0	41	767	36	57	0	182	3	0	4	1572
PEAK HR. FACTOR:		0.867			0.909			0.818			0.583		0.925

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Mountain Ave

DATE: 4/3/2007

LOCATION: City of San Jacinto

E-W STREET: Esplanade ave

DAY: TUESDAY

PROJECT# 07-3127-006

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	1	1	0	0	1	1	1	0	1	0	0	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	27	74			92	46	26		34				299
4:15 PM	33	98			110	62	47		47				397
4:30 PM	33	81			160	59	41		50				424
4:45 PM	47	97			172	64	24		72				476
5:00 PM	38	74			196	85	45		51				489
5:15 PM	42	61			151	61	57		63				435
5:30 PM	29	58			167	68	41		48				411
5:45 PM	14	46			142	61	24		32				319
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	263	589	0	0	1190	506	305	0	397	0	0	0	3250

PM Peak Hr Begins at: 4:30 PM

PEAK VOLUMES =	160	313	0	0	679	269	167	0	236	0	0	0	1824
PEAK HR. FACTOR:		0.821			0.843			0.840			0.000		0.933

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Soboba Rd

DATE: 4/3/2007

LOCATION: City of San Jacinto

E-W STREET: Mountain Ave.

DAY: TUESDAY

PROJECT# 07-3127-007

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	0	1	0	0	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	7		4					87	11	2	67		178
4:15 PM	11		5					112	18	7	82		235
4:30 PM	16		2					146	21	4	91		280
4:45 PM	10		4					116	22	6	70		228
5:00 PM	14		10					137	30	0	64		255
5:15 PM	17		7					143	27	8	83		285
5:30 PM	13		4					128	24	3	62		234
5:45 PM	8		2					108	12	1	47		178
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	96	0	38	0	0	0	0	977	165	31	566	0	1873

PM Peak Hr Begins at: 430 PM

PEAK VOLUMES =	57	0	23	0	0	0	0	542	100	18	308	0	1048
PEAK HR. FACTOR:		0.833			0.000			0.944			0.858		0.919

CONTROL: 1-Way Stop N

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Soboba Rd

DATE: 11/1/2007

LOCATION: City of San Jacinto

E-W STREET: Lake Park Dr

DAY: THURSDAY

PROJECT# 07-3338-01

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	0	1	0	0	0	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	62	20			30	27	19			71			229
4:15 PM	70	20			31	26	17			78			242
4:30 PM	78	18			34	31	18			70			249
4:45 PM	69	16			26	34	21			89			255
5:00 PM	68	22			25	36	22			83			256
5:15 PM	70	23			31	31	18			80			253
5:30 PM	58	21			25	47	19			62			232
5:45 PM	56	19			26	42	11			78			232
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	531	159	0	0	228	274	145	0	611	0	0	0	1948

PM Peak Hr Begins at: 430 PM

PEAK VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	285	79	0	0	116	132	79	0	322	0	0	0	1013
PEAK HR. FACTOR:		0.948			0.954			0.911			0.000		0.989

CONTROL: 3-way stop

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Soboba Rd

DATE: 4/3/2007

LOCATION: City of San Jacinto

E-W STREET: Castle Cyn Rd.

DAY: TUESDAY

PROJECT# 07-3127-008

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	0	0	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM		3	0	1	5					3		5	17
4:15 PM		6	3	0	8					8		7	32
4:30 PM		2	2	4	7					4		4	23
4:45 PM		7	6	2	11					11		3	40
5:00 PM		6	3	5	6					2		1	23
5:15 PM		4	5	0	10					0		0	19
5:30 PM		5	1	3	4					1		2	16
5:45 PM		3	4	1	2					0		1	11
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	36	24	16	53	0	0	0	0	29	0	23	181

PM Peak Hr Begins at: 4:15 PM

PEAK VOLUMES =	0	21	14	11	32	0	0	0	0	25	0	15	118
PEAK HR. FACTOR:		0.673			0.827			0.000			0.667		0.738

CONTROL: 1-Way Stop W

APPENDIX C

COST ESTIMATES

Cost Estimate for Ramona Expressway and 7th Street Signalization

ITEM	UNIT COST/QUANTITY	COST	
Traffic Signal Installation (Includes all poles, mast arms, controller, meter, loops, conduits, pull boxes, etc.)		\$250,000.00	lump sum
Pedestrian ADA Ramps	4 ea @ \$3,000 ea	\$12,000.00	
Striping & Signage		\$20,000.00	lump sum
Pavement Widening/Transitions	\$2.50/ft ² x 25,000 ft ²	\$62,500.00	
Minor Drainage Structures (Includes inlets, outlets, pipe (24" diameter), curbing)		\$25,000.00	lump sum
SCE Cost (Extension of Electrical Serv.)		<u>\$5,000.00</u>	lump sum
	Subtotal	\$374,500.00	
10% Design Cost		\$37,450.00	
10% Contingency		<u>\$37,450.00</u>	
	Total	\$449,400.00	

Cost Estimate for Soboba Street and Mountain Ave Signalization

ITEM	UNIT COST/QUANTITY	COST	
Traffic Signal Installation		\$200,000.00	lump sum
Pedestrian ADA Ramps	4 ea x \$3,000 ea	\$12,000.00	
SCE Cost (Extension of Electrical Serv.)		\$5,000.00	lump sum
Pavement Widening/Transitions and minor grading	\$2.50/ft. ² x 30,000 ft. ²	\$75,000.00	
	Subtotal	\$292,000.00	
10% Design Cost		\$29,200.00	
10% Contingency		<u>\$29,200.00</u>	
	Total	\$350,400.00	

Cost Estimate for Soboba Road and Lake Park Drive Signalization

ITEM	UNIT COST/QUANTITY	COST	
Traffic Signal Installation (Includes all poles, mast arms, controller, meter, loops, conduits, pull boxes, etc.)		\$200,000.00	lump sum
Pedestrian ADA Ramps	4 ea x \$3,000 ea	\$12,000.00	
Striping & Signage		\$15,000.00	lump sum
Pavement Widening/Transitions and minor grading	\$2.50/ft. ² x 7,000/ft. ²	\$17,500.00	
SCE Cost (Extension of Electrical Serv.)		<u>\$5,000.00</u>	lump sum
	Subtotal	\$249,500.00	
10% Design Cost		\$24,950.00	
10% Contingency		<u>\$24,950.00</u>	
	Total	\$299,400.00	