RESOLUTION 16-052

**A RESOLUTION OF THE PLANNING COMMISSION
OF THE CITY OF PASO ROBLES
RECOMMENDING THE CITY COUNCIL
ADOPT A MITIGATED NEGATIVE DECLARATION
AND MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE DESTINO PASO RESORT
PLANNED DEVELOMENT AMENDMENT 08-002,
CONDITIONAL USE PERMINT AMENDMENT 08-002,
VESTING TENTATIVE TRACT MAP 2962, AND OAK TREE REMOVAL 16-009
3350 AIRPORT ROAD, APN: 025-436-029 & 025-346-030**

WHEREAS, an application for Planned Development Amendment (PD 08-002), Conditional Use Permit Amendment (CUP 08-002), Vesting Tentative Tract Map (VTTM 2962), and Oak Tree Removal (OTR 16-009) have been filed by Karen Stier for Destino Paso Resort, with four (4) hotels that include 291 rooms and ancillary site improvements; and

WHEREAS, pursuant to the Statutes and Guidelines of the California Environmental Quality Act (CEQA), Public Resources Code, Section 21000, et seq., and the City's Procedures for Implementing CEQA, an Initial Study and a Draft Mitigated Negative Declaration (MND) was prepared and circulated for a 30-day public review period beginning on September 10, 2016 and extended through December 13, 2016. Public comments were received from Caltrans on the MND prior to the Planning Commission meeting on October 11, 2016, and modifications to the mitigation measures, as suggested by Caltrans to not close the southbound left turn movement on Airport Road at SR 46E has been incorporated consistent the updated 11/30/16 Traffic Impact Analysis (Exhibit C and D); and

WHEREAS, a copy of the Draft MND/Initial Study is included in Exhibit A (Attachment 12 of the project staff report) of this Resolution, and it is on file at the Paso Robles Community Development Department; and

WHEREAS, mitigation measures have been incorporated into the MND and will be imposed on the project through the City's adoption of a Mitigation Monitoring and Reporting Program (MMRP) in compliance with CEQA Guideline 15074(d). These mitigation measures are imposed on the project to address potential environmental effects from: aesthetics; air quality; traffic; biological resources, greenhouse gas emissions; and traffic; and

WHEREAS, with the implementation of these mitigation measures, all potential environmental effects will be reduced to a less than significant level. These mitigation measures are provided in Exhibit B, "Mitigation Monitoring and Reporting Program" attached to this Resolution; and

WHEREAS, mitigation measures set forth in the MMRP are specific and enforceable. The MMRP adequately describes implementation procedures, monitoring responsibility, reporting actions, compliance schedule, and verification of compliance in order to ensure that the Project complies with the adopted mitigation measures; and

WHEREAS, the mitigation measures contained in the MMRP will also be imposed as enforceable

conditions of approval; and

WHEREAS, the applicant has executed a Mitigation Agreement whereby the applicant has agreed to incorporate all of the mitigation measures listed in Exhibit B into the project. A copy of the executed Mitigation Agreement is on file in the Community Development Department; and

WHEREAS, public notice of the proposed Draft MND was posted as required by Section 21092 of the Public Resources Code; and

WHEREAS, two public hearings were conducted by the Planning Commission on October 11, 2016 and December 13, 2016 to consider the Initial Study and the draft MND prepared for the proposed project, and to accept public testimony on the Planned Development, Conditional Use Permit, Vesting Tentative Tract Map, Oak Tree Removal, and environmental determination. At the close of the public hearing on December 13, 2016, the Planning Commission recommended adoption of the MND and approval of the proposed project to the City Council; and

WHEREAS, pursuant to CEQA the Planning Commission has independently reviewed the Initial Study, the Mitigated Negative Declaration, and all comments received regarding the Mitigated Negative Declaration, and based on the whole record before it finds that the Mitigated Negative Declaration was prepared in compliance with CEQA and the CEQA Guidelines, that there is no substantial evidence that the Project will have a significant effect on the environment with the incorporation of mitigation, and the Mitigated Negative Declaration reflects the independent judgment and analysis of the Planning Commission.

NOW, THEREFORE, BE IT RESOLVED, the Planning Commission of the City of El Paso de Robles, based on its independent judgment and analysis, hereby recommends the City Council adopt (i) the Mitigated Negative Declaration for the Destino Paso Resort project, attached hereto as Exhibit A and incorporated herein by reference, and (ii) the Mitigation Monitoring and Reporting Program for the project, attached hereto as Exhibit B and incorporated herein by reference, and hereby imposes each mitigation measure as a condition of approval of the project, in accordance with the Statutes and Guidelines of the California Environmental Quality Act (CEQA) and the City's Procedures for Implementing CEQA.

PASSED AND ADOPTED this 13th day of December, 2016, by the following roll call vote:

AYES: Commissioners Donaldson, Brennan, Barth and Davis.
NOES: Commissioners Agredano, Burgett and Chairman Rollins.
ABSENT:
ABSTAIN:

BOB ROLLINS, CHAIRPERSON

ATTEST:

WARREN FRACE, SECRETARY OF THE PLANNING COMMISSION

Exhibits:

A. Exhibit A – Mitigated Negative Declaration / Initial Study (refer to Attachment 12 of the October 11, 2016 Planning Commission staff report)
B. Exhibit B – 12/6/16 updated Mitigation Monitoring and Reporting Program
C. Exhibit C – 11/30/16 revised Transportation Impact Analysis
D. Exhibit D - 11/30/16 revised Appendix A: Traffic Count Sheets

Exhibit B
Mitigation Monitoring and Reporting Plan

Project File No./Name: PD Amendment 08-002, CUP 08-002, VTTM Amendment 2962, OTR 16-002 – Destino Paso Resort Hotel, 3350 Airport Road

Approving Resolution No.:_____ by: ■ Planning Commission Date: December 13, 2016

The following environmental mitigation measures were either incorporated into the approved plans or were incorporated into the conditions of approval. Each and every mitigation measure listed below has been found by the approving body indicated above to lessen the level of environmental impact of the project to a level of non-significance. A completed and signed checklist for each mitigation measure indicates that it has been completed.

Explanation of Headings:

Type: .....Project, ongoing, cumulative
Monitoring Department or Agency: .....Department or Agency responsible for monitoring a particular mitigation measure
Shown on Plans: .....When a mitigation measure is shown on the plans, this column will be initialed and dated.
Verified Implementation: .....When a mitigation measure has been implemented, this column will be initialed and dated.
Remarks: .....Area for describing status of ongoing mitigation measure, or for other information.

Mitigation Measure	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
AES – 1 The project shall be designed in accordance with the attached specific architectural features to ensure visual impacts are mitigated.	Project	CDD			Prior to issuance of building permits.
BIO-1 To the maximum extent possible, site preparation, ground-disturbing, and construction activities should be conducted outside of the migratory bird breeding season. If such activities are required during this period, the applicant should retain a qualified biologist to conduct a nesting bird survey and verify that migratory birds are not occupying the site. If nesting activity is detected the following measures should be implemented: a. The project should be modified or delayed as necessary to avoid direct take of identified nests, eggs, and/or young protected under the MBTA; b. The qualified biologist should determine an appropriate biological buffer zone around active nest sites. Construction activities within the established buffer	Project	Qualified Biologist CDD			Prior to issuance of grading permit

Mitigation Measure	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
zone will be prohibited until the young have fledged the nest and achieved independence; and, c. The qualified biologist should document all active nests and submit a letter report to the City documenting project compliance with the MBTA.					
BIO-2 Prior to construction, a qualified biologist should conduct a pre-activity survey to identify known or potential dens or sign of San Joaquin kit fox no less than 14 days and no more than 30 days prior to the beginning of the site preparation, ground-disturbing, or construction activities, or any other activity that has the potential to adversely affect the species. If a known or potential den or any other sign of the species is identified or detected within the project area, the biologist will contact USFWS and CDFW immediately. No work will commence or continue until such time that USFWS and CDFW determine that it is appropriate to proceed. Under no circumstances will a known or potential den be disturbed or destroyed without prior authorization from USFWS and CDFW. Within 7 days of survey completion, a report will be submitted to USFWS, CDFW, and the City. The report will include, at a minimum, survey dates, field personnel, field conditions, survey methodology, and survey results.	Project	Qualified Biologist CDD			Prior to issuance of grading permit
BIO-3 During the site-disturbance and/or construction phase, to prevent entrapment of the San Joaquin kit fox, all excavation, steep-walled holes, or trenches in excess of 2 feet in depth should be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Trenches should also be inspected for entrapped kit fox each morning prior to onset of field activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled or covered, they should be thoroughly inspected for entrapped kit fox. If any kit fox is found, work will stop and USFWS and CDFW will be contacted immediately to determine how to proceed.	On-going	CDD			Prior to issuance of grading permit
BIO-4	On-going	CDD			Prior to issuance of grading permit

Mitigation Measure	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
During the site disturbance and/or construction phase, any pipes, culverts, or similar structures with a diameter of 4 inches or greater stored overnight at the project site should be thoroughly inspected for trapped San Joaquin kit foxes before the subject pipe is subsequently buried, capped, or otherwise used or moved in any way. If any kit fox is found, work will stop and USFWS and CDFW will be contacted immediately to determine how to proceed.					
BIO-5 Prior to, during, and after the site disturbance and/or construction phase, use of pesticides or herbicides should be in compliance with all federal, state, and local regulations. This is necessary to minimize the probability of primary or secondary poisoning of endangered species utilizing adjacent habitats, and the depletion of prey upon which San Joaquin kit foxes depend.	On-going	CDD			Prior to issuance of grading permit
BIO-6 During the site disturbance and/or construction phase, any contractor or employee that inadvertently kills or injures a San Joaquin kit fox or who finds any such animal either dead, injured, or entrapped should be required to report the incident immediately to the applicant and City. In the event that any observations are made of injured or dead kit fox, the applicant should immediately notify USFWS and CDFW by telephone. In addition, formal notification should be provided in writing within 3 working days of the finding of any such animal(s). Notification should include the date, time, location, and circumstances of the incident. Any threatened or endangered species found dead or injured should be turned over immediately to CDFW for care, analysis, or disposition.	On-going	CDD			Prior to issuance of grading permit
BIO-7 Prior to final inspection, should any long internal or perimeter fencing be proposed or installed, the City should do the following to provide for kit fox passage: a. If a wire strand/pole design is used, the lowest strand should be no closer to the ground than 12 inches. b. If a more solid wire mesh fence is used, 8 × 12-inch openings near the ground should be provided every 100 yards.	Project	CDD			Prior to issuing Certificate of Occupancy permit

Mitigation Measure	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
Upon fence installation, the applicant should notify the City to verify proper installation. Any fencing constructed after issuance of a final permit should follow the above guidelines.					
BIO-8 Prior to site disturbance, the CRZ of all oak trees with a DBH of 6 inches or greater must be fenced to protect from construction activities. The proposed fencing shall be shown in orange ink on the grading plan. It must be a minimum of 4' high chain link, snow or safety fence staked (with t posts 8 feet on center) at the edge of the critical root zone or line of encroachment for each tree or group of trees. The fence shall be up before any construction or earth moving begins. The owner shall be responsible for maintaining an erect fence throughout the construction period. The arborist(s), upon notification, will inspect the fence placement once it is erected. After this time, fencing shall not be moved without arborist inspection/approval. If the orange plastic fencing is used, a minimum of four zip ties shall be used on each stake to secure the fence. All efforts shall be made to maximize the distance from each saved tree. Weather proof signs shall be permanently posted on the fences every 50 feet (See Arborist Report for specific language required for signage). All areas within the critical root zone of the trees that can be fenced shall receive a 4-6" layer of chip mulch to retain moisture, soil structure and reduce the effects of soil compaction.	Project	Certified Arborist CDD			Prior to issuing grading permit
BIO-9 All trenching within the critical root zone of native trees shall be hand dug. All major roots shall be avoided whenever possible. All exposed roots larger than 1" in diameter shall be clean cut with sharp pruning tools and not left ragged. A Mandatory meeting between the arborists and grading contractor(s) must take place prior to work start. During the site disturbance and/or construction phase, grading, cutting, or filling within 5 feet of a CRZ of all oak trees with a DBH of 6 inches or greater must be supervised by a certified arborist approved by the City. Such activities beyond 5 feet of a CRZ must be monitored to ensure that activities are in accordance with approved plans. Root pruning outside of the CRZ must be done by hand. Grading should not encroach within the critical root zone unless authorized.	On-going	Certified Arborist CDD		Notes shown on construction documents.	Prior to issuing grading permit.

Mitigation Measure	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
Grading should not disrupt the normal drainage pattern around the trees. Fills should not create a ponding condition and excavations should not leave the tree on a rapidly draining mound.					
BIO-10 Oil, gasoline, chemicals, or other construction materials potentially harmful to oak trees may not be stored in the CRZ of any oak tree with a DBH of 6 inches or greater. No liquid or solid construction waste shall be dumped on the ground within the critical root zone of any native tree. The critical root zone areas are not for storage of materials either.	On-going	CDD		Notes shown on construction documents.	Prior to issuing grading permit.
BIO-11 Drains shall be installed according to City specification so as to avoid harm by excessive watering to oak trees with a DBH of 6 inches or greater.	Project	CDD		Notes shown on construction documents.	Prior to issuing Certificate of Occupancy permit
BIO-12 Landscaping within the CRZ of any oak tree with a DBH of 6 inches or greater is limited to indigenous plant species or non-plant material, such as cobbles or wood chips. All landscape within the critical root zone shall consist of drought tolerant or native varieties. Lawns shall be avoided. All irrigation trenching shall be routed around critical root zones, otherwise above ground drip-irrigation shall be used.	Project	CDD		Notes shown on construction documents.	Prior to issuing Building Permit.
BIO-13 Wires, signs, or other similar items shall not be attached to oak trees with a DBH of 6 inches or greater.	On-going	CDD		Notes shown on construction documents.	Prior to issuing Building Permit.
BIO-14 For each oak tree removed (DBH of 6 inches or greater), a tree or trees of the same species must be planted with a combined DBH of 25% of the removed tree's DBH within the property's boundary.	Project	CDD			Prior to issuing Certificate of Occupancy permit
BIO-15 It is the responsibility of the owner or project manager to provide a copy of the tree protection plan to any and all contractors and subcontractors that work within the critical root zone of any native tree and confirm they are trained in maintaining fencing, protecting root zones and conforming to all tree protection goals. Each contractor must sign and acknowledge this tree protection plan.	Project	CDD			Prior to site disturbance, grading permit issued
BIO-16 Any exposed roots shall be re-covered the same day they were exposed. If they cannot, they must be covered with burlap or another suitable material and	On-going	Certified Arborist CDD		Shown on construction documents	Prior to issuance of grading permit

Mitigation Measure	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
wetted down 2x per day until re-buried. All heavy equipment shall not be driven under the trees, as this will contribute to soil compaction. Also there is to be no parking of equipment or personal vehicles in these areas. All areas behind fencing are off limits unless pre-approved by the arborist.					
BIO-17 As the project moves toward completion, the arborist(s) may suggest either fertilization and/or mycorrhiza applications that will benefit tree health. Mycorrhiza offers several benefits to the host plant, including faster growth, improved nutrition, greater drought resistance, and protection from pathogens.	On-going	Certified Arborist CDD		Shown on construction documents	Prior to issuance of Certificate of Occupancy
BIO-18 Class 4 pruning includes crown reduction pruning shall consist of reduction of tops, sides or individual limbs. A trained arborist shall perform all pruning. No pruning shall take more than 25% of the live crown of any native tree. Any trees that may need pruning for road/home clearance shall be pruned prior to any grading activities to avoid any branch tearing.	On-going	Certified Arborist CDD		Shown on construction documents	Prior to issuance of building permit
BIO-19 An arborist shall be present for selected activities (trees identified in Arborist Report and items bulleted below). The monitoring does not necessarily have to be continuous but observational at times during these activities. It is the responsibility of the owner(s) or their designee to inform us prior to these events so we can make arrangements to be present. All monitoring will be documented on the field report form which will be forwarded to the project manager and the City of Paso Robles Planning Department. ● pre-construction fence placement inspection ● all grading and trenching identified on the spreadsheet ● any other encroachment the arborist feels necessary	On-going	Certified Arborist CDD		Shown on construction documents	Prior to issuance of building permit
BIO-20 Pre-Construction Meeting: An on-site pre-construction meeting with the Arborist(s), Owner(s), Planning Staff, and the earth moving team shall be required for this project. Prior to final occupancy, a letter from the	Project	Certified Arborist CDD			Prior to issuance of Final Occupancy

Mitigation Measure	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
arborist(s) shall be required verifying the health/condition of all impacted trees and providing any recommendations for any additional mitigation. The letter shall verify that the arborist(s) were on site for all grading and/or trenching activity that encroached into the critical root zone of the selected native trees, and that all work done in these areas was completed to the standards set forth above.					
GHG-1 The proposed project shall implement, at a minimum, the following GHG-reduction measures: a. Install high efficiency lights in parking lots, streets, and other public areas. b. Comply with mandatory California Green Building Standards Code bicycle parking standards. c. Install bicycle facilities and/or amenities beyond those required in building standards. d. Incorporate a pedestrian access network that internally links all uses and connects all existing or planned external streets and pedestrian facilities contiguous with the project site. e. The project site shall be designed to minimize barriers to pedestrian access and interconnectivity. f. Implement traffic calming improvements as appropriate (e.g., marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, median islands, mini-circles, tight corner radii, etc.). g. Comply with CALGreen Tier 1 or Tier 2 standards for water efficiency and conservation. h. Divert 65 percent of non-hazardous construction or demolition debris. i. Include the planting of native and drought tolerant trees beyond those required as mitigation for tree removal. j. Implement Mitigation Measure AQ-2. k. Implement Mitigation Measure AQ-3,e-k.	Project	CDD			Prior to occupancy permit of hotel 1
AQ-1	Project	CDD			Prior to occupancy permit of hotel 1

Mitigation Measure	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
The following measures shall be implemented to minimize construction-generated emissions. These measures shall be shown on grading and building plans: a. Reduce the amount of the disturbed area where possible. b. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible. c. All dirt stock pile areas should be sprayed daily as needed. d. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities; e. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established. f. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the SLOAPCD. g. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used. h. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site. i. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical					

Mitigation Measure	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
distance between top of load and top of trailer) in accordance with CVC Section 23114. j. Install wheel washers at the construction site entrance, wash off the tires or tracks of all trucks and equipment leaving the site, or implement other SLOAPCD-approved methods sufficient to minimize the track-out of soil onto paved roadways. k. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible. l. The burning of vegetative material shall be prohibited. m. The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20% opacity, and to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the SLOAPCD Compliance Division prior to the start of any grading, earthwork or demolition. n. Construction of the proposed project shall use low-VOC content paints not exceeding 50 grams per liter.					
AQ-2 To reduce operational emissions, the proposed project shall implement the following measures. The project proponent shall submit proof to the Paso Robles Community Development Department Staff that implementation of all measures have been met in accordance with a time schedule deemed appropriate by Community Development Department staff.	Project	CDD			Prior to occupancy permit of hotel 1

Mitigation Measure	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
a. Utilize green building materials (materials which are resource efficient, recycled, and sustainable) available locally if possible. b. Provide shade tree planting in parking lots to reduce evaporative emissions from parked vehicles. Design should provide 50% tree coverage within 10 years of construction using low ROG emitting, low maintenance native drought resistant trees. c. Pave and maintain roads in parking areas. d. Plant drought tolerant native shade trees along southern exposures of buildings to reduce energy used to cool buildings in summer. e. Provide native and drought tolerant trees beyond those required as mitigation for tree removal. f. Incorporate outdoor electrical outlets to encourage the use of electric appliances and tools. g. Install high-efficiency heating and cooling systems. h. Utilize high-efficiency gas or solar water heaters. i. Utilize built-in energy efficient appliances (i.e., Energy Star rated). j. Utilize double- or triple-paned windows. k. Utilize low energy street lights (i.e., sodium, light-emitting diode [LED]). l. Utilize energy-efficient interior lighting. m. Install door sweeps and weather stripping (if more efficient doors and windows are not available). n. Install energy-reducing programmable thermostats. o. Install low water consumption landscape. Use native plants that do not require watering after they are well established or minimal watering during the summer months and are low ROG emitting. p. Provide a designated parking space for alternatively fueled vehicles.					

Mitigation Measure	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
q. Provide a shuttle service for guests to local destinations, including Paso Robles Transit/Amtrak Station r. Install energy-saving systems in guest rooms that reduce energy usage when rooms are not occupied. s. Provide a pedestrian access network that internally links all uses and connects all existing or planned external streets and pedestrian facilities contiguous with the project site t. Provide on-site bicycle parking beyond those required by California Green Building Standards Code and related facilities to support long-term use (lockers, or a locked room with standard racks and access limited to bicyclists only). u. Implement traffic calming improvements as appropriate (e.g., marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, median islands, mini-circles, tight corner radii, etc.)					
AQ-3 The following measures shall be implemented to reduce expose of sensitive receptors to substantial pollutant concentrations. These measures shall be shown on grading and building plans: a. Implement Mitigation Measure AQ-1, as identified in “Impact AQ-C”, above. b. Demolition of onsite structures shall comply with the National Emission Standards for Hazardous Air Emissions (NESHAP) requirements (NESHAP, 40 CFR, Part 61, Subpart M) for the demolition of existing structures. The SLOAPCD is delegated authority by the Environmental Protection Agency (EPA) to implement the Federal Asbestos NESHAP. Prior to demolition of onsite structures, the SLOAPCD shall be notified, per NESHAP requirements. SLOAPCD notification form and reporting requirements are included in Appendix A. Additional information may be obtained at website url: http://slocleanair.org/business/asbestos.php.	Project	CDD			Prior to occupancy permit of hotel 1

Mitigation Measure	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
c. If during demolition of existing structures, paint is separated from the construction materials (e.g. chemically or physically), the paint waste will be evaluated independently from the building material by a qualified hazardous materials inspector to determine its proper management. All hazardous materials shall be handled and disposed in accordance with local, state and federal regulations. According to the Department of Toxic Substances Control (DTSC), if paint is not removed from the building material during demolition (and is not chipping or peeling), the material can be disposed of as construction debris (a non-hazardous waste). The landfill operator will be contacted prior to disposal of building material debris to determine any specific requirements the landfill may have regarding the disposal of lead-based paint materials. The disposal of demolition debris shall comply with any such requirements. Contact the SLOAPCD Enforcement Division at (805) 781-5912 for more information. Approval of a lead work plan and permit may be required. Lead work plans, if required, will need to be submitted to SLOAPCD ten days prior to the start of demolition d. On-road diesel vehicles shall comply with Section 2485 of Title 13 of the California Code of Regulations. This regulation limits idling from diesel-fueled commercial motor vehicles with gross vehicular weight ratings of more than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies that drivers of said vehicles: 1) Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location, except as noted in Subsection (d) of the regulation; and, 2) Shall not operate a diesel-fueled auxiliary power system to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater					

Mitigation Measure	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
than 5.0 minutes at any location when within 1,000 feet of a restricted area, except as noted in Subsection (d) of the regulation. e. Maintain all construction equipment in proper tune according to manufacturer's specifications; f. Fuel all off-road and portable diesel powered equipment with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road); g. Use diesel construction equipment meeting ARB's Tier 2 certified engines or cleaner off-road heavy duty diesel engines, and comply with the State off-Road Regulation; h. Idling of all on and off-road diesel-fueled vehicles shall not be permitted when not in use. Signs shall be posted in the designated queuing areas and or job site to remind drivers and operators of the no idling limitation. i. Electrify equipment when possible; j. Substitute gasoline-powered in place of diesel-powered equipment, when available; and, k. Use alternatively fueled construction equipment on-site when available, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.					
TR-1 A sidewalk is proposed along Airport Road between Hotels 3 and 4. A four foot or greater aggregate base walking path is shown on the west side of Airport Road from Destino Paso Way to the northernmost Ravine Water Park parking area. Detailed construction documents should be reviewed once they are ready to ensure that adequate sight distance is provided at the driveways serving Hotels 1 and 3, which are located on the inside of horizontal curves. Landscaping and other features should be restricted near these driveways to provide clear sight lines to approaching traffic.	On-going	CDD			Prior to certificate of occupancy of hotels 3 and 4
TR-2	Project	CDD			Prior to certificate of occupancy of hotel 1

Mitigation Measure	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
The applicant will be required to pay traffic mitigation fees to offset to offset its impacts to the citywide transportation network.					
TR-3 The applicant will implement employee transportation demand measures to reduce traffic congestion, such as: (1) The applicant shall implement a program to direct east bound guest traffic to the Jardine Road/SR 46E intersection, and not be permitted to develop Phase II without additional traffic analysis demonstrating effectiveness of this TDM, and to pursue alternative TDM measures if it should not be determined to be effective; (2) Provide information on regional rideshare programs, bike racks, well as provide shuttle service to the multi-modal transportation center and downtown for residents and guests.	Project	CDD			Prior to certificate of occupancy of hotel 1
TR-4 The project will be required to participate in the SLO Car Free program with SLO County APCD	Project	CDD			Prior to certificate of occupancy of hotel 1

(add additional measures as necessary)

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Exhibit C

Destino Paso Resort Hotel

Transportation Impact Analysis

Central Coast Transportation Consulting

895 Napa Avenue, Suite A-6

Morro Bay, CA 93442

(805) 316-0101

November 2016

Executive Summary

This study evaluates the potential transportation impacts of the Destino Paso Resort Hotel proposed on Airport Road in Paso Robles. Four hotels are proposed as a part of the project, with a combined total of 291 rooms and supporting resort amenities. This revised study incorporates comments on the September 2016 version from the City Planning Commission, City staff, and Caltrans.

The following study intersections are evaluated during the weekday morning (7-9 AM), weekday evening (4-6 PM) and Saturday mid-day (11 AM-1 PM) time periods under Existing and Near-Term conditions with and without the project:

1. Dry Creek Road/Airport Road
2. State Route 46 E/Golden Hill Road
3. State Route 46 E/Union Road
4. State Route 46 E/Airport Road

The project is expected to generate 1,657 daily trips, 90 AM peak hour trips, and 122 PM peak hour trips on a typical weekday and 146 peak hour trips on a Saturday. The City's Transportation Impact Analysis Guidelines and Caltrans criteria are applied to identify the transportation deficiencies below.

Traffic Operations: The following recommendations are noted:

- Prohibit northbound left turns at SR 46E/Union Road to improve operations by reducing turning conflicts. The westbound left turn lane should remain, as it provides substantial relief to the SR 46E/Golden Hill Road intersection. This improvement is a condition of approval from an approved development project.
- The southbound approach to SR 46E/Airport Road would operate at LOS E during the Saturday peak hour under Existing conditions, worsening to LOS F with the project. We recommend directing project traffic heading east on SR 46E to Dry Creek Road, then to the SR 46E/Jardine Road intersection where they would turn left on to SR 46E. The SR 46E/Jardine Road intersection has adequate capacity to accommodate the shifted left turn volumes under Existing Plus Project conditions. The effectiveness of this measure should be evaluated prior to Hotel 2 permitting and the measure should be adjusted if needed to meet the satisfaction of the Community Development Director. Under Near Term conditions, a parallel route would be needed to reduce the reliance on SR 46E for local trips.
- An access easement is recommended along Destino Paso Way to serve the property to the north, which would reduce the number of driveways on Airport Road.
- Detailed construction documents should be reviewed once they are ready to ensure that adequate sight distance is provided at the driveways serving Hotels 1 and 3, which are located on the inside of horizontal curves. Landscaping and other features should be restricted near these driveways to provide clear sight lines to approaching traffic.

Bicycle and Pedestrian Recommendations:

- Modify the proposed Airport Road/Destino Paso Way roadway striping to place the bike lane between the northbound right turn lane and through lane per Figure 9C-4 of the CA MUTCD.
- Eliminate the short merge/acceleration lane proposed on the north side of the Hotel 4 Driveway/Airport Road intersection. This merge would be difficult for cyclists to navigate and would provide little benefit to vehicles.

Analysis supporting these recommendations are provided in the body of this report.

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Appendix A: Traffic Counts
Appendix B: LOS/Queue Calculation Sheets

Introduction

This study evaluates the potential transportation impacts of the proposed Destino Paso Resort Hotel in the City of Paso Robles. The project site is located at 3340 Airport Road, north of State Route 46E (SR 46E) and on the east side of Airport Road.

This study revises the prior version from September 2016 to address comments received from the City's Planning Commission, City staff, and Caltrans. The following changes have been made to the September 2016 study:

- Eliminated the recommendation to prohibit southbound left turns at SR 46E/Airport Road due to Caltrans and Planning Commission concerns.
- Evaluated the impact of channelizing the southbound approach to SR 46E/Airport Road per Caltrans' request.
- Added approved projects to the Near Term scenario.
- Evaluated operations at SR 46E/Jardine Road as an alternative route for eastbound project traffic.
- Described project trip generation for each of the individual hotels and documented impacts by phase.

The project's location and study intersections are shown on **Figure 1**, and **Figure 2** shows the project's site plan. The study locations and analysis scenarios were developed in consultation with City staff.

The following intersections are evaluated during the weekday morning (7-9 AM) and evening (4-6 PM) and Saturday mid-day time periods:

1. Dry Creek Road/Airport Road
2. State Route 46 E/Golden Hill Road
3. State Route 46 E/Union Road
4. State Route 46 E/Airport Road

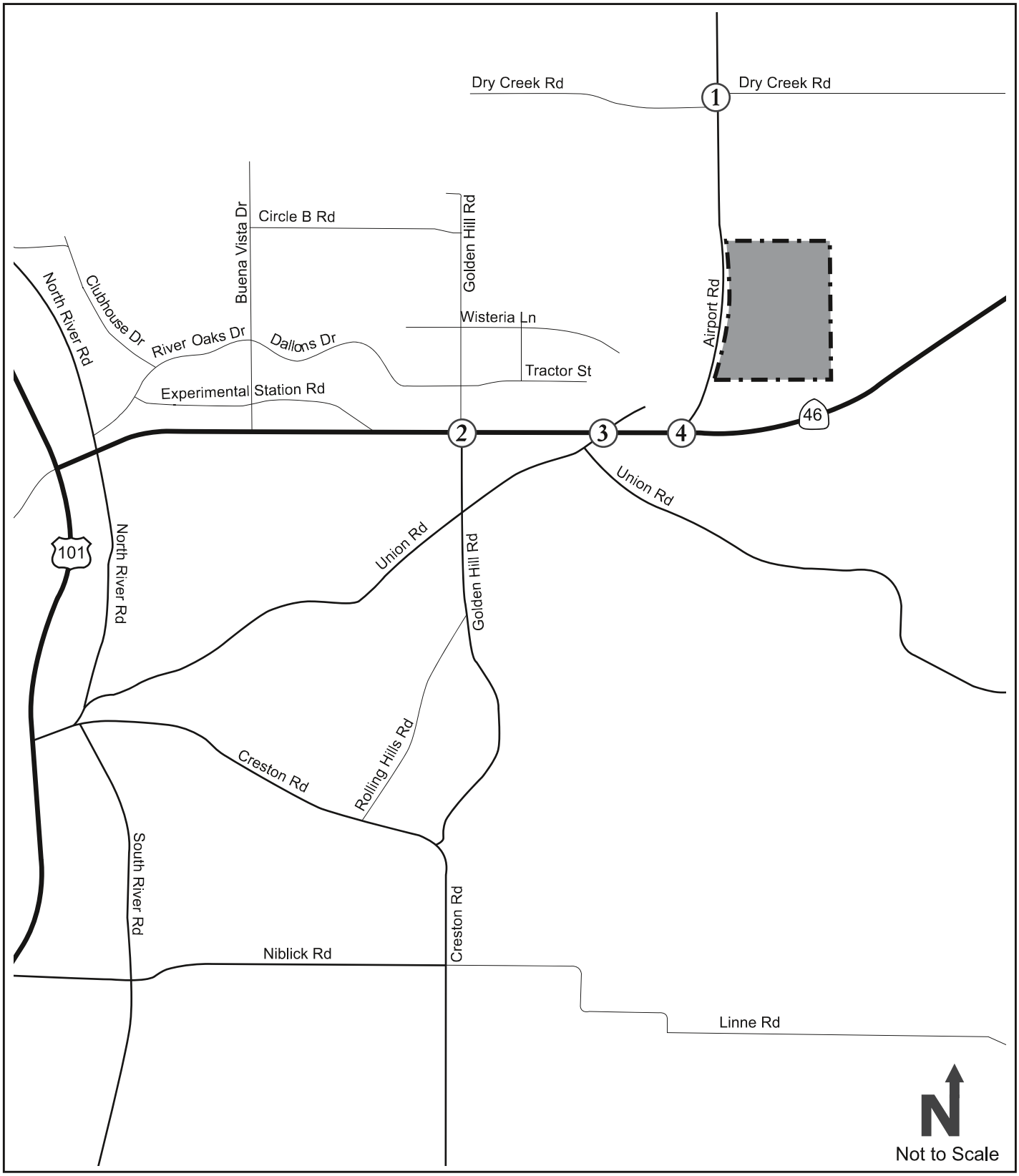
The study intersections are evaluated under these scenarios:

1. **Existing Conditions** reflect traffic counts collected in May 2014, June 2015, March 2016, and June 2016 and the existing transportation network.
2. **Existing Plus Project Conditions** add project generated traffic to Existing Conditions volumes.
3. **Near Term Conditions** add approved and pending projects in the study area to Existing Conditions volumes.
4. **Near Term Plus Project Conditions** add project traffic to Near Term Conditions volumes.

A description of the analysis approach follows Figures 1 and 2.

Exhibit C

Figure 1: Project and Study Locations



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Legend:

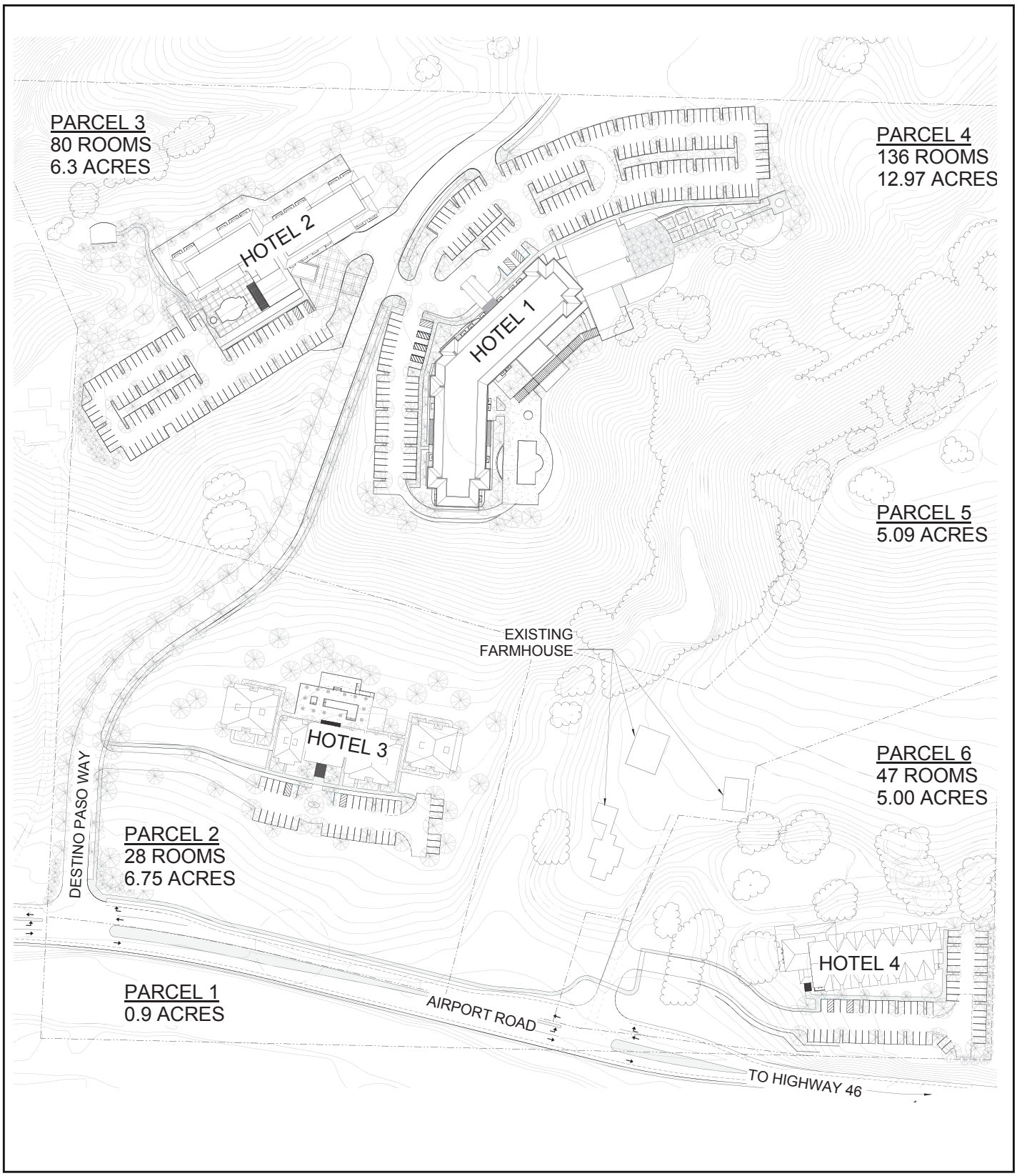
- Project Site
- 7 - Study Intersection

November 2016

Destino Paso

Exhibit C

Figure 2: Site Plan



Source: Stanton Architecture

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ANALYSIS METHODS

The analysis approach was developed based on the City of Paso Robles' *Transportation Impact Analysis Guidelines* and Caltrans standards for intersections on State Route 46.

City Facilities

The City's TIA Guidelines provide criteria for identifying mobility deficiencies reflecting the City's Circulation Element Goals. While vehicular level of service (LOS) is not identified as a mobility deficiency criteria for City controlled intersections, vehicular queues that exceed existing or planned lengths of turn pockets are a deficiency criteria. LOS calculations are also a component of the evaluation criteria for stop-controlled intersections.

To evaluate queuing and stop-controlled intersection LOS the study intersections have been analyzed with the Synchro 9 software package applying the 2010 Highway Capacity Manual (HCM) methods. The 95th percentile queues are reported, which reflect the queue length that will not be exceeded 95% of the time.

The City's TIA Guidelines provide mobility deficiency criteria for a variety of study elements. Table 1 summarizes these criteria, which are used to identify deficiencies.

Table 1: City of Paso Robles Mobility Deficiency Criteria[1]

Study Element	Deficiency Determination
On-site Circulation and Parking	Project designs fail to meet City or industry standard guidelines, fail to provide adequate truck access, will result in unsafe condition, or will create parking demand or supply above code requirement.
Pedestrian, Bicycle, Transit Facilities	Project fails to provide safe and accessible connections, conflicts with adopted plans, or adds trips to facility that doesn't meet current design standards.
Traffic Operations	Project causes vehicle queues that exceed turn pocket lengths, increases safety hazards, or causes stop-controlled intersection to operate below LOS D and meet signal warrant.

1. Summary based on Table 5 of City's Transportation Impact Guidelines.

The City's TIA Guidelines also specify the analysis time periods, noting that typically traffic operations should be studied during the peak one hour of traffic on weekday mornings (between 7-9 AM) and afternoons (between 4-6 PM). The weekend mid-day peak was also included in this study to describe conditions when high regional traffic is present on SR 46E and when the Ravine Water Park is active. Note that these conditions only occur during a limited time period in the summer.

Caltrans Facilities

Caltrans controls the intersections along State Route 46 and relies on LOS to determine deficiencies. Accordingly, Caltrans intersections have been evaluated using LOS criteria as contained in the 2010 HCM. Vehicular level of service is based on control delay, which is the total of time spent decelerating when approaching an intersection, time spent stopped or moving in a queue at an intersection, and time spent accelerating after an intersection.

The level of service thresholds relevant to the Caltrans controlled intersection in this study are presented in Table 2. Unsignalized intersections have lower delay thresholds because users experience more uncertainty than at signals, where drivers typically expect higher levels of congestion and more predictable levels of delay.

Caltrans strives to maintain operations at the LOS C/D threshold on state-operated facilities. If an existing State Highway facility is operating at LOS D, E, or F the existing LOS should be maintained.

Table 2: Intersection Level of Service Thresholds

Signalized Intersections[1]		Stop Sign Controlled Intersections[2]	
Delay[3]	Level of Service	Delay[3]	Level of Service
≤ 10	A	≤ 10	A
> 10 - 20	B	> 10 - 15	B
> 20 - 35	C	> 15 - 25	C
> 35 - 55	D	> 25 - 35	D
> 55 - 80	E	> 35 - 50	E
> 80	F	> 50	F

1. Source: Exhibit 18-4 of the 2010 *Highway Capacity Manual.*
2. Source: Exhibits 19-1 and 20-2 of the 2010 Highway Capacity Manual.
3. HCM 2010 average control delay in seconds per vehicle.

Note that side-street stop-controlled intersection operations are described both in terms of the overall intersection average delay per vehicle in addition to the delay experienced by the worst approach. While not required by the 2010 HCM, reporting both the average and worst approach delays per vehicle gives a more complete picture of intersection operations. This is particularly relevant to intersections with very low side street volumes where worst approach delay can be very high but affects a very small portion of the total entering vehicles.

Existing Conditions

This section describes the existing transportation system and current operating conditions in the study area.

EXISTING ROADWAY NETWORK

State Route 46 is an east-west facility connecting the Central Valley with the Central Coast. In the vicinity of the project it consists of four lanes with at-grade intersections at side streets.

Golden Hill Road is a north-south arterial with two travel lanes north of Union Road that expand into four travel lanes between Mesa Road and Dallons Drive.

Union Road is a northeast-southwest arterial with two travel lanes between State Route 46 E and Creston Road. Union Road also splits into a second arterial in the northwest-southeast direction just before connecting to State Route 46 E.

Airport Road is a north-south arterial with two travel lanes north of State Route 46 E.

Dry Creek Road is an east-west arterial with two travel lanes. Dry Creek Road meets with Airport Road at the El Paso De Robles School driveway.

EXISTING PEDESTRIAN AND BICYCLE FACILITIES

Pedestrian facilities include sidewalks, crosswalks, multi-use paths, and pedestrian signals at signalized intersections. Sidewalks are provided along Golden Hill Road and along discontinuous portions of Union Road. Marked crosswalks are provided across three legs of the State Route 46/Golden Hill Road intersection. No crosswalks are provided at the intersection of State Route 46/Union Road. No pedestrian facilities are provided on Airport Road.

Bicycle facilities consist of permitted bicycle use on the shoulder of State Route 46. The City's Bike Master Plan proposes Class II bicycle facilities along Golden Hill Road, Union Road, Airport Road, and Dry Creek Road.

EXISTING TRANSIT SERVICE

The Paso Express provides fixed route and dial-a-ride transit service throughout the City of Paso Robles. The nearest stop to the site is served by Route C at Cuesta College Campus on Buena Vista Drive, with hourly service from 7:15 AM to 7:15 PM on weekdays. Route C was created in 2011 and connects Cuesta College with Templeton via the North County Transit Center. The dial-a-ride service provides curb-to-curb service on weekdays from 7:00 AM to 1:00 PM.

The San Luis Obispo Regional Transit Authority (RTA) provides regional fixed-route and dial-a-ride services to San Luis Obispo County. Route 9 serves the North County, with a stop in Paso Robles at Pine Street/8th Street. RTA also operates a summer beach shuttle connecting the North County to Cayucos.

EXISTING TRAFFIC CONDITIONS

Traffic counts for weekday AM and PM peak hour and Saturday mid-day conditions were collected at the study intersections in May 2014, June 2015, March 2016, and June 2016. The traffic count sheets are included in Appendix A. The specific count days are listed below.

- Airport Road/Dry Creek Road: Thursday, April 7, 2016, Saturday June 4, 2016, and Sunday June 5, 2016.

- State Route 46/Golden Hill Road: Thursday May 1, 2014, Saturday June 4, 2016, and Sunday June 5, 2016.
- State Route 46/Union Road: Thursday May 1, 2014, Saturday June 4, 2016, and Sunday June 5, 2016.
- State Route 46/Airport Road: Thursday, April 7, 2016, Saturday June 4, 2016, and Sunday June 5, 2016.

Figure 3 shows the existing weekday peak hour traffic volumes and lane configurations. Table 3 presents the LOS for the study intersections, and the detailed calculation sheets are included in Appendix B.

Table 3: Existing Intersection Levels of Service

Intersection	Peak Hour	Delay[1] (sec/veh)	LOS[2]	Queues Exceed Storage[3]
1. Airport Road/ Dry Creek Road	AM	0.9 (11.6)	- (B)	No
	PM	3.7 (15.3)	- (C)	No
	Sat	5.4 (12.9)	- (C)	No
2. State Route 46/ Golden Hill Road	AM	22.7	C	No
	PM	23.0	C	No
	Sat	34.0	C	No
3. State Route 46/ Union Road	AM	4.2 (25.2)	- (D)	No
	PM	5.3 (38.8)	- (E)	No
	Sat	8.9 (>200)	- (F)	No
4. State Route 46/ Airport Road	AM	5.2 (19.5)	- (C)	**Yes[4]**
	PM	4.4 (26.7)	- (D)	**Yes[4]**
	Sat	8.8 (46.3)	- (E)	**Yes[4]**

1. HCM 2010 average control delay in seconds per vehicle.
2. For side-street-stop controlled intersections the worst approach's delay is reported in parenthesis.
3. See Table 7 for detailed queues.
4. 95th percentile queues exceed storage length or signal capacity.

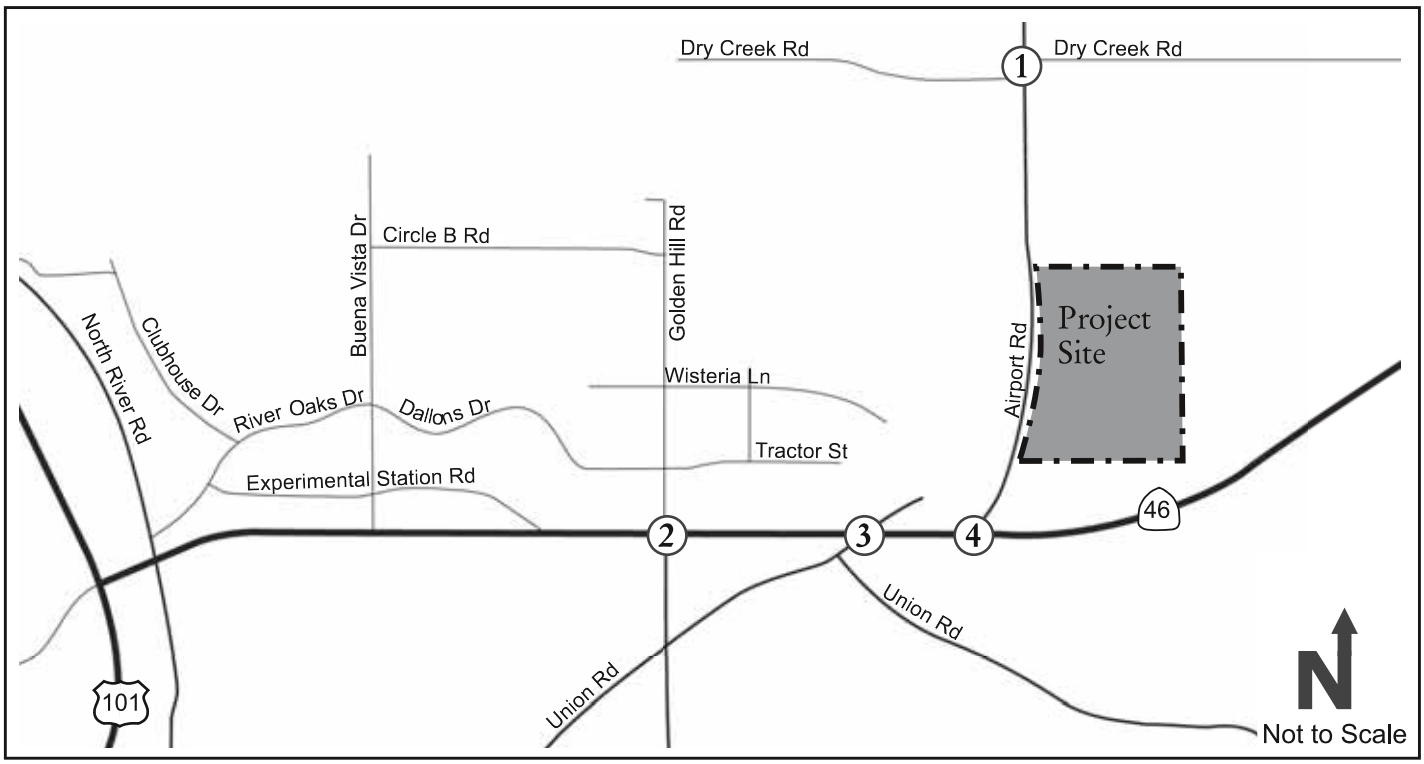
Field observations at the SR 46E/Golden Hill Road intersection showed occasional queue spillback for the north- and southbound left turn lanes. These queues cleared within a single cycle.

At the SR 46E/Union Road intersection left turns from the Union Road approach experiences high levels of delay due to the high volumes of SR 46E. This results in occasional aggressive maneuvers as drivers are unable to find an acceptable gap in traffic. Many drivers familiar with the intersection detour to avoid these turning movements. The northbound approach at this intersection currently operates at LOS D/E during the weekday AM/PM peak hours and at LOS F on Saturday at mid-day.

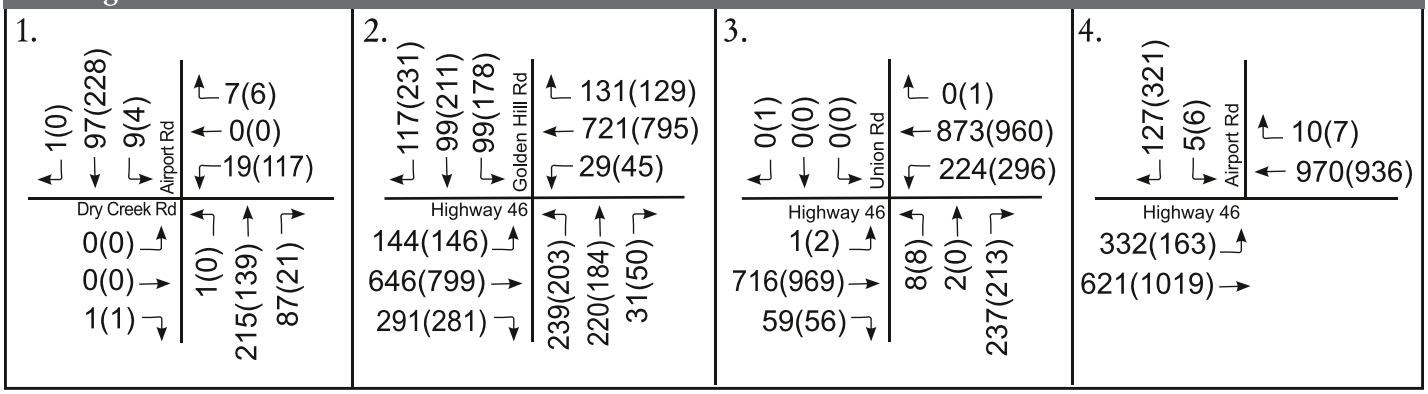
The 95th percentile queues on the southbound approach to the SR 46E/Airport Road intersection reach five vehicles and this approach operates at LOS D during the PM peak hour and at LOS E on Saturday at mid-day. Note that the Saturday conditions include traffic from the Ravine Water Park, which operates in the summer and is busiest on weekends.

Exhibit C

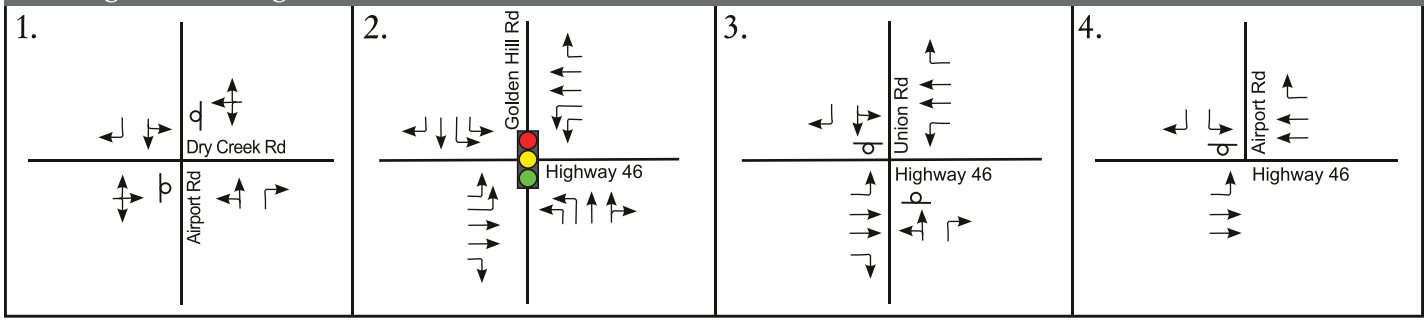
Figure 3: Existing Weekday Peak Hour Volumes and Lane Configurations



Existing Peak Hour



Existing Lane Configuration



Legend:

7	- Study Area Intersection		- Traffic Signal
xx(yy)	- AM(PM) Peak Hour Traffic Volumes		- Stop Sign

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Existing Plus Project Conditions

This section evaluates the impacts of the proposed project on the surrounding transportation network, including traffic operations, bicycle, pedestrian, transit, and site access deficiencies. Existing Plus Project conditions reflect existing traffic levels plus the estimated traffic generated by the proposed project.

PROJECT TRAFFIC ESTIMATES

The amount of project traffic affecting the study intersections is estimated in three steps: trip generation, trip distribution, and trip assignment. Trip generation refers to the total number of new trips generated by the site. Trip distribution identifies the general origins and destinations of these trips, and trip assignment identifies the specific routes taken to reach these origins and destinations.

Trip Generation

The project's trip generation estimate, shown in Table 4, was developed using data provided in the Institute of Transportation Engineers' (ITE) Trip Generation Manual. The Resort Hotel land use most closely matches the proposed land uses, and includes trips generated by supporting amenities such as hotel meeting facilities and restaurants. Trips during the AM and PM peak hours are reported during the peak commute time periods and the Saturday peak hour of the Hotel is assumed to coincide with a summer Saturday peak hour on Airport Road, when the water park is operational.

Table 4: Project Trip Generation

Land Use	Phase	Size	Weekday Daily Trips	Weekday AM Peak Hour Trips In	Weekday AM Peak Hour Trips Out	Weekday AM Peak Hour Trips Total	Weekday PM Peak Hour Trips In	Weekday PM Peak Hour Trips Out	Weekday PM Peak Hour Trips Total	Saturday Peak Hour Trips In	Saturday Peak Hour Trips Out	Saturday Peak Hour Trips Total
Resort Hotel[1]	Hotel 1	136 rooms	772	30	12	42	25	32	57	38	30	68
	Hotel 2	80 rooms	464	18	7	25	14	20	34	23	18	41
	Hotel 3	28 rooms	156	7	2	9	5	6	11	8	6	14
	Hotel 4	47 rooms	265	10	4	14	8	12	20	13	10	23
Total		**291 rooms**	**1,657**	**65**	**25**	**90**	**52**	**70**	**122**	**82**	**64**	**146**

1. ITE Trip Generation Manual, Land Use Code 330, Resort Hotel. Average rate used for AM and PM trips. Daily and Saturday trips are not provided in ITE Trip Generation Manual for Resort Hotel, so they were estimated using the PM to Daily and Saturday trip ratios from Land Use Code 310, Hotel.

Source: ITE *Trip Generation Manual*, 9th Edition, 2012; CCTC, 2016.

The project, in total, is expected to generate 1,657 daily trips, 90 weekday AM peak hour trips, 122 weekday PM peak hour trips, and 146 Saturday peak hour trips.

Trip Distribution and Assignment

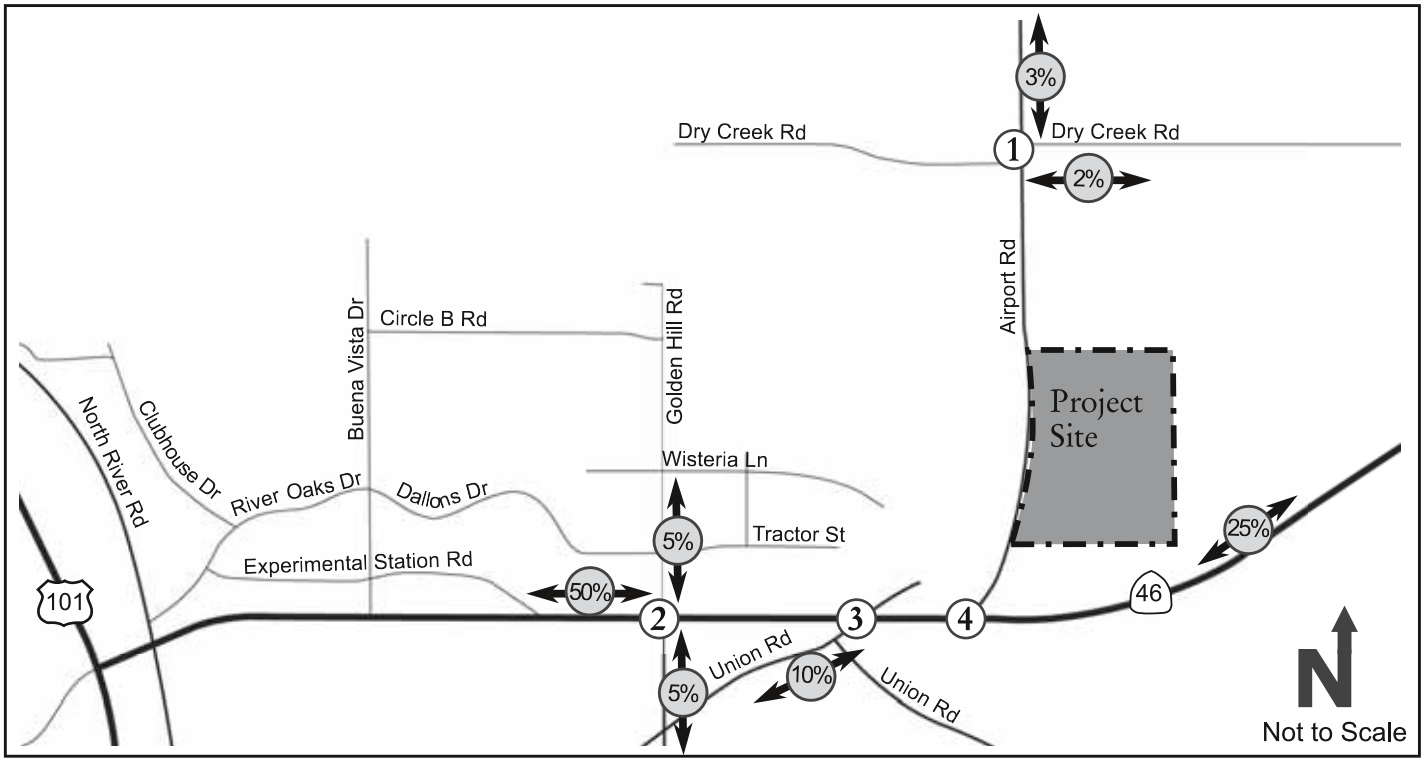
The directions of approach and departure for project trips were estimated using existing trip patterns and the locations of complementary land uses. Project trips were assigned to individual intersections based on the trip distribution percentages, and were then added to the existing traffic volumes to establish Existing Plus Project Conditions. **Figure 4** shows the trip distribution percentages, project trip assignment, and Existing Plus Project volumes.

Project Proposed Improvements

The project proposes frontage improvements along Airport Road to provide a southbound left turn lane, northbound right turn lane, a raised median, and bike lanes. An aggregate base path is proposed on the west side of the road.

Exhibit C

Figure 4: Project Trip Distribution, Assignment, and Existing Plus Project Weekday Volumes



Project Trip Assignment

1.

Airport Rd: 0(0) 2(2) 0(0) | 0(0) 0(0) 1(1)

Dry Creek Rd: 0(0) 0(0) 0(0) | 0(0) 1(2) 1(1)

2.

Golden Hill Rd: 0(0) 0(0) 3(3) | 1(4) 13(35) 1(4)

Highway 46: 0(0) 33(26) 0(0) | 0(0) 0(0) 3(3)

3.

Union Rd: 0(0) 0(0) 0(0) | 0(0) 15(42) 3(7)

Highway 46: 0(0) 39(31) 0(0) | 0(0) 0(0) 7(5)

4.

Airport Rd: 18(49) 6(18) | 16(13) 0(0)

Highway 46: 46(36) 0(0)

Existing Plus Project

1.

Airport Rd: 1(0) 99(230) 9(4) | 7(6) 0(0) 20(118)

Dry Creek Rd: 0(0) 0(0) 1(1) | 1(0) 216(141) 88(22)

2.

Golden Hill Rd: 117(231) 99(211) 102(181) | 132(133) 734(830) 30(49)

Highway 46: 144(146) 679(825) 291(281) | 239(203) 220(184) 34(53)

3.

Union Rd: 0(1) 0(0) 0(0) | 0(1) 888(1002) 227(303)

Highway 46: 1(2) 755(1000) 59(56) | 8(8) 2(0) 244(218)

4.

Airport Rd: 145(370) 11(24) | 26(20) 970(936)

Highway 46: 378(199) 621(1019)

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Legend:

7 - Study Area Intersection

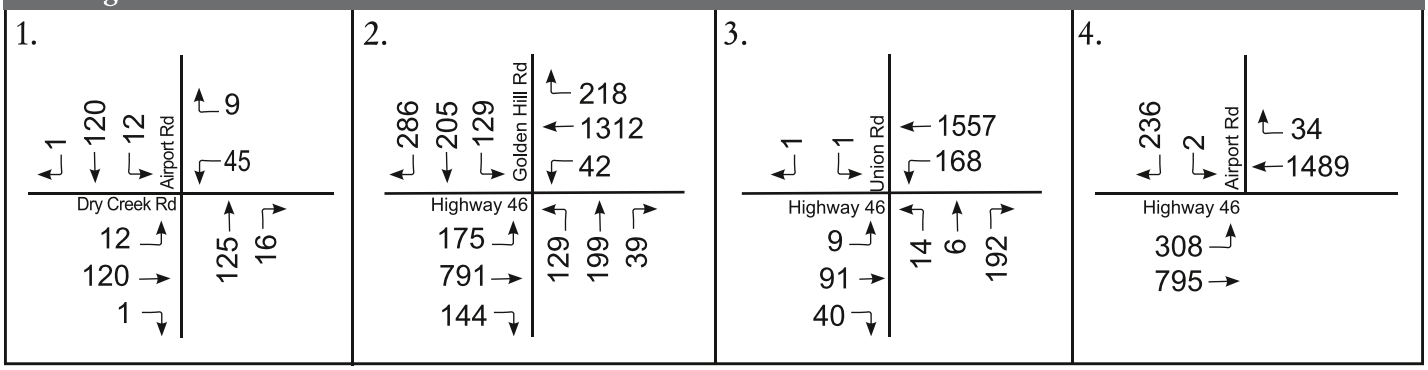
xx(yy) - AM(PM) Peak Hour Traffic Volumes

xx% - Trip Distribution

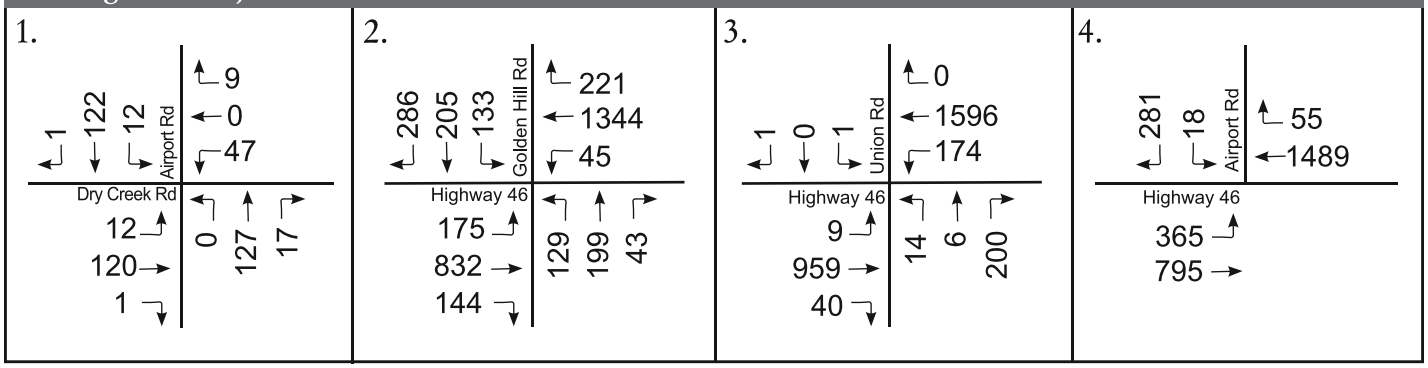
Exhibit C

Figure 5: Saturday Peak Hour Volumes

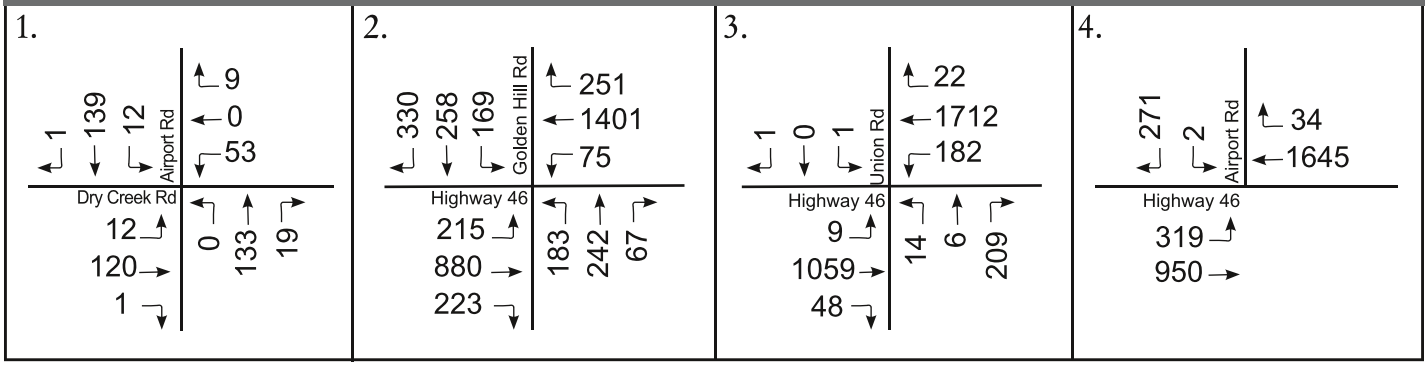
Existing Peak Hour



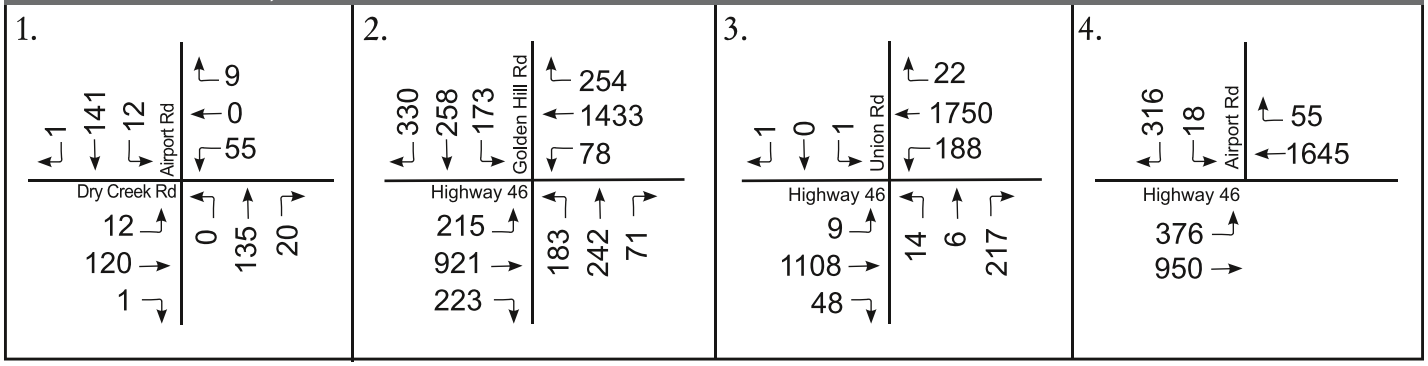
Existing Plus Project



Near Term



Near Term Plus Project



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Legend:

⑦ - Study Area Intersection

xx - Saturday Peak Hour Traffic Volumes

DEFICIENCY ANALYSIS

The deficiency analysis for individual travel modes are discussed below.

Traffic Operations

Traffic operations deficiency criteria are described in the Analysis Methods section of this report. Table 5 summarizes the operating conditions under Existing and Existing Plus Project conditions.

Table 5: Existing & Existing Plus Project Intersection Levels of Service

Intersection	Peak Hour	Existing Delay[1] (sec/veh)	Existing LOS[2]	Existing Plus Project Delay[1] (sec/veh)	Existing Plus Project LOS[2]	Queues Exceed Storage[3]
1. Airport Road/ Dry Creek Road	AM	0.9 (11.6)	- (B)	0.9 (11.6)	- (B)	No
	PM	3.7 (15.3)	- (C)	3.7 (15.5)	- (C)	No
	Sat	5.4 (12.9)	- (C)	5.4 (13.0)	- (B)	No
2. State Route 46/ Golden Hill Road	AM	22.7	C	23.0	C	No
	PM	23.0	C	23.6	C	No
	Sat	34.0	C	34.7	C	No
3. State Route 46/ Union Road	AM	4.2 (25.2)	- (D)	4.4 (27.7)	- (D)	No
	PM	5.3 (38.8)	- (E)	6.1 (48.3)	- (E)	No
	Sat	8.9 (>200)	- (F)	10.2 (>200)	- (F)	No
4. State Route 46/ Airport Road	AM	5.2 (19.5)	- (C)	7.5 (27.2)	- (D)	**Yes[4]**
	PM	4.4 (26.7)	- (D)	6.3 (34.8)	- (D)	**Yes[4]**
	Sat	8.8 (46.3)	- (E)	43.4 (>200)	- (F)	**Yes[4]**

1. HCM 2010 average control delay in seconds per vehicle.
2. For side-street-stop controlled intersections the worst approach's delay is reported in parenthesis.
3. See Table 7 for detailed queues.
4. 95th percentile queues exceed storage length or signal capacity.

The Airport Road/Dry Creek Road and SR 46E/Golden Hill Road intersections operate at LOS C or better during all time periods both with and without the project.

The northbound approach to the SR 46E/Union Road intersection operates at LOS E both with and without the project during weekday PM peak hour and at LOS F on Saturday at mid-day due to high volumes on SR 46E.

The southbound approach to the SR 46E/Airport Road intersection operates at LOS D during weekday conditions with the project and at LOS F on Saturday with the project. Note that this includes traffic from the Ravine Water Park.

Queuing is reported in Table 8. Queuing on the southbound approach to SR 46E/Airport Road increases from five vehicles in the Existing PM peak hour to seven vehicles with the addition of project traffic under Existing Plus Project PM conditions. Queuing at the same intersection increase from six vehicles in Existing Saturday at mid-day to nine vehicles with the addition of project traffic under Existing Plus Project Saturday mid-day conditions.

<u>Traffic Operations Recommendations</u>

The side-street-stop controlled approaches to Union Road and Airport Road at SR 46E experience moderate to long delay as drivers wait for an acceptable gap in traffic on SR 46E. Caltrans' Comprehensive Corridor Study for SR 46E acknowledges these existing deficiencies and provides recommendations to address them. These recommendations include improving local parallel routes,

improving the SR 46E/Union Road intersection, and implementation of travel demand management strategies.

SR 46E/Union Road: The City recently approved a project on Union Road with the condition that it prohibit northbound left turns at the SR 46E/Union Road intersection. This will improve operations at this intersection in the near term; no further improvements are recommended. With the side street left and through movements prohibited at this intersection, the worst approach is expected to operate at LOS C during the Saturday mid-day peak hour under Existing Plus Project conditions. Longer term improvements are under study as a part of the on-going SR 46E/Union Road Project Report and Environmental Document.

SR 46E/Airport Road: The southbound approach to the SR 46E/Airport Road intersection experiences moderate delay during the weekday peak hours, worsening during Saturday mid-day conditions when the water park is active and high regional traffic volumes are present on the highway. The 95th percentile queues on the southbound approach are forecast to reach 228 feet (under 10 vehicles) under Existing Plus Project conditions on Saturday, when the southbound approach would operate at LOS F.

We recommend that the project direct exiting project traffic destined to the east on SR 46E to turn right on Airport Road, right on Dry Creek Road, then left at SR 46 E/Jardine Road. This would shift southbound left turns from the SR 46E/Airport Road intersection to the SR 46 E/Jardine Road intersection. Table 6 shows the effect of adding these shifted southbound left turns to the SR 46 E/Jardine Road intersection by phase of the project.

Table 6: Existing Mitigation Evaluation

Scenario	State Route 46/ Airport Road Delay[1] (sec/veh)	State Route 46/ Airport Road LOS[2]	State Route 46/ Jardine Road Delay[1] (sec/veh)	State Route 46/ Jardine Road LOS[2]
Existing Saturday	8.8 (46.3)	- (E)	1.9 (15.5)	- (C)
Existing Saturday Plus Hotel 1	12.3 (63.0)	- (F)	1.9 (15.6)	- (C)
Mitigated Existing Saturday Plus Hotel 1	11.6 (55.8)	- (F)	2.0 (16.3)	- (C)
Existing Saturday Plus Hotels 1 and 2	17.1 (96.9)	- (F)	1.9 (15.6)	- (C)
Mitigated Existing Saturday Plus Hotels 1 and 2	13.8 (64.1)	- (F)	2.1 (16.6)	- (C)
Existing Saturday Plus Hotels 1, 2, and 3	20.1 (121.7)	- (F)	1.9 (15.7)	- (C)
Mitigated Existing Saturday Plus Hotels 1, 2, and 3	15.5 (76.6)	- (F)	2.1 (16.8)	- (C)
Existing Saturday Plus Hotels 1, 2, 3, and 4	43.4 (>200)	- (F)	1.9 (15.7)	- (C)
Mitigated Existing Saturday Plus Hotels 1, 2, 3, and 4	16.9 (80.8)	- (F)	2.2 (17.2)	- (C)

1. HCM 2010 average control delay in seconds per vehicle.
2. For side-street-stop controlled intersections the worst approach's delay is reported in parenthesis.

Table 6 shows that the southbound approach to SR 46 E/Jardine Road would operate at LOS C with the addition of left turning traffic from all Hotels. Shifting the left turning traffic away from SR 46E/Airport Road would also substantially reduce the delay at this intersection, but the southbound approach would continue to operate at LOS F under all phases of the project. The effectiveness of this measure should be evaluated prior to Hotel 2 permitting and the measure should be adjusted if needed to meet the satisfaction of the Community Development Director.

Two additional improvements were considered but discarded for this location. One would channelize the southbound approach to SR 46E/Airport Road to provide designated right and left turn lanes. This improvement would not reduce delay but would provide additional queue storage. However, the forecast queues to not block any nearby intersections so this improvement is not recommended. The second recommendation would prohibit southbound left turns at this intersection. Caltrans has indicated they would not support this turn prohibition due to potential secondary impacts of u-turns causing conflicts at the SR 46E/Union Road intersection, so it is not recommended.

The development of parallel routes is consistent with the Caltrans Corridor Study for this area and would allow project traffic to access other areas of the City without driving on SR 46E. This improvement is discussed in more detail in the Near Term chapter.

Bicycles

Bicycle deficiencies would occur if the project disrupts existing or planned bicycle facilities or is otherwise incongruent with the City's Bike Master Plan. The Bike Master Plan proposes the following new bicycle facilities in the vicinity of the project:

- Class II bike lanes are proposed along Golden Hill Road from SR 46E to south of Niblick Drive.
- Class II bike lanes are proposed along the extent of Union Road.
- Class II bike lanes are proposed along Dry Creek Road from Airport Road to Jardine Road.
- Class II bike lanes are proposed along the extent of Airport Road, including along the project frontage.
- A Class I bike path along the east bank of the Huer Huero Creek is proposed connecting Union Road near Barney Schwartz Park to the Ravine Water Park on Airport Road.

The project site plan shows frontage improvements on Airport Road that include a 12 foot median, 12 foot travel lanes, a two foot buffer, and five foot Class II bike lanes.

The following changes are recommended to better serve cyclists and conform to the Bike Master Plan:

- Modify the bike lane and right turn striping for the northbound right turn lane proposed at Airport Road/Destino Paso Way per Figure 9C-4 of the California MUTCD. The site plan shows the bike lane to the right of the right turn lane instead of between the right turn lane and through lane as recommended by the MUTCD.
- Install the bicycle rider stencil pavement marker only when the bike lanes are continuous to the north and south of the project frontage.

Pedestrians

Pedestrian deficiencies would occur if the project fails to provide safe and accessible pedestrian connections between project buildings and adjacent streets, trails, and transit facilities.

The project site plan shows a concrete sidewalk along the east side of the project driveway (Destino Paso Way) connecting to Hotels 1 and 2 to Hotel 3. A sidewalk is proposed along Airport Road between Hotels 3 and 4. A four foot or greater aggregate base walking path is shown on the west side of Airport Road from Destino Paso Way to the northernmost Ravine Water Park parking area.

<u>Pedestrian Evaluation and Recommendations</u>

The Ravine Water Park is located approximately ½ mile from the proposed project, and some Hotel guests may walk to the Water Park if pedestrian accommodations are provided. As proposed, guests

walking to the Water Park would cross Airport Road at Destino Paso Way then walk along the aggregate walking path to the Water Park. An alternative would be to cross Airport Road near the RV Park. The table below summarizes these alternatives.

Airport Road Pedestrian Crossing Evaluation			
Location	**Pros**	**Cons**	**Recommendation**
Cross Airport at Destino Paso, path on West Side	• Serves Destino Paso pedestrians	• Long uncontrolled crossing (60-80 feet)	• Construct as proposed on site plan.
Path on East Side, Cross on North side of RV Resort Driveway	• Shorter Crossing Distance • Serves RV Resort and Destino Paso pedestrians	• May require modification of Airport Road at RV Resort entrance merge • May require additional grading • Potential sight distance issue due to horizontal and vertical curves	• Not recommended.

The table above suggests that a shared crossing with the RV Resort would benefit the most pedestrians, but has constructability and sight distance concerns. This crossing would require modification to the short northbound acceleration/merge lane located north of the RV Resort driveway on Airport Road, potential grading and retaining walls, and would require site plan revisions to provide a walking path along the east side of Airport Road along the project frontage. The walking path as proposed by the project along the west side of Airport Road is recommended given these constraints.

<u>On-Site Pedestrian Circulation</u>

Recommendations on the preliminary site plans have been incorporated into the current plan. No further changes are recommended.

Transit

Transit deficiencies would occur if the project disrupts existing or planned transit facilities or services; conflicts with City plans, guidelines, policies, or standards; or if the project adds trips to a line already operating at peak hour crush load capacity.

The project is not expected to alter or disrupt any of the transit facilities or services, so no transit deficiencies are noted. Shuttle service, if feasible, serving local attractions such as wineries and the Water Park would reduce the demand for travel by personal automobile.

Site Access and On-Site Circulation

On-site circulation deficiencies would occur if project designs fail to meet appropriate standards, fail to provide adequate truck access, or would result in hazardous or unsafe conditions.

The proposed site plan is shown on **Figure 2**. Project access will be provided via Destino Paso Way, which would be improved from its current condition as a dirt road.

Detailed construction documents should be reviewed once they are ready to ensure that adequate sight distance is provided at the driveways serving Hotels 1 and 3, which are located on the inside of

horizontal curves. Landscaping and other features should be restricted near these driveways to provide clear sight lines to approaching traffic.

Circulation Element Consistency

Airport Road is classified as an arterial in the City's Circulation Element. Page CE-15 of the Circulation Element lists development policies, and item 12 notes that developers should be responsible for "Limited access on all arterials." Three of the project's hotels would gain access directly from Destino Paso Way, not Airport Road, which is consistent with this Circulation Element policy. The fourth hotel would be accessed directly from Airport Road.

There is an existing driveway less than 100 feet north of Destino Paso Way. It currently serves low-intensity single family and ranching uses. If this property intensifies, the existing driveway could create driver confusion and conflicts due to the closely spaced intersections. We recommend providing an access easement to consolidate this parcel via Destino Paso Way if the property intensifies and generates more traffic. This would limit the conflicting closely spaced driveways on an arterial roadway consistent with the Circulation Element policy.

Destino Paso Way is proposed as a City street, so it would serve the parcel to the east should it redevelop. The City's Circulation Element and Parallel Routes Study plan the development of a network of City streets parallel to State Route 46 from Jardine Road to River Road. The Circulation Element plans a new connection from Wisteria Lane to Airport Road which would allow project traffic to reach Golden Hill Road on local streets and reduce the reliance on State Route 46 for local trips. Providing the eastern property access to Airport Road via Destino Paso Way as proposed by the project would support the development of parallel routes.

Near Term Traffic Conditions

Near Term conditions reflect the addition of approved and pending projects in the study area to Existing Conditions volumes. The following near-term projects are included in this scenario:

- Buena Vista Apartments- 142 apartment units located at 802 Experimental Station Road.
- River Oaks- The Next Generation- 144 active adult homes, 127 single family homes, community center, and fitness/wellness center located north of River Oaks Drive and east of River Road.
- RV Park- 332 spaces located at the north end of Golden Hill Road
- Wine Storage Building- 66,000 s.f. located at 2261 Wisteria Lane
- Hilton Garden Inn Hotel- 166 hotel rooms and related amenities on the southeast corner of SR 46E/Golden Hill Road.
- Paso Robles Marriott- 119 hotel rooms on Union Road.
- San Antonio Winery Development- Tasting room, restaurant, four residences, and retail in addition to existing facilities at 2610 Buena Vista Drive
- San Antonio Winery Processing- 126,000 s.f. processing facility at 2261 Wisteria Lane.
- Discovery Gardens also known as La Entrada – East of Airport Road on SR 46E. Phases 1 and 1a were assumed to be in place.
- Gran Cielo Cluster Development – 42 single family homes located in the County south of Union Road and State Route 46 E.
- Vina Robles Hotel – 98 room hotel south of Vina Robles Amphitheatre on Mill Road.

Traffic volumes for the Buena Vista Apartments, Hilton Garden Inn, River Oaks, Discovery Gardens, and Paso Robles Marriott projects were obtained from the traffic studies prepared for those projects. Traffic volumes for the remaining near term projects were estimated using standard ITE rates. The roadway network was assumed to remain the same as under Existing conditions.

DEFICIENCY ANALYSIS

Project volumes were added to Near Term conditions to yield Near Term Plus Project conditions as shown on **Figure 6**. Table 7 summarizes the traffic conditions under Near Term and Near Term Plus Project conditions, with queues detailed in Table 8.

Table 7: Near Term & Near Term Plus Project Intersection Levels of Service

Intersection	Peak Hour	Near Term Delay[1] (sec/veh)	Near Term LOS[2]	Near Term Queues Exceed Storage[3]	Near Term Plus Project Delay[1] (sec/veh)	Near Term Plus Project LOS[2]	Near Term Plus Project Queues Exceed Storage[3]
1. Airport Road/ Dry Creek Road	AM	0.9 (11.8)	- (B)	No	0.9 (11.9)	- (B)	No
	PM	3.9 (16.1)	- (C)	No	3.9 (16.3)	- (C)	No
	Sat	5.4 (13.6)	- (B)	No	5.5 (13.8)	- (B)	No
2. State Route 46/ Golden Hill Road	AM	28.4	C	No	28.8	C	No
	PM	31.0	C	**Yes[4]**	32.1	C	**Yes[4]**
	Sat	46.0	D	**Yes[4]**	47.4	D	**Yes[4]**
3. State Route 46/ Union Road	AM	5.0 (34.8)	- (D)	No	5.7 (40.7)	- (E)	No
	PM	8.7 (78.2)	- (F)	No	11.4 (110.5)	- (F)	No
	Sat	13.8 (184.6)	- (F)	No	18.9 (>200)	- (F)	No
4. State Route 46/ Airport Road	AM	8.2 (26.2)	- (D)	**Yes[4]**	19.4 (128.6)	- (F)	**Yes[4]**
	PM	6.8 (45.7)	- (E)	**Yes[4]**	11.0 (67.5)	- (F)	**Yes[4]**
	Sat	8.6 (96.1[5])	- (F)	**Yes[4]**	16.1 (149.3[5])	- (F)	**Yes[4]**

1. HCM 2010 average control delay in seconds per vehicle.
2. For side-street-stop controlled intersections the worst approach's delay is reported in parenthesis.
3. See Table 7 for detailed queues.
4. 95th percentile queues exceed storage length or signal capacity.
5. Software does not report value for southbound approach, delay reported for southbound right turn lane.

Table 7 shows the following:

- The Airport Road/Dry Creek Road intersection operates at LOS C or better during all Near Term scenarios.
- The SR 46E/Golden Hill Road intersection is forecast to operate at LOS C during the weekday peak hour with the project in place. During the Saturday peak hour, the intersection operates at LOS D both with and without the project.
- The northbound approach to the SR 46E/Union Road intersection operates at LOS F both with and without the project during weekday PM and Saturday mid-day peak hours.
- The southbound approach to the SR 46E/Airport Road intersection operates at LOS D during weekday conditions with the project and at LOS F on Saturday with the project.

Queuing is summarized in Table 8. Queuing on the southbound approach to SR 46E/Airport Road increases from nine vehicles in the Near Term PM peak hour to 12 vehicles with the addition of project traffic under Near Term Plus Project PM conditions. Queuing at the same intersection increase from 11 vehicles under Near Term Saturday conditions to 15 vehicles with the addition of project traffic. These queues would not block nearby driveways.

Traffic Operations Recommendations

The recommendations summarized in the Existing Plus Project conditions section (shifting exiting project traffic heading east on SR 46E to use the SR 46E/Jardine Road intersection) also apply to the Near Term Plus Project scenario. However, the SR 46E/Jardine Road intersection is forecast to operate at LOS E under Near Term conditions without the project.

We recommend completion of the local road connection from Wisteria Lane to Airport Road to address the deficiency at SR 46E/Airport Road. When the connection is complete, provide signage to direct hotel visitors and other drivers to the new local road connection instead of SR 46E. The City has made substantial progress towards completing this connection, and the project would contribute towards this connection by paying development impact fees.

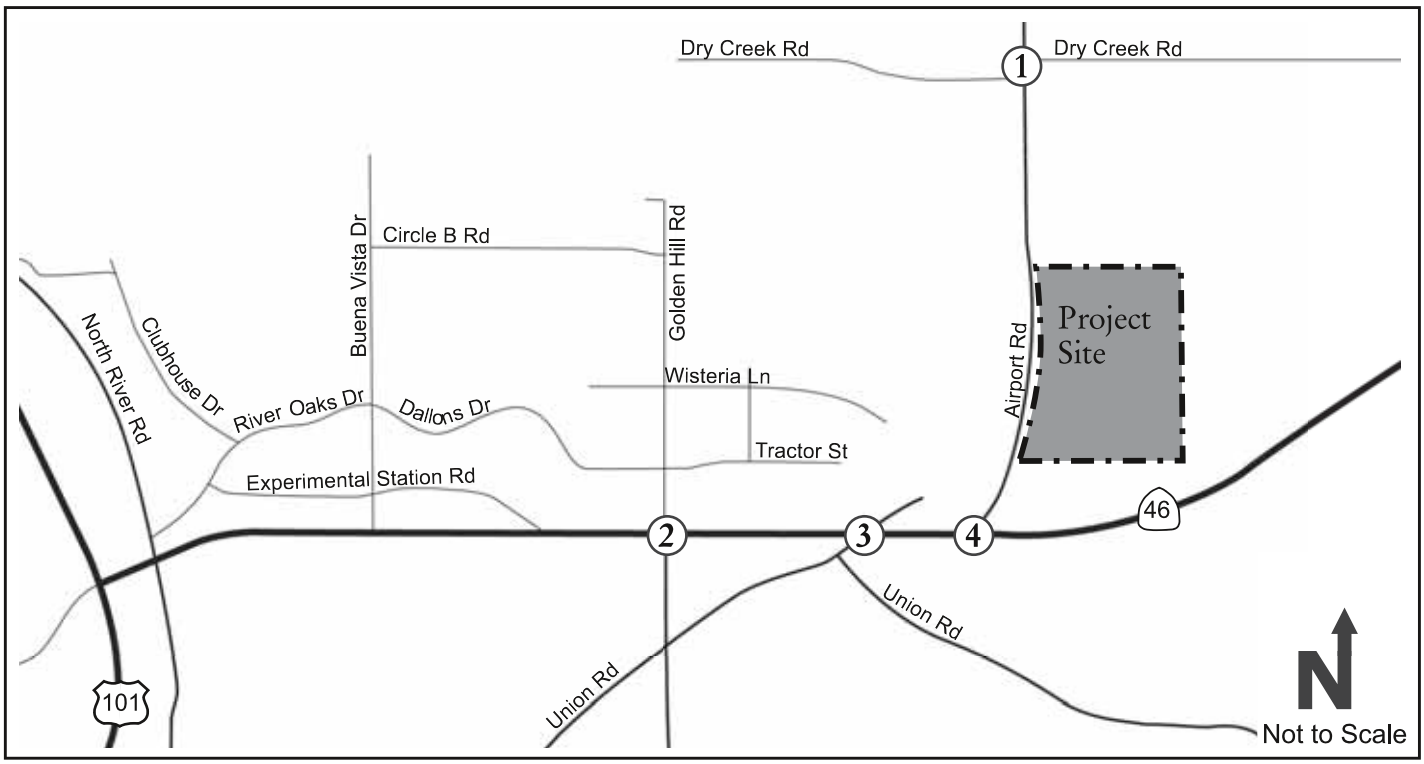
Table 8: 95th Percentile Queues

Intersection	Direction	Storage Length	Peak Hour	95th Percentile Queues (feet)[1] Existing	Existing+ Project	Near Term	Near Term+ Project
1. Airport Road/ Dry Creek Road	EBL	N/A	AM	0	0	0	0
			PM	0	0	0	0
			Sat	25	25	25	25
	WBL	N/A	AM	5	5	5	5
			PM	33	33	38	38
			Sat	10	10	13	13
	NBL	N/A	AM	0	0	0	0
			PM	0	0	0	0
			Sat	0	0	0	0
	SBL	N/A	AM	0	0	0	0
			PM	0	0	0	0
			Sat	0	0	0	0
2. State Route 46/ Golden Hill Road	EBL	550 ft.	AM	79	80	118	118
			PM	86	88	121	121
			Sat	115	116	149	151
	WBL	460 ft.	AM	23	23	41	41
			PM	35	38	57	62
			Sat	31	34	58	61
	NBL	160 ft.	AM	119	120	136	136
			PM	115	119	148	148
			Sat	90	90	130	132
	SBL	130 ft.	AM	59	61	75	77
			PM	104	109	**146**	**147**
			Sat	91	94	123	**142**
3. State Route 46/ Union Road	EBL	500 ft.	AM	0	0	0	0
			PM	0	0	0	0
			Sat	3	3	3	3
	WBL	670 ft.	AM	35	38	43	45
			PM	68	75	98	108
			Sat	25	28	33	38
	NBL	N/A	AM	63	70	80	90
			PM	65	70	93	103
			Sat	45	90	95	100
4. State Route 46/ Airport Road	EBL	950	AM	135	188	223	308
			PM	28	35	38	50
			Sat	193	295	285	420
	SBL	N/A	AM	8	30	18	68
			PM	3	18	5	25
			Sat	5	98	265 [2]	373 [2]
	SBR	25 ft.	AM	**38**	**45**	**50**	**60**
			PM	**130**	**185**	**218**	**305**
			Sat	**155**	**228**	**265**	**373**

1. Queue length that would not be exceeded 95 percent of the time.
2. Software does not report value for southbound left turn lane, queue reported for southbound right turn lane.

Exhibit C

Figure 6: Near Term Volumes and Near Term Plus Project Weekday Volumes



Near Term

1.

Airport Rd: 1(0) 103(240) 9(4) — 7(6) 0(0) 20(122)

Dry Creek Rd: 0(0) 0(0) 1(1) — 1(0) 229(146) 93(25)

2.

Golden Hill Rd: 143(310) 131(297) 123(242) — 185(166) 760(884) 54(73)

Highway 46: 217(191) 713(881) 363(350) — 277(254) 296(231) 51(74)

3.

Union Rd: 0(1) 0(0) 0(0) — 13(19) 991(1112) 230(309)

Highway 46: 1(2) 821(1130) 64(64) — 8(9) 2(0) 247(229)

4.

Airport Rd: 141(354) 5(6) — 10(7) 1093(1086)

Highway 46: 359(179) 709(1180)

Near Term Plus Project

1.

Airport Rd: 1(0) 105(242) 9(4) — 7(6) 0(0) 21(123)

Dry Creek Rd: 0(0) 0(0) 1(1) — 1(0) 230(148) 94(26)

2.

Golden Hill Rd: 143(310) 131(297) 126(245) — 186(170) 773(919) 55(77)

Highway 46: 217(191) 746(907) 363(350) — 277(254) 296(231) 54(77)

3.

Union Rd: 0(1) 0(0) 0(0) — 13(19) 1006(1154) 233(316)

Highway 46: 1(2) 860(1161) 64(64) — 8(9) 2(0) 254(234)

4.

Airport Rd: 159(403) 11(24) — 26(20) 1093(1086)

Highway 46: 405(215) 709(1180)

Central Coast Transportation Consulting
Traffic Engineering & Transportation Planning

Legend:

7 - Study Area Intersection

xx(yy) - AM(PM) Peak Hour Traffic Volumes

References

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Hatch Mott MacDonald. 2012. Highway 46 PSR- Traffic Operations Analysis.

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Paso Express. 2013. Telephone conversation with Susie Castro.

Penfield & Smith. 2012. Ayers Hotel Project Traffic and Circulation Study.

Transportation Research Board. 2010. Highway Capacity Manual.

Exhibit D

Appendix A: Traffic Count Sheets

Exhibit D

Turning Movement Report

Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

LOCATION Airport Road @ Dry Creek Road
LATITUDE 35.662886°
COUNTY San Luis Obispo
LONGITUDE -120.640968°
COLLECTION DATE Thursday, April 7, 2016
WEATHER Clear

	Northbound				Southbound				Eastbound				Westbound			
Time	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
7:00 AM - 7:15 AM	0	27	11	2	0	17	0	1	0	0	0	0	4	0	0	2
7:15 AM - 7:30 AM	0	40	10	3	0	36	0	1	0	0	0	0	6	0	1	2
7:30 AM - 7:45 AM	1	45	20	2	3	26	0	0	0	0	0	0	5	0	0	2
7:45 AM - 8:00 AM	0	65	29	4	3	32	1	3	0	0	0	0	5	0	1	2
8:00 AM - 8:15 AM	0	54	20	3	1	13	0	1	0	0	1	0	3	0	2	0
8:15 AM - 8:30 AM	0	51	18	5	2	26	0	2	0	0	0	0	6	0	4	1
8:30 AM - 8:45 AM	1	33	18	2	1	27	0	3	0	0	0	0	5	0	0	0
8:45 AM - 9:00 AM	0	21	7	1	1	29	0	3	0	0	0	0	5	0	0	0
TOTAL	**2**	**336**	**133**	**22**	**11**	**206**	**1**	**14**	**0**	**0**	**1**	**0**	**39**	**0**	**8**	**9**

	Northbound				Southbound				Eastbound				Westbound			
Time	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
4:00 PM - 4:15 PM	0	23	6	3	1	37	0	3	0	0	2	0	15	0	5	0
4:15 PM - 4:30 PM	0	35	9	4	1	41	0	2	0	0	0	0	16	0	2	0
4:30 PM - 4:45 PM	0	29	3	3	2	73	0	2	0	0	0	0	53	0	3	1
4:45 PM - 5:00 PM	0	43	4	6	1	49	0	2	0	0	0	0	23	0	1	0
5:00 PM - 5:15 PM	0	32	5	3	0	65	0	0	0	0	1	0	25	0	0	1
5:15 PM - 5:30 PM	0	24	11	2	2	52	0	1	0	0	0	0	7	0	0	0
5:30 PM - 5:45 PM	0	24	5	2	0	33	0	3	0	0	0	0	16	0	2	0
5:45 PM - 6:00 PM	0	16	3	1	0	27	0	3	0	0	0	0	11	0	0	1
TOTAL	**0**	**226**	**46**	**24**	**7**	**377**	**0**	**16**	**0**	**0**	**3**	**0**	**166**	**0**	**13**	**3**

	Northbound				Southbound				Eastbound				Westbound			
PEAK HOUR	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
7:30 AM - 8:30 AM	1	215	87	14	9	97	1	6	0	0	1	0	19	0	7	5
4:15 PM - 5:15 PM	0	139	21	16	4	228	0	6	0	0	1	0	117	0	6	2

	PHF	Trucks
AM	0.803	5.7%
PM	0.791	4.7%

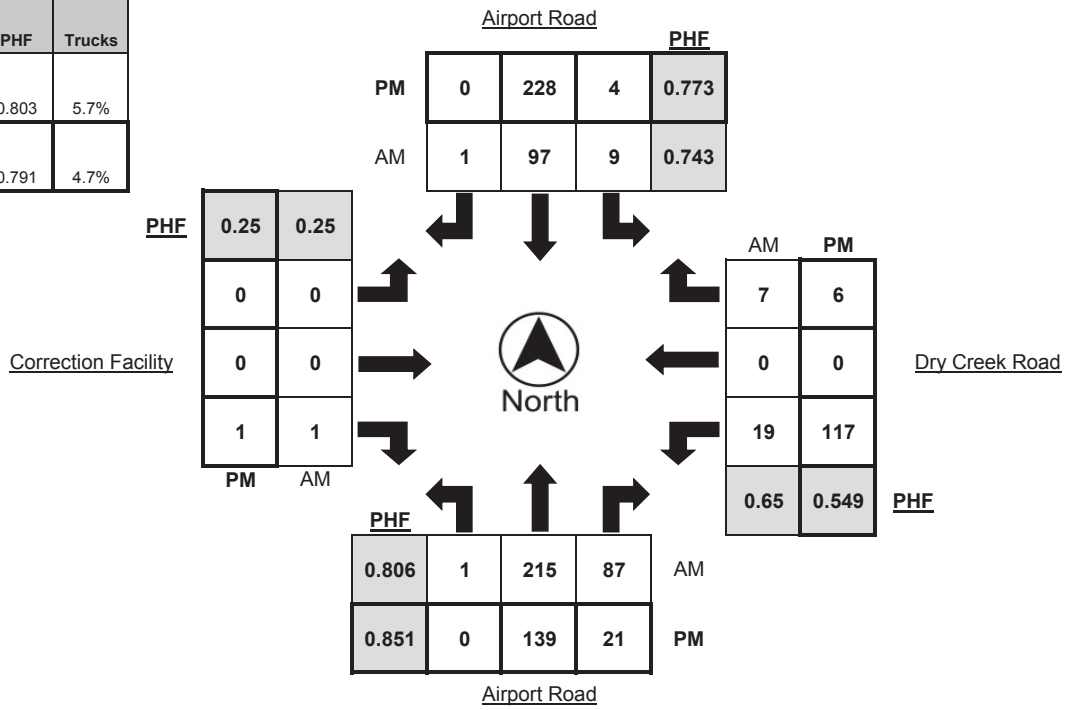


Exhibit D

Turning Movement Report

Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

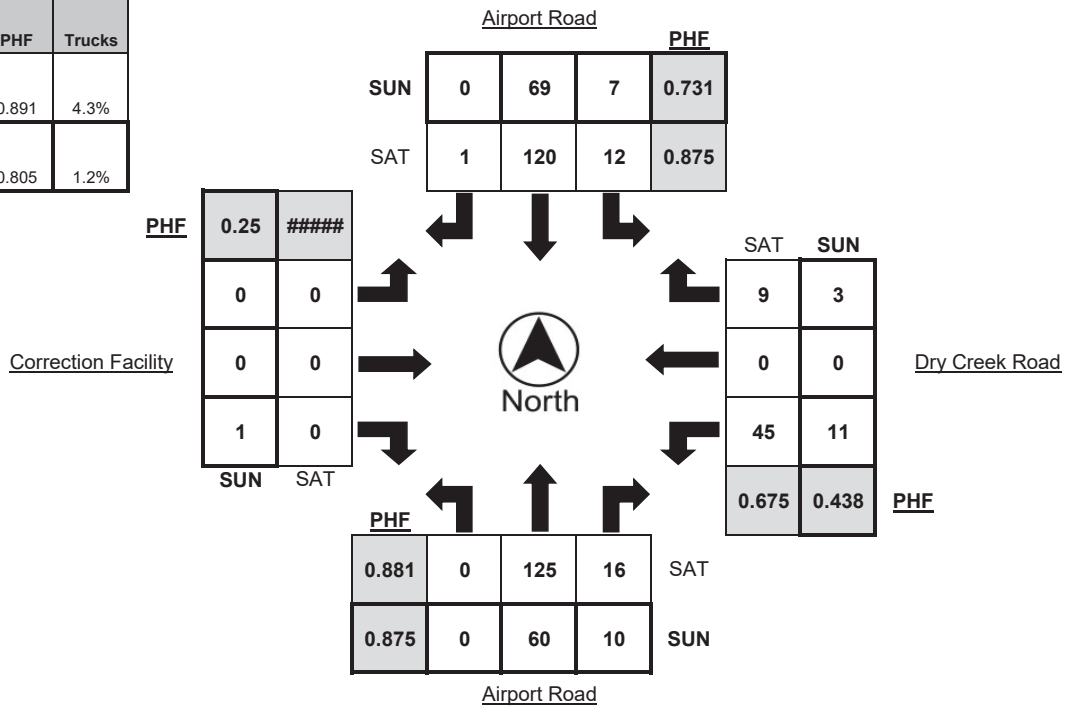
LOCATION Airport Road @ Dry Creek Road (East)
LATITUDE 35.662849°
COUNTY San Luis Obispo
LONGITUDE -120.640936°
COLLECTION DATE Saturday 6/4/16 & Sunday 6/5/16
WEATHER Clear

	Northbound				Southbound				Eastbound				Westbound			
Time (Saturday)	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
11:00 AM - 11:15 AM	0	17	5	2	2	36	0	7	0	0	0	0	9	0	1	2
11:15 AM - 11:30 AM	0	27	8	0	2	15	0	0	0	0	0	0	5	0	1	0
11:30 AM - 11:45 AM	0	25	5	1	3	13	1	0	0	0	0	0	14	1	3	0
11:45 AM - 12:00 PM	0	37	3	2	4	28	0	4	0	0	0	0	17	0	3	0
12:00 PM - 12:15 PM	0	31	3	1	3	34	1	0	0	0	0	0	8	0	3	0
12:15 PM - 12:30 PM	0	31	3	0	2	24	0	0	0	0	0	0	7	0	1	0
12:30 PM - 12:45 PM	0	26	7	5	3	34	0	2	0	0	0	0	13	0	2	0
12:45 PM - 1:00 PM	0	32	2	3	1	25	0	3	0	0	0	0	20	0	2	1
TOTAL	**0**	**226**	**36**	**14**	**20**	**209**	**2**	**16**	**0**	**0**	**0**	**0**	**93**	**1**	**16**	**3**

	Northbound				Southbound				Eastbound				Westbound			
Time (Sunday)	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
4:00 PM - 4:15 PM	0	15	1	0	2	24	0	1	0	0	0	0	5	0	3	0
4:15 PM - 4:30 PM	0	14	2	0	3	18	0	0	0	0	0	0	4	0	0	0
4:30 PM - 4:45 PM	0	14	4	0	2	14	0	0	0	0	0	0	2	0	0	0
4:45 PM - 5:00 PM	0	17	3	1	0	13	0	0	0	0	1	0	0	0	0	0
5:00 PM - 5:15 PM	0	8	4	0	1	22	0	0	0	1	0	0	3	1	0	0
5:15 PM - 5:30 PM	0	15	5	1	2	19	0	0	0	0	0	0	1	0	2	0
5:30 PM - 5:45 PM	0	15	0	0	1	15	0	0	0	0	0	0	5	0	0	0
5:45 PM - 6:00 PM	0	21	3	2	0	9	0	0	0	0	0	0	2	0	1	0
TOTAL	**0**	**119**	**22**	**4**	**11**	**134**	**0**	**1**	**0**	**1**	**1**	**0**	**22**	**1**	**6**	**0**

	Northbound				Southbound				Eastbound				Westbound			
PEAK HOUR	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
11:45 AM - 12:45 PM	0	125	16	8	12	120	1	6	0	0	0	0	45	0	9	0
4:00 PM - 5:00 PM	0	60	10	1	7	69	0	1	0	0	1	0	11	0	3	0

	PHF	Trucks
Saturday	0.891	4.3%
Sunday	0.805	1.2%



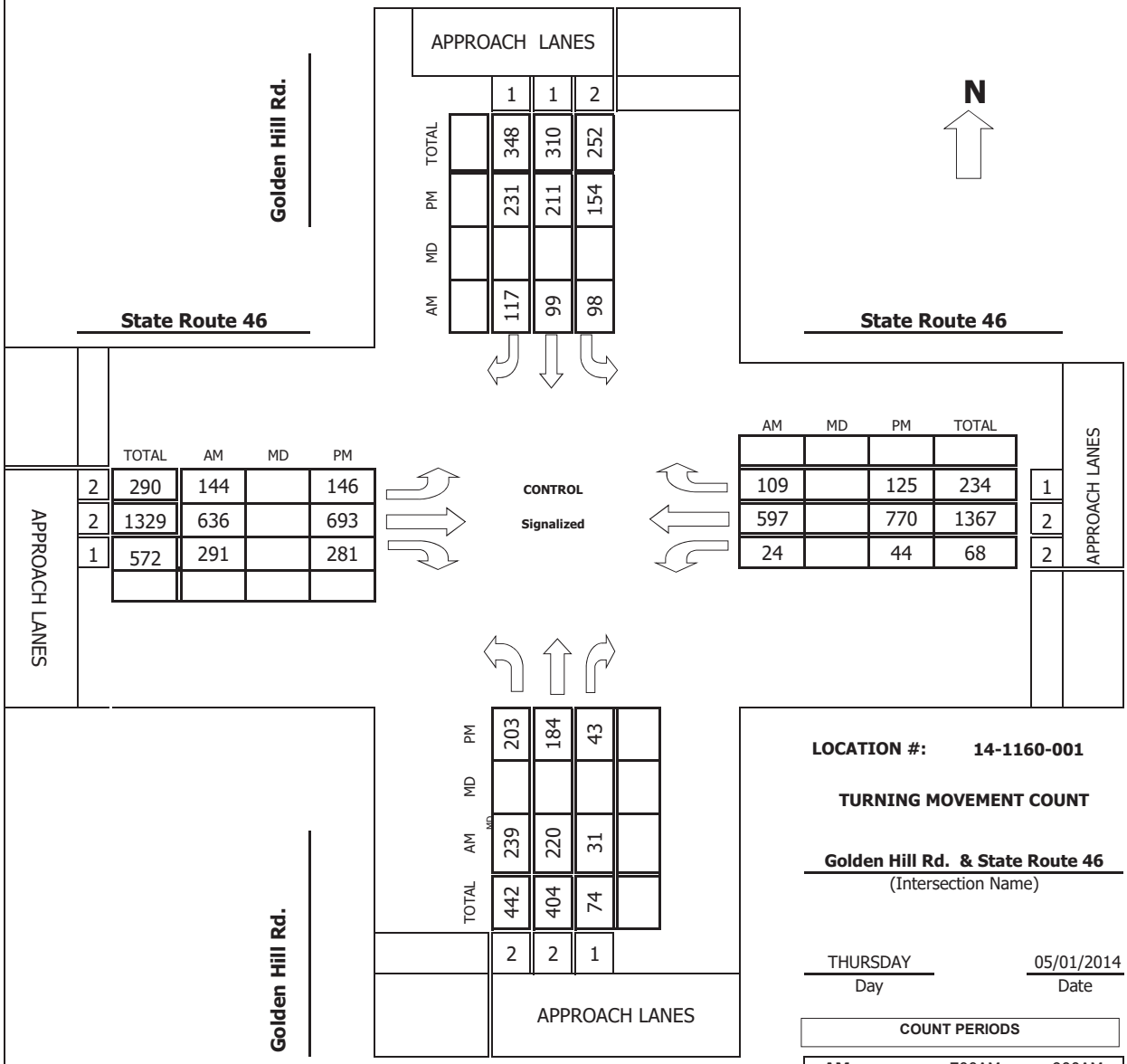
Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Exhibit D

Project #: 14-1160-001

TMC SUMMARY OF Golden Hill Rd. & State Route 46



	1	1	2
TOTAL	348	310	252
PM	231	211	154
MD			
AM	117	99	98

	TOTAL	AM	MD	PM
2	290	144		146
2	1329	636		693
1	572	291		281

AM	MD	PM	TOTAL	
109		125	234	1
597		770	1367	2
24		44	68	2

	2	2	1
PM	203	184	43
MD			
AM	239	220	31
TOTAL	442	404	74

LOCATION #: 14-1160-001

TURNING MOVEMENT COUNT

Golden Hill Rd. & State Route 46
(Intersection Name)

THURSDAY — Day
05/01/2014 — Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR: 730 AM

NOON PEAK HOUR:

PM PEAK HOUR: 430 PM

Exhibit D

Turning Movement Report

Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

LOCATION SR 46 @ Golden Hill Road

LATITUDE 35.644557°

COUNTY San Luis Obispo

LONGITUDE -120.658075°

COLLECTION DATE Saturday 6/4/16 & Sunday 6/5/16

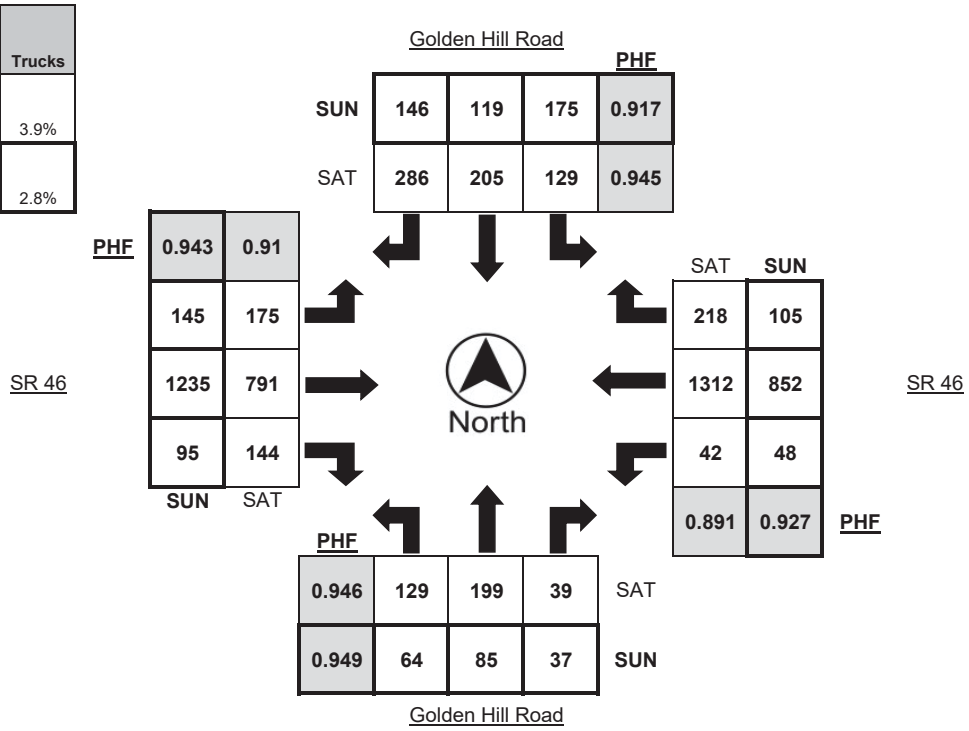
WEATHER Clear

	Northbound				Southbound				Eastbound				Westbound			
Time (Saturday)	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
11:00 AM - 11:15 AM	37	38	6	1	23	55	72	4	34	183	33	22	21	301	62	23
11:15 AM - 11:30 AM	31	56	10	1	33	54	75	0	44	175	35	33	12	367	62	7
11:30 AM - 11:45 AM	38	46	9	1	31	48	76	2	48	221	36	14	11	307	55	11
11:45 AM - 12:00 PM	36	48	12	0	37	58	69	1	38	177	41	21	8	315	63	21
12:00 PM - 12:15 PM	24	49	8	0	28	45	66	0	45	218	32	18	11	323	38	13
12:15 PM - 12:30 PM	38	41	7	2	31	39	58	0	32	191	39	25	8	285	41	6
12:30 PM - 12:45 PM	29	36	10	0	34	39	50	1	34	198	29	10	19	303	62	21
12:45 PM - 1:00 PM	28	40	1	0	33	35	56	1	34	187	20	15	15	255	23	12
TOTAL	**261**	**354**	**63**	**5**	**250**	**373**	**522**	**9**	**309**	**1550**	**265**	**158**	**105**	**2456**	**406**	**114**

	Northbound				Southbound				Eastbound				Westbound			
Time (Sunday)	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
4:00 PM - 4:15 PM	13	21	6	1	40	23	27	0	42	278	25	3	7	213	36	8
4:15 PM - 4:30 PM	15	27	7	0	41	33	25	0	34	296	24	7	15	222	20	5
4:30 PM - 4:45 PM	17	20	11	0	48	30	31	2	47	317	27	14	14	197	33	13
4:45 PM - 5:00 PM	13	18	12	0	44	28	40	4	34	303	25	11	9	231	31	11
5:00 PM - 5:15 PM	19	20	7	0	42	28	50	0	30	319	19	8	10	202	21	11
5:15 PM - 5:30 PM	16	19	2	0	28	18	31	1	31	316	17	5	15	223	39	8
5:30 PM - 5:45 PM	26	30	10	1	39	24	41	1	17	322	23	7	12	198	31	7
5:45 PM - 6:00 PM	16	25	9	0	37	22	23	0	31	304	24	0	17	211	25	13
TOTAL	**135**	**180**	**64**	**2**	**319**	**206**	**268**	**8**	**266**	**2455**	**184**	**55**	**99**	**1697**	**236**	**76**

	Northbound				Southbound				Eastbound				Westbound			
PEAK HOUR	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
11:15 AM - 12:15 PM	129	199	39	2	129	205	286	3	175	791	144	86	42	1312	218	52
4:15 PM - 5:15 PM	64	85	37	0	175	119	146	6	145	1235	95	40	48	852	105	40

	PHF	Trucks
Saturday	0.961	3.9%
Sunday	0.980	2.8%



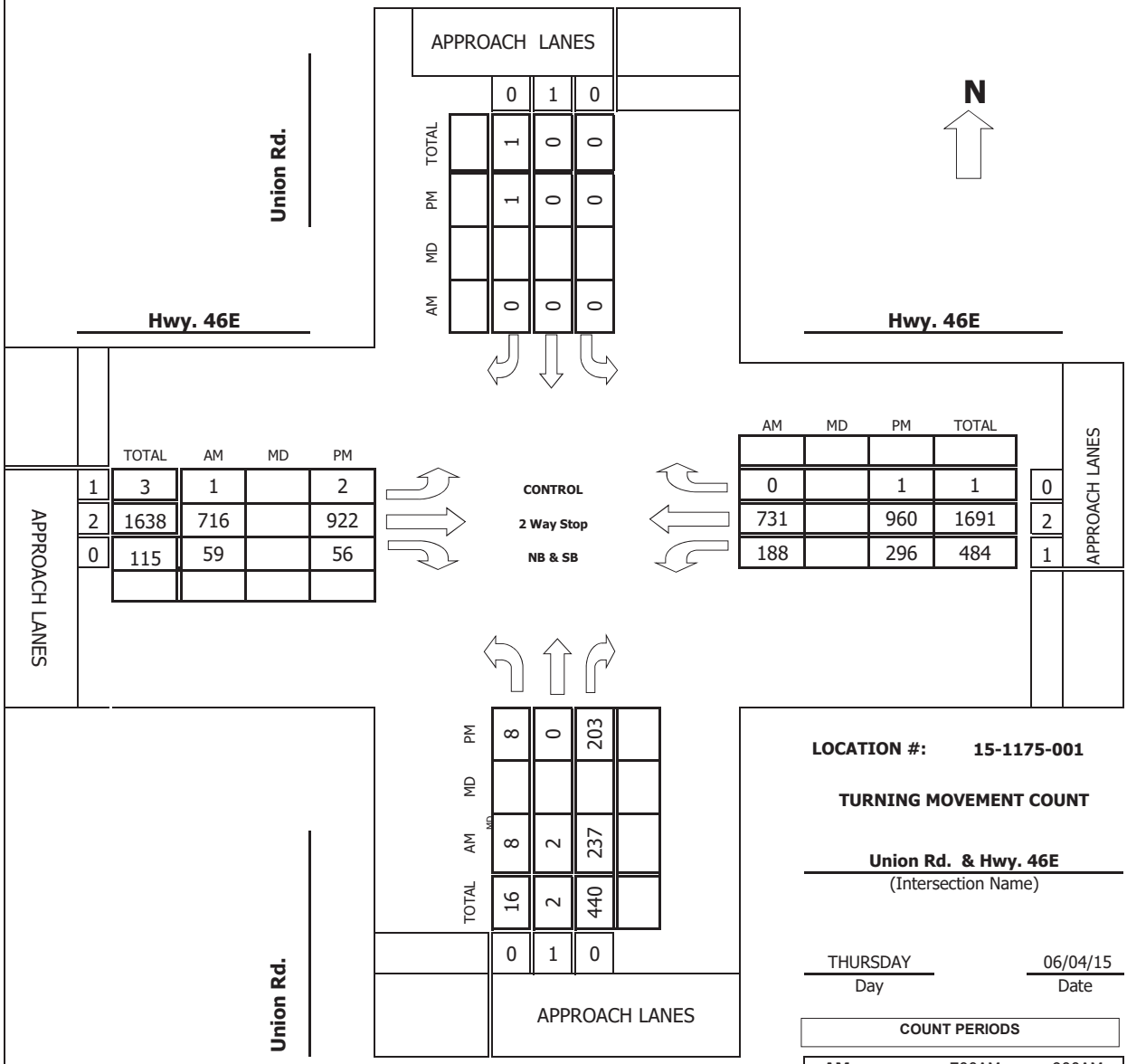
Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Exhibit D

Project #: 15-1175-001

TMC SUMMARY OF Union Rd. & Hwy. 46E



LOCATION #: 15-1175-001

TURNING MOVEMENT COUNT

Union Rd. & Hwy. 46E
(Intersection Name)

THURSDAY — Day
06/04/15 — Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR: 730 AM

NOON PEAK HOUR:

PM PEAK HOUR: 445 PM

Exhibit D

Turning Movement Report

Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

LOCATION SR 46 @ Union Road
LATITUDE 35.644553°
COUNTY San Luis Obispo
LONGITUDE -120.649432°
COLLECTION DATE Saturday 6/4/16 & Sunday 6/5/16
WEATHER Clear

	Northbound				Southbound				Eastbound				Westbound			
Time (Saturday)	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
11:00 AM - 11:15 AM	1	0	40	0	0	0	1	0	2	224	8	23	42	377	0	16
11:15 AM - 11:30 AM	3	0	51	0	0	0	0	0	1	188	9	16	47	453	0	12
11:30 AM - 11:45 AM	4	2	42	0	0	0	0	0	2	242	16	20	46	350	0	8
11:45 AM - 12:00 PM	6	3	60	1	1	0	0	0	4	221	5	20	34	384	0	25
12:00 PM - 12:15 PM	1	1	39	0	0	0	1	0	2	246	9	17	41	369	0	22
12:15 PM - 12:30 PM	2	0	46	1	0	0	1	0	2	224	9	20	45	327	0	14
12:30 PM - 12:45 PM	2	0	50	1	0	0	2	0	2	239	7	16	48	392	0	18
12:45 PM - 1:00 PM	3	1	53	0	1	0	0	0	3	214	7	18	44	304	0	16
TOTAL	**22**	**7**	**381**	**3**	**2**	**0**	**5**	**0**	**18**	**1798**	**70**	**150**	**347**	**2956**	**0**	**131**

	Northbound				Southbound				Eastbound				Westbound			
Time (Sunday)	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
4:00 PM - 4:15 PM	0	0	29	0	0	2	5	0	1	321	7	3	27	249	0	7
4:15 PM - 4:30 PM	2	0	48	2	0	0	3	0	0	360	3	10	56	260	0	5
4:30 PM - 4:45 PM	1	0	34	2	0	0	6	1	0	346	8	13	35	231	0	16
4:45 PM - 5:00 PM	3	0	49	0	1	0	8	0	1	369	6	11	36	264	0	9
5:00 PM - 5:15 PM	2	0	28	0	1	1	1	0	0	358	4	14	26	216	0	14
5:15 PM - 5:30 PM	4	0	35	0	0	1	3	0	0	339	6	5	42	277	0	8
5:30 PM - 5:45 PM	0	0	37	0	1	1	4	0	0	358	5	10	45	232	0	12
5:45 PM - 6:00 PM	1	0	50	1	0	1	9	0	0	346	7	4	43	238	0	15
TOTAL	**13**	**0**	**310**	**5**	**3**	**6**	**39**	**1**	**2**	**2797**	**46**	**70**	**310**	**1967**	**0**	**86**

	Northbound				Southbound				Eastbound				Westbound			
PEAK HOUR	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
11:15 AM - 12:15 PM	14	6	192	1	1	0	1	0	9	897	39	73	168	1556	0	67
4:00 PM - 5:00 PM	6	0	160	4	1	2	22	1	2	1396	24	37	154	1004	0	37

	PHF	Trucks
Saturday	0.958	4.9%
Sunday	0.940	2.9%

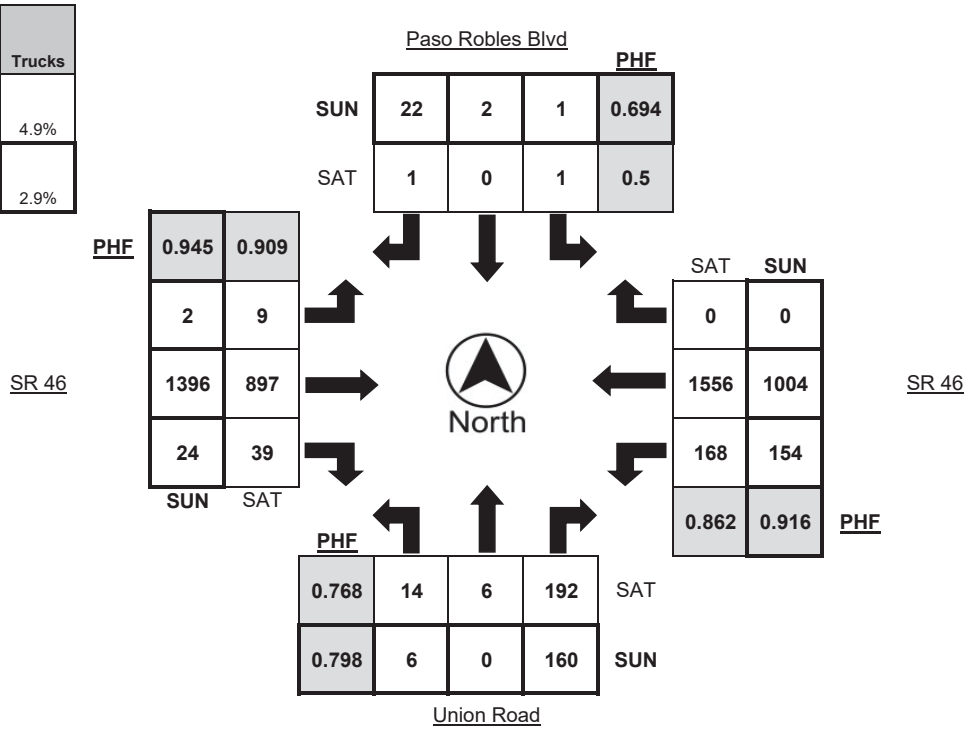


Exhibit D

Turning Movement Report

Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

LOCATION	SR 46 @ Airport Road	**LATITUDE**	35.644513°
COUNTY	San Luis Obispo	**LONGITUDE**	-120.643315°
COLLECTION DATE	Thursday, April 7, 2016	**WEATHER**	Clear

	Northbound				Southbound				Eastbound				Westbound			
Time	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
7:00 AM - 7:15 AM	0	0	0	0	2	0	14	2	39	91	0	18	0	168	3	35
7:15 AM - 7:30 AM	0	0	0	0	0	0	34	3	47	124	0	19	0	227	3	19
7:30 AM - 7:45 AM	0	0	0	0	0	0	33	4	44	102	0	20	0	265	5	29
7:45 AM - 8:00 AM	0	0	0	0	1	0	30	2	101	138	0	18	0	285	2	28
8:00 AM - 8:15 AM	0	0	0	0	4	0	30	5	82	149	0	14	0	193	0	19
8:15 AM - 8:30 AM	0	0	0	0	1	0	21	4	61	157	0	26	0	176	1	39
8:30 AM - 8:45 AM	0	0	0	0	2	0	31	0	51	150	0	43	0	150	2	19
8:45 AM - 9:00 AM	0	0	0	0	1	0	31	5	51	140	0	20	0	149	1	31
TOTAL	**0**	**0**	**0**	**0**	**11**	**0**	**224**	**25**	**476**	**1051**	**0**	**178**	**0**	**1613**	**17**	**219**

	Northbound				Southbound				Eastbound				Westbound			
Time	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
4:00 PM - 4:15 PM	0	0	0	0	1	0	81	2	42	230	0	21	0	215	2	18
4:15 PM - 4:30 PM	0	0	0	0	4	0	62	4	40	218	0	29	0	199	2	17
4:30 PM - 4:45 PM	0	0	0	0	1	0	84	1	46	234	0	25	0	198	1	17
4:45 PM - 5:00 PM	0	0	0	0	1	0	76	4	42	277	0	22	0	244	2	23
5:00 PM - 5:15 PM	0	0	0	0	1	0	78	5	39	240	0	14	0	259	2	22
5:15 PM - 5:30 PM	0	0	0	0	3	0	68	1	36	268	0	21	0	193	2	14
5:30 PM - 5:45 PM	0	0	0	0	1	0	55	2	34	240	0	18	0	204	2	24
5:45 PM - 6:00 PM	0	0	0	0	3	0	26	2	28	212	0	12	0	157	2	16
TOTAL	**0**	**0**	**0**	**0**	**15**	**0**	**530**	**21**	**307**	**1919**	**0**	**162**	**0**	**1669**	**15**	**151**

	Northbound				Southbound				Eastbound				Westbound			
PEAK HOUR	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
7:15 AM - 8:15 AM	0	0	0	0	5	0	127	14	274	513	0	71	0	970	10	95
4:30 PM - 5:30 PM	0	0	0	0	6	0	306	11	163	1019	0	82	0	894	7	76

	PHF	Trucks
AM	0.852	9.5%
PM	0.933	7.1%

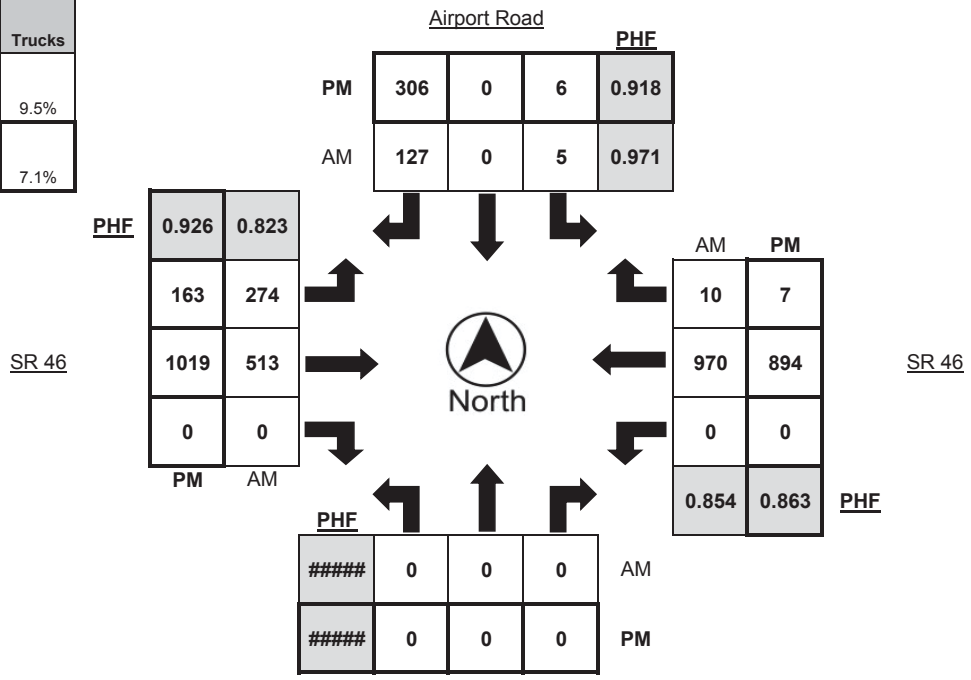


Exhibit D

Turning Movement Report

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310 N. Irwin Street - Suite 20
Hanford, CA 93230

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Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

LOCATION SR 46 @ Airport Road
LATITUDE 35.644561°
COUNTY San Luis Obispo
LONGITUDE -120.643296°
COLLECTION DATE Saturday 6/4/16 & Sunday 6/5/16
WEATHER Clear

	Northbound				Southbound				Eastbound				Westbound			
Time (Saturday)	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
11:00 AM - 11:15 AM	0	0	0	0	0	0	58	1	81	196	0	23	0	348	12	17
11:15 AM - 11:30 AM	0	0	0	0	1	0	73	6	58	176	0	20	0	407	8	10
11:30 AM - 11:45 AM	0	0	0	0	1	0	36	0	70	181	0	13	0	350	4	11
11:45 AM - 12:00 PM	0	0	0	0	0	0	62	0	73	177	0	26	0	338	10	24
12:00 PM - 12:15 PM	0	0	0	0	3	0	73	3	72	196	0	20	0	323	7	21
12:15 PM - 12:30 PM	0	0	0	0	3	0	63	0	66	199	0	21	0	319	7	18
12:30 PM - 12:45 PM	0	0	0	0	0	0	71	1	82	186	0	20	0	331	11	14
12:45 PM - 1:00 PM	0	0	0	0	4	0	72	4	67	190	0	18	0	292	6	19
TOTAL	**0**	**0**	**0**	**0**	**12**	**0**	**508**	**15**	**569**	**1501**	**0**	**161**	**0**	**2708**	**65**	**134**

	Northbound				Southbound				Eastbound				Westbound			
Time (Sunday)	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
4:00 PM - 4:15 PM	0	0	0	0	10	0	67	6	27	365	0	12	0	217	3	10
4:15 PM - 4:30 PM	0	0	0	0	18	0	85	7	31	395	0	16	0	265	3	16
4:30 PM - 4:45 PM	0	0	0	0	8	0	59	9	30	385	0	30	0	190	1	14
4:45 PM - 5:00 PM	0	0	0	0	12	0	80	10	30	450	0	25	0	218	1	11
5:00 PM - 5:15 PM	0	0	0	0	15	0	44	4	20	269	0	12	0	174	0	10
5:15 PM - 5:30 PM	0	0	0	0	10	0	81	0	32	332	0	4	0	231	0	7
5:30 PM - 5:45 PM	0	0	0	0	2	0	75	8	29	344	0	14	0	186	5	16
5:45 PM - 6:00 PM	0	0	0	0	11	0	86	9	24	369	0	7	0	181	1	11
TOTAL	**0**	**0**	**0**	**0**	**86**	**0**	**577**	**53**	**223**	**2909**	**0**	**120**	**0**	**1662**	**14**	**95**

	Northbound				Southbound				Eastbound				Westbound			
PEAK HOUR	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
11:00 AM - 12:00 PM	0	0	0	0	2	0	229	7	282	730	0	82	0	1443	34	62
4:00 PM - 5:00 PM	0	0	0	0	48	0	291	32	118	1595	0	83	0	890	8	51

	PHF	Trucks
Saturday	0.941	5.6%
Sunday	0.925	5.6%

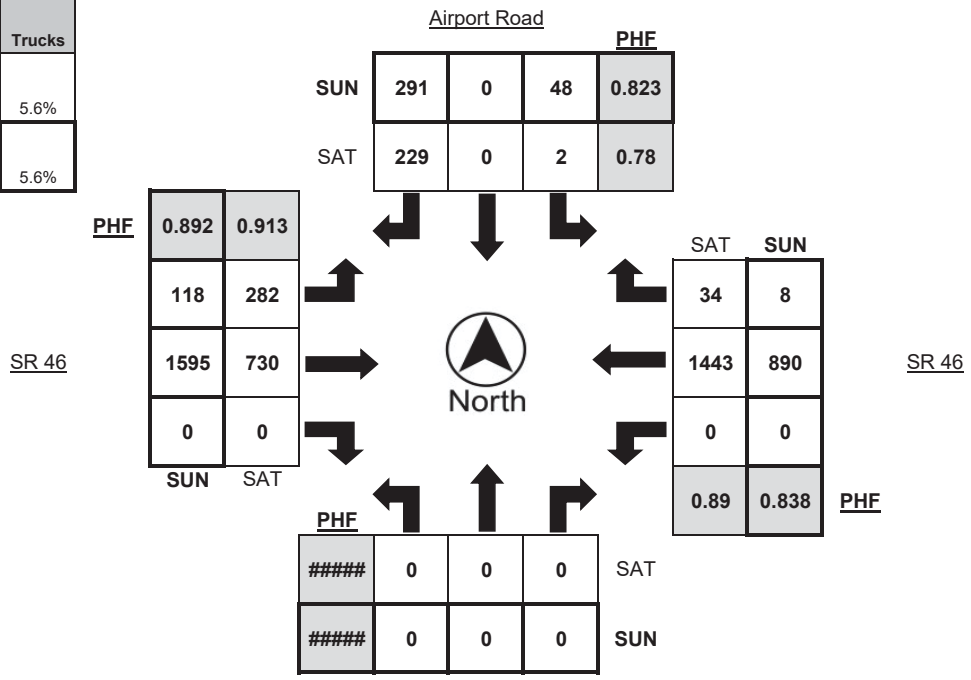


Exhibit D

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: CAL POLY ITE

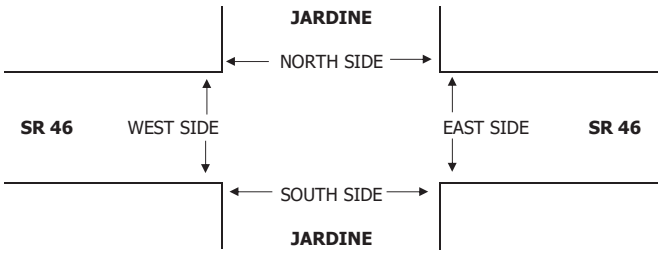
DATE:	LOCATION:	PASO ROBLES	PROJECT #:	1701
10/18/16	NORTH & SOUTH:	JARDINE	LOCATION #:	1
TUESDAY	EAST & WEST:	SR 46	CONTROL:	TWSC

NOTES:

AM
PM
MD
OTHER
OTHER

N
W
E
S

	NORTHBOUND JARDINE			SOUTHBOUND JARDINE			EASTBOUND SR 46			WESTBOUND SR 46				U-TURNS				
LANES:	NL 0	NT 0	NR 0	SL 0	ST 0	SR 0	EL 0	ET 0	ER 0	WL 0	WT 0	WR 0	TOTAL	NB X	SB X	EB X	WB X	TTL
5:30 AM													0					0
5:45 AM													0					0
6:00 AM													0					0
6:15 AM													0					0
6:30 AM													0					0
6:45 AM													0					0
7:00 AM	0	1	1	7	0	59	14	119	0	0	111	6	318					0
7:15 AM	0	0	2	4	0	84	19	98	2	1	166	15	391					0
7:30 AM	0	0	0	5	0	99	22	99	0	0	162	7	394					0
7:45 AM	0	0	0	5	0	85	32	112	1	0	164	11	410					0
8:00 AM	1	0	0	5	0	50	49	123	0	0	129	11	368					0
8:15 AM	0	0	0	6	0	47	26	113	0	0	121	7	320					0
8:30 AM	1	0	0	6	0	33	19	105	0	0	92	10	266					0
8:45 AM	1	0	0	2	0	45	20	106	0	0	146	8	328					0
9:00 AM													0					0
9:15 AM													0					0
9:30 AM													0					0
9:45 AM													0					0
10:00 AM													0					0
10:15 AM													0					0
VOLUMES	3	1	3	40	0	502	201	875	3	1	1,091	75	2,795	0	0	0	0	0
APPROACH %	43%	14%	43%	7%	0%	93%	19%	81%	0%	0%	93%	6%						
APP/DEPART	7	/	277	542	/	4	1,079	/	918	1,167	/	1,596	0					
BEGIN PEAK HR		7:15 AM																
VOLUMES	1	0	2	19	0	318	122	432	3	1	621	44	1,563					
APPROACH %	33%	0%	67%	6%	0%	94%	22%	78%	1%	0%	93%	7%						
PEAK HR FACTOR		0.375			0.810			0.810			0.915		0.953					
APP/DEPART	3	/	166	337	/	4	557	/	453	666	/	940	0					



	PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
5:30 AM	0	0	0	0	0					0					0
5:45 AM	0	0	0	0	0					0					0
6:00 AM	0	0	0	0	0					0					0
6:15 AM	0	0	0	0	0					0					0
6:30 AM	0	0	0	0	0					0					0
6:45 AM	0	0	0	0	0					0					0
7:00 AM	0	0	0	0	0					0					0
7:15 AM	0	0	0	0	0					0					0
7:30 AM	0	0	0	0	0					0					0
7:45 AM	0	0	0	0	0					0					0
8:00 AM	0	0	0	0	0					0					0
8:15 AM	0	0	0	0	0					0					0
8:30 AM	0	0	0	0	0					0					0
8:45 AM	0	0	0	0	0					0					0
9:00 AM	0	0	0	0	0					0					0
9:15 AM	0	0	0	0	0					0					0
9:30 AM	0	0	0	0	0										0
9:45 AM	0	0	0	0	0										0
10:00 AM	0	0	0	0	0										0
10:15 AM	0	0	0	0	0										0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit D

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: CAL POLY ITE

DATE:	LOCATION:	PASO ROBLES	PROJECT #:	1701
10/18/16	NORTH & SOUTH:	JARDINE	LOCATION #:	1
TUESDAY	EAST & WEST:	SR 46	CONTROL:	TWSC

NOTES:

AM
PM
MD
OTHER
OTHER

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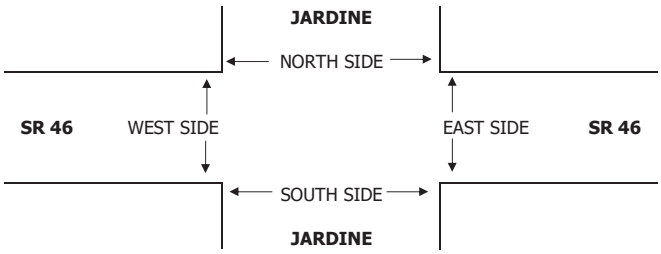
	NORTHBOUND JARDINE			SOUTHBOUND JARDINE			EASTBOUND SR 46			WESTBOUND SR 46				U-TURNS				
LANES:	NL 0	NT 0	NR 0	SL 0	ST 0	SR 0	EL 0	ET 0	ER 0	WL 0	WT 0	WR 0	TOTAL	NB X	SB X	EB X	WB X	TTL
2:30 PM													0					0
2:45 PM													0					0
3:00 PM													0					0
3:15 PM													0					0
3:30 PM													0					0
3:45 PM													0					0
4:00 PM	1	0	0	4	0	36	52	161	0	0	150	6	410					0
4:15 PM	0	0	1	3	0	46	55	176	1	0	137	10	429					0
4:30 PM	0	0	0	5	0	43	44	160	0	0	150	8	410					0
4:45 PM	0	0	0	3	0	32	43	190	0	0	160	3	431					0
5:00 PM	2	0	0	14	3	50	68	165	0	2	142	2	448					0
5:15 PM	2	0	1	5	0	26	59	163	0	0	157	6	419					0
5:30 PM	1	0	0	5	0	29	50	169	0	0	143	1	398					0
5:45 PM	0	0	0	3	0	29	45	167	0	0	149	5	398					0
6:00 PM													0					0
6:15 PM													0					0
6:30 PM													0					0
6:45 PM													0					0
7:00 PM													0					0
7:15 PM													0					0
VOLUMES	6	0	2	42	3	291	416	1,351	1	2	1,188	41	3,343	0	0	0	0	0
APPROACH %	75%	0%	25%	13%	1%	87%	24%	76%	0%	0%	97%	3%						
APP/DEPART	8	/	457	336	/	6	1,768	/	1,395	1,231	/	1,485	0					
BEGIN PEAK HR		4:15 PM																
VOLUMES	2	0	1	25	3	171	210	691	1	2	589	23	1,718					
APPROACH %	67%	0%	33%	13%	2%	86%	23%	77%	0%	0%	96%	4%						
PEAK HR FACTOR		0.375			0.743			0.968			0.942		0.959					
APP/DEPART	3	/	233	199	/	6	902	/	717	614	/	762	0					



	PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
2:30 PM	0	0	0	0	0					0					0
2:45 PM	0	0	0	0	0					0					0
3:00 PM	0	0	0	0	0					0					0
3:15 PM	0	0	0	0	0					0					0
3:30 PM	0	0	0	0	0					0					0
3:45 PM	0	0	0	0	0					0					0
4:00 PM	0	0	0	0	0					0					0
4:15 PM	0	0	0	0	0					0					0
4:30 PM	0	0	0	0	0					0					0
4:45 PM	0	0	0	0	0					0					0
5:00 PM	0	0	0	0	0					0					0
5:15 PM	0	0	0	0	0					0					0
5:30 PM	0	0	0	0	0					0					0
5:45 PM	0	0	0	0	0					0					0
6:00 PM	0	0	0	0	0					0					0
6:15 PM	0	0	0	0	0					0					0
6:30 PM	0	0	0	0	0										0
6:45 PM	0	0	0	0	0										0
7:00 PM	0	0	0	0	0										0
7:15 PM	0	0	0	0	0										0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit D

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: CAL POLY ITE

DATE:	LOCATION:	PASO ROBLES	PROJECT #:	1701
10/22/16	NORTH & SOUTH:	JARDINE	LOCATION #:	1
SATURDAY	EAST & WEST:	SR 46	CONTROL:	TWSC

NOTES:

AM
PM
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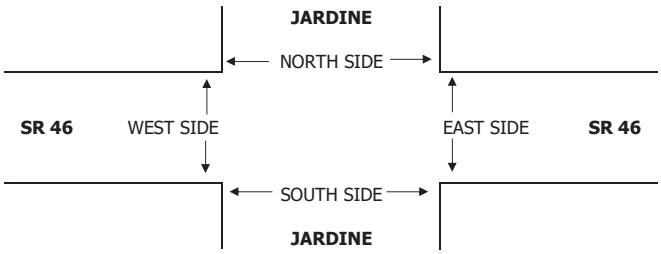
OTHER
OTHER

N ▲ ◄ W E ► S ▼

	NORTHBOUND JARDINE			SOUTHBOUND JARDINE			EASTBOUND SR 46			WESTBOUND SR 46				U-TURNS				
LANES:	NL 0	NT 0	NR 0	SL 0	ST 0	SR 0	EL 0	ET 0	ER 0	WL 0	WT 0	WR 0	TOTAL	NB X	SB X	EB X	WB X	TTL
9:30 AM													0					0
9:45 AM													0					0
10:00 AM													0					0
10:15 AM													0					0
10:30 AM													0					0
10:45 AM													0					0
11:00 AM	1	0	0	5	0	45	46	178	0	0	214	4	493					0
11:15 AM	0	3	1	7	0	22	37	151	0	0	235	4	460					0
11:30 AM	0	0	0	7	0	38	27	146	0	0	257	2	477					0
11:45 AM	0	0	0	2	0	35	30	164	0	0	220	6	457					0
12:00 PM	0	0	0	3	0	37	32	184	0	0	246	3	505					0
12:15 PM	0	0	0	3	0	25	47	179	0	0	229	6	489					0
12:30 PM	0	0	0	4	0	37	26	199	0	0	230	7	503					0
12:45 PM	0	0	0	4	0	41	17	189	0	0	214	2	467					0
1:00 PM													0					0
1:15 PM													0					0
1:30 PM													0					0
1:45 PM													0					0
2:00 PM													0					0
2:15 PM													0					0
VOLUMES	1	3	1	35	0	280	262	1,390	0	0	1,845	34	3,851	0	0	0	0	0
APPROACH %	20%	60%	20%	11%	0%	89%	16%	84%	0%	0%	98%	2%						
APP/DEPART	5	/	299	315	/	0	1,652	/	1,426	1,879	/	2,126	0					
BEGIN PEAK HR		12:00 PM																
VOLUMES	0	0	0	14	0	140	122	751	0	0	919	18	1,964					
APPROACH %	0%	0%	0%	9%	0%	91%	14%	86%	0%	0%	98%	2%						
PEAK HR FACTOR		0.000			0.856			0.966			0.941		0.972					
APP/DEPART	0	/	140	154	/	0	873	/	765	937	/	1,059	0					



	PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
9:30 AM	0	0	0	0	0					0					0
9:45 AM	0	0	0	0	0					0					0
10:00 AM	0	0	0	0	0					0					0
10:15 AM	0	0	0	0	0					0					0
10:30 AM	0	0	0	0	0					0					0
10:45 AM	0	0	0	0	0					0					0
11:00 AM	0	0	0	0	0					0					0
11:15 AM	0	0	0	0	0					0					0
11:30 AM	0	0	0	0	0					0					0
11:45 AM	0	0	0	0	0					0					0
12:00 PM	0	0	0	0	0					0					0
12:15 PM	0	0	0	0	0					0					0
12:30 PM	0	0	0	0	0					0					0
12:45 PM	0	0	0	0	0					0					0
1:00 PM	0	0	0	0	0					0					0
1:15 PM	0	0	0	0	0					0					0
1:30 PM	0	0	0	0	0										0
1:45 PM	0	0	0	0	0										0
2:00 PM	0	0	0	0	0										0
2:15 PM	0	0	0	0	0										0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit D

Appendix B: LOS Calculations Sheets

Exhibit D

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	1	19	0	7	1	215	87	9	97	1
Future Vol, veh/h	0	0	1	19	0	7	1	215	87	9	97	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	0	0	1	24	0	9	1	269	109	11	121	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	420	415	121	415	415	269	121	0	0	269	0	0
Stage 1	144	144	-	271	271	-	-	-	-	-	-	-
Stage 2	276	271	-	144	144	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.56	6.26	7.16	6.56	6.26	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.16	5.56	-	6.16	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.56	-	6.16	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	3.554	4.054	3.354	2.254	-	-	2.254	-	-
Pot Cap-1 Maneuver	537	522	920	541	522	760	1442	-	-	1272	-	-
Stage 1	849	770	-	726	678	-	-	-	-	-	-	-
Stage 2	722	678	-	849	770	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	527	517	920	536	517	760	1442	-	-	1272	-	-
Mov Cap-2 Maneuver	527	517	-	536	517	-	-	-	-	-	-	-
Stage 1	848	763	-	725	677	-	-	-	-	-	-	-
Stage 2	713	677	-	840	763	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.9	11.6	0	0.7
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1442	-	-	920	582	1272	-	-
HCM Lane V/C Ratio	0.001	-	-	0.001	0.056	0.009	-	-
HCM Control Delay (s)	7.5	0	-	8.9	11.6	7.9	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	178	798	359	36	890	162	295	310	122	122	144
v/c Ratio	0.50	0.60	0.41	0.10	0.77	0.24	0.61	0.43	0.46	0.46	0.40
Control Delay	41.5	20.8	3.6	35.8	26.4	3.7	40.1	29.0	43.9	38.5	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.5	20.8	3.6	35.8	26.4	3.7	40.1	29.0	43.9	38.5	7.5
Queue Length 50th (ft)	42	170	0	8	193	0	70	66	29	55	0
Queue Length 95th (ft)	79	221	32	23	245	26	119	106	59	107	25
Internal Link Dist (ft)		3280			2376			566		648	
Turn Bay Length (ft)	550		490	460		390	160		130		
Base Capacity (vph)	354	2173	1199	531	2330	1213	487	2064	265	986	898
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.37	0.30	0.07	0.38	0.13	0.61	0.15	0.46	0.12	0.16

Intersection Summary

Exhibit D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	646	291	29	721	131	239	220	31	99	99	117
Future Volume (veh/h)	144	646	291	29	721	131	239	220	31	99	99	117
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1610	1863	1863	1610	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	178	798	359	36	890	162	295	272	38	122	122	144
Adj No. of Lanes	2	2	1	2	2	1	2	2	0	2	1	1
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	18	2	2	18	2	2	2	2	2	2	2
Cap, veh/h	266	1096	562	252	1167	599	394	731	101	198	331	276
Arrive On Green	0.08	0.36	0.36	0.07	0.38	0.38	0.11	0.23	0.23	0.06	0.18	0.18
Sat Flow, veh/h	3442	3059	1570	3442	3059	1571	3442	3119	431	3442	1863	1557
Grp Volume(v), veh/h	178	798	359	36	890	162	295	153	157	122	122	144
Grp Sat Flow(s),veh/h/ln	1721	1530	1570	1721	1530	1571	1721	1770	1780	1721	1863	1557
Q Serve(g_s), s	3.6	16.4	8.3	0.7	18.3	5.1	6.0	5.2	5.4	2.5	4.2	6.1
Cycle Q Clear(g_c), s	3.6	16.4	8.3	0.7	18.3	5.1	6.0	5.2	5.4	2.5	4.2	6.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	266	1096	562	252	1167	599	394	415	417	198	331	276
V/C Ratio(X)	0.67	0.73	0.64	0.14	0.76	0.27	0.75	0.37	0.38	0.62	0.37	0.52
Avail Cap(c_a), veh/h	381	2329	1195	572	2498	1283	524	1127	1133	286	1057	883
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	20.1	7.1	31.4	19.5	15.4	31.0	23.2	23.2	33.3	26.2	26.9
Incr Delay (d2), s/veh	2.9	0.9	1.2	0.3	1.1	0.2	4.1	0.5	0.6	3.1	0.7	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	7.0	4.7	0.3	7.8	2.3	3.1	2.6	2.7	1.3	2.2	2.7
LnGrp Delay(d),s/veh	35.3	21.1	8.3	31.6	20.5	15.6	35.1	23.7	23.8	36.4	26.8	28.5
LnGrp LOS	D	C	A	C	C	B	D	C	C	D	C	C
Approach Vol, veh/h		1335			1088			605			388	
Approach Delay, s/veh		19.5			20.2			29.3			30.4	
Approach LOS		B			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	20.9	11.3	31.9	12.3	16.8	9.6	33.6
Change Period (Y+Rc), s	4.0	4.0	6.0	* 6	4.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	6.0	46.0	12.0	* 55	11.0	41.0	8.0	59.0
Max Q Clear Time (g_c+I1), s	4.5	7.4	2.7	18.4	8.0	8.1	5.6	20.3
Green Ext Time (p_c), s	0.0	3.0	4.1	7.0	0.3	3.0	0.1	7.1

Intersection Summary	
HCM 2010 Ctrl Delay	22.7
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	1	716	59	224	873	0	8	2	237	0	0	0
Future Vol, veh/h	1	716	59	224	873	0	8	2	237	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	500	-	50	670	-	50	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	1	-	-	1	-	-	2	-	-	-8	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	18	2	2	18	2	2	2	2	2	2	2
Mvmt Flow	1	823	68	257	1003	0	9	2	272	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1003	0	0	823	0	0	1842	2343	411	1933	2343	502
Stage 1	-	-	-	-	-	-	825	825	-	1518	1518	-
Stage 2	-	-	-	-	-	-	1017	1518	-	415	825	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.94	6.94	7.14	5.94	4.94	6.14
Critical Hdwy Stg 1	-	-	-	-	-	-	6.94	5.94	-	4.94	3.94	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.94	5.94	-	4.94	3.94	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	686	-	-	803	-	-	38	28	577	94	101	575
Stage 1	-	-	-	-	-	-	304	351	-	244	353	-
Stage 2	-	-	-	-	-	-	227	152	-	704	556	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	686	-	-	803	-	-	29	19	577	34	69	575
Mov Cap-2 Maneuver	-	-	-	-	-	-	29	19	-	34	69	-
Stage 1	-	-	-	-	-	-	304	350	-	244	240	-
Stage 2	-	-	-	-	-	-	154	103	-	369	555	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.4	25.2	0
HCM LOS			D	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	26	577	686	-	-	803	-	-	-	-
HCM Lane V/C Ratio	0.442	0.472	0.002	-	-	0.321	-	-	-	-
HCM Control Delay (s)	226	16.7	10.3	-	-	11.6	-	-	0	0
HCM Lane LOS	F	C	B	-	-	B	-	-	A	A
HCM 95th %tile Q(veh)	1.4	2.5	0	-	-	1.4	-	-	-	-

Exhibit D

Destino Paso
4: SR 46 E & Airport Road

Existing AM
5/17/2016

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Traffic Vol, veh/h	332	621	970	10	5	127
Future Vol, veh/h	332	621	970	10	5	127
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	10	18	18	10	10	10
Mvmt Flow	391	731	1141	12	6	149

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1141	0	-	0	2287	571
Stage 1	-	-	-	-	1141	-
Stage 2	-	-	-	-	1146	-
Critical Hdwy	4.3	-	-	-	7	7.1
Critical Hdwy Stg 1	-	-	-	-	6	-
Critical Hdwy Stg 2	-	-	-	-	6	-
Follow-up Hdwy	2.3	-	-	-	3.6	3.4
Pot Cap-1 Maneuver	564	-	-	-	30	444
Stage 1	-	-	-	-	250	-
Stage 2	-	-	-	-	249	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	564	-	-	-	9	444
Mov Cap-2 Maneuver	-	-	-	-	56	-
Stage 1	-	-	-	-	250	-
Stage 2	-	-	-	-	76	-

Approach	EB	WB	SB
HCM Control Delay, s	8.5	0	19.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	564	-	-	-	56	444
HCM Lane V/C Ratio	0.693	-	-	-	0.105	0.337
HCM Control Delay (s)	24.5	-	-	-	76.7	17.2
HCM Lane LOS	C	-	-	-	F	C
HCM 95th %tile Q(veh)	5.4	-	-	-	0.3	1.5

Destino Paso
1: Airport Road & Dry Creek Road

Existing PM
5/17/2016

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	1	117	0	6	0	139	21	4	228	0
Future Vol, veh/h	0	0	1	117	0	6	0	139	21	4	228	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	0	1	148	0	8	0	176	27	5	289	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	479	475	289	475	475	176	289	0	0	176	0	0
Stage 1	299	299	-	176	176	-	-	-	-	-	-	-
Stage 2	180	176	-	299	299	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	492	484	743	495	484	859	1256	-	-	1382	-	-
Stage 1	703	661	-	819	748	-	-	-	-	-	-	-
Stage 2	815	748	-	703	661	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	486	482	743	493	482	859	1256	-	-	1382	-	-
Mov Cap-2 Maneuver	486	482	-	493	482	-	-	-	-	-	-	-
Stage 1	703	658	-	819	748	-	-	-	-	-	-	-
Stage 2	808	748	-	699	658	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.9	15.3	0	0.1
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1256	-	-	743	503	1382	-	-
HCM Lane V/C Ratio	-	-	-	0.002	0.31	0.004	-	-
HCM Control Delay (s)	0	-	-	9.9	15.3	7.6	0	-
HCM Lane LOS	A	-	-	A	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	1.3	0	-	-

Exhibit D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	152	832	293	47	828	134	211	244	185	220	241
v/c Ratio	0.40	0.63	0.35	0.15	0.75	0.21	0.50	0.34	0.48	0.60	0.50
Control Delay	43.1	23.8	3.7	42.7	30.1	4.7	44.1	29.2	44.9	41.4	10.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.1	23.8	3.7	42.7	30.1	4.7	44.1	29.2	44.9	41.4	10.2
Queue Length 50th (ft)	40	201	0	12	205	0	55	53	49	110	9
Queue Length 95th (ft)	86	315	51	35	324	38	115	104	104	216	77
Internal Link Dist (ft)		3280			2376			566		648	
Turn Bay Length (ft)	550		490	460		390	160		130		
Base Capacity (vph)	485	2427	1281	352	2308	1194	445	1860	404	988	925
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.34	0.23	0.13	0.36	0.11	0.47	0.13	0.46	0.22	0.26

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	146	799	281	45	795	129	203	184	50	178	211	231
Future Volume (veh/h)	146	799	281	45	795	129	203	184	50	178	211	231
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1610	1863	1863	1610	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	152	832	293	47	828	134	211	192	52	185	220	241
Adj No. of Lanes	2	2	1	2	2	1	2	2	0	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	18	2	2	18	2	2	2	2	2	2	2
Cap, veh/h	242	1125	577	157	1135	582	308	634	167	278	411	344
Arrive On Green	0.07	0.37	0.37	0.05	0.37	0.37	0.09	0.23	0.23	0.08	0.22	0.22
Sat Flow, veh/h	3442	3059	1570	3442	3059	1571	3442	2764	728	3442	1863	1562
Grp Volume(v), veh/h	152	832	293	47	828	134	211	121	123	185	220	241
Grp Sat Flow(s),veh/h/ln	1721	1530	1570	1721	1530	1571	1721	1770	1723	1721	1863	1562
Q Serve(g_s), s	3.1	17.1	6.7	1.0	16.9	4.2	4.3	4.1	4.3	3.8	7.6	10.3
Cycle Q Clear(g_c), s	3.1	17.1	6.7	1.0	16.9	4.2	4.3	4.1	4.3	3.8	7.6	10.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	242	1125	577	157	1135	582	308	406	395	278	411	344
V/C Ratio(X)	0.63	0.74	0.51	0.30	0.73	0.23	0.68	0.30	0.31	0.67	0.54	0.70
Avail Cap(c_a), veh/h	571	2876	1476	381	2707	1390	523	1125	1096	476	1159	972
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.7	19.9	7.3	33.4	19.6	15.6	31.9	23.1	23.1	32.3	24.9	26.0
Incr Delay (d2), s/veh	2.7	1.0	0.7	1.0	0.9	0.2	2.7	0.4	0.4	2.7	1.1	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	7.3	3.7	0.5	7.3	1.9	2.2	2.0	2.1	1.9	4.0	4.7
LnGrp Delay(d),s/veh	35.4	20.8	8.0	34.4	20.5	15.8	34.6	23.5	23.6	35.0	26.0	28.6
LnGrp LOS	D	C	A	C	C	B	C	C	C	D	C	C
Approach Vol, veh/h		1277			1009			455			646	
Approach Delay, s/veh		19.6			20.6			28.7			29.5	
Approach LOS		B			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	20.6	9.3	32.6	10.5	20.0	9.1	32.8
Change Period (Y+Rc), s	4.0	4.0	6.0	* 6	4.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	10.0	46.0	8.0	* 68	11.0	45.0	12.0	64.0
Max Q Clear Time (g_c+I1), s	5.8	6.3	3.0	19.1	6.3	12.3	5.1	18.9
Green Ext Time (p_c), s	0.2	3.6	2.5	7.2	0.3	3.6	0.2	6.5

Intersection Summary

HCM 2010 Ctrl Delay	23.0
HCM 2010 LOS	C

Notes

Exhibit D

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	2	969	56	296	960	1	8	0	213	0	0	1
Future Vol, veh/h	2	969	56	296	960	1	8	0	213	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	500	-	50	670	-	50	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	1	-	-	1	-	-	2	-	-	-8	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	18	2	2	18	2	2	2	2	2	2	2
Mvmt Flow	2	1053	61	322	1043	1	9	0	232	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1043	0	0	1053	0	0	2223	2745	527	2218	2745	522
Stage 1	-	-	-	-	-	-	1058	1058	-	1687	1687	-
Stage 2	-	-	-	-	-	-	1165	1687	-	531	1058	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.94	6.94	7.14	5.94	4.94	6.14
Critical Hdwy Stg 1	-	-	-	-	-	-	6.94	5.94	-	4.94	3.94	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.94	5.94	-	4.94	3.94	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	663	-	-	657	-	-	19	14	481	64	67	561
Stage 1	-	-	-	-	-	-	214	266	-	206	314	-
Stage 2	-	-	-	-	-	-	181	123	-	633	479	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	663	-	-	657	-	-	12	7	481	20	34	561
Mov Cap-2 Maneuver	-	-	-	-	-	-	12	7	-	20	34	-
Stage 1	-	-	-	-	-	-	213	265	-	205	160	-
Stage 2	-	-	-	-	-	-	92	63	-	327	478	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.7	38.8	11.4
HCM LOS			E	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	12	481	663	-	-	657	-	-	-	561
HCM Lane V/C Ratio	0.725	0.481	0.003	-	-	0.49	-	-	-	0.002
HCM Control Delay (s)	$ 561.9	19.2	10.4	-	-	15.6	-	-	0	11.4
HCM Lane LOS	F	C	B	-	-	C	-	-	A	B
HCM 95th %tile Q(veh)	1.6	2.6	0	-	-	2.7	-	-	-	0

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Traffic Vol, veh/h	163	1019	936	7	6	321
Future Vol, veh/h	163	1019	936	7	6	321
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	7	18	18	7	7	7
Mvmt Flow	175	1096	1006	8	6	345

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1006	0	-	0	1904	503
Stage 1	-	-	-	-	1006	-
Stage 2	-	-	-	-	898	-
Critical Hdwy	4.24	-	-	-	6.94	7.04
Critical Hdwy Stg 1	-	-	-	-	5.94	-
Critical Hdwy Stg 2	-	-	-	-	5.94	-
Follow-up Hdwy	2.27	-	-	-	3.57	3.37
Pot Cap-1 Maneuver	655	-	-	-	57	501
Stage 1	-	-	-	-	303	-
Stage 2	-	-	-	-	346	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	655	-	-	-	42	501
Mov Cap-2 Maneuver	-	-	-	-	145	-
Stage 1	-	-	-	-	303	-
Stage 2	-	-	-	-	254	-

Approach	EB	WB	SB
HCM Control Delay, s	1.7	0	26.7
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	655	-	-	-	145	501
HCM Lane V/C Ratio	0.268	-	-	-	0.044	0.689
HCM Control Delay (s)	12.5	-	-	-	31	26.6
HCM Lane LOS	B	-	-	-	D	D
HCM 95th %tile Q(veh)	1.1	-	-	-	0.1	5.2

Exhibit D

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	120	1	45	0	9	0	125	16	12	120	1
Future Vol, veh/h	12	120	1	45	0	9	0	125	16	12	120	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	13	135	1	51	0	10	0	140	18	13	135	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	308	302	135	370	302	140	135	0	0	140	0	0
Stage 1	162	162	-	140	140	-	-	-	-	-	-	-
Stage 2	146	140	-	230	162	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.54	6.24	7.14	6.54	6.24	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	3.536	4.036	3.336	2.236	-	-	2.236	-	-
Pot Cap-1 Maneuver	641	607	909	583	607	903	1437	-	-	1431	-	-
Stage 1	835	760	-	858	777	-	-	-	-	-	-	-
Stage 2	852	777	-	768	760	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	629	601	909	478	601	903	1437	-	-	1431	-	-
Mov Cap-2 Maneuver	629	601	-	478	601	-	-	-	-	-	-	-
Stage 1	835	752	-	858	777	-	-	-	-	-	-	-
Stage 2	842	777	-	623	752	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.9	12.9	0	0.7
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1437	-	-	605	519	1431	-	-
HCM Lane V/C Ratio	-	-	-	0.247	0.117	0.009	-	-
HCM Control Delay (s)	0	-	-	12.9	12.9	7.5	0	-
HCM Lane LOS	A	-	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1	0.4	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	182	824	150	44	1367	227	134	248	134	214	298
v/c Ratio	0.57	0.54	0.20	0.08	0.83	0.27	0.47	0.40	0.50	0.67	0.72
Control Delay	58.0	29.3	5.2	37.6	30.5	3.3	57.2	39.8	59.1	54.7	28.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.0	29.3	5.2	37.6	30.5	3.3	57.2	39.8	59.1	54.7	28.6
Queue Length 50th (ft)	66	284	0	12	428	1	48	78	48	148	81
Queue Length 95th (ft)	115	374	45	31	600	44	90	124	91	242	190
Internal Link Dist (ft)		3280			2376			566		648	
Turn Bay Length (ft)	550		490	460		390	160		130		
Base Capacity (vph)	346	2174	1002	576	1979	958	314	1459	283	768	743
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.38	0.15	0.08	0.69	0.24	0.43	0.17	0.47	0.28	0.40

Intersection Summary

Exhibit D

Destino Paso
2: Golden Hill Rd & SR 46 E

Existing Saturday MD
6/21/2016

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	791	144	42	1312	218	129	199	39	129	205	286
Future Volume (veh/h)	175	791	144	42	1312	218	129	199	39	129	205	286
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1900	1827	1827	1827
Adj Flow Rate, veh/h	182	824	150	44	1367	227	134	207	41	134	214	298
Adj No. of Lanes	2	2	1	2	2	1	2	2	0	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	246	1028	455	747	1609	715	195	686	133	194	433	363
Arrive On Green	0.07	0.30	0.30	0.22	0.46	0.46	0.06	0.24	0.24	0.06	0.24	0.24
Sat Flow, veh/h	3375	3471	1537	3375	3471	1543	3375	2893	562	3375	1827	1533
Grp Volume(v), veh/h	182	824	150	44	1367	227	134	123	125	134	214	298
Grp Sat Flow(s),veh/h/ln	1688	1736	1537	1688	1736	1543	1688	1736	1719	1688	1827	1533
Q Serve(g_s), s	5.6	23.3	6.4	1.1	37.1	9.9	4.1	6.2	6.4	4.1	10.8	19.6
Cycle Q Clear(g_c), s	5.6	23.3	6.4	1.1	37.1	9.9	4.1	6.2	6.4	4.1	10.8	19.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	246	1028	455	747	1609	715	195	412	408	194	433	363
V/C Ratio(X)	0.74	0.80	0.33	0.06	0.85	0.32	0.69	0.30	0.31	0.69	0.49	0.82
Avail Cap(c_a), veh/h	349	2184	967	747	1989	884	317	750	743	285	772	648
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.4	34.6	18.0	32.7	25.3	18.0	49.2	33.3	33.4	49.2	35.1	38.5
Incr Delay (d2), s/veh	5.0	1.5	0.4	0.0	3.1	0.3	4.3	0.4	0.4	4.3	0.9	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	11.4	3.1	0.5	18.3	4.2	2.1	3.0	3.1	2.1	5.5	8.8
LnGrp Delay(d),s/veh	53.4	36.1	18.4	32.7	28.4	18.2	53.5	33.7	33.8	53.6	36.0	43.1
LnGrp LOS	D	D	B	C	C	B	D	C	C	D	D	D
Approach Vol, veh/h		1156			1638			382			646	
Approach Delay, s/veh		36.5			27.1			40.7			42.9	
Approach LOS		D			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	29.2	29.6	37.5	10.1	29.2	11.8	55.3
Change Period (Y+Rc), s	4.0	4.0	6.0	* 6	4.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	9.0	46.0	5.0	* 67	10.0	45.0	11.0	61.0
Max Q Clear Time (g_c+I1), s	6.1	8.4	3.1	25.3	6.1	21.6	7.6	39.1
Green Ext Time (p_c), s	0.1	3.8	1.5	6.2	0.1	3.6	0.2	10.2

Intersection Summary	
HCM 2010 Ctrl Delay	34.0
HCM 2010 LOS	C

Notes

Destino Paso
3: Union Road & SR 46 E

Existing Saturday MD
6/21/2016

Intersection	
Int Delay, s/veh	8.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	910	40	168	1557	0	14	6	192	1	0	1
Future Vol, veh/h	9	910	40	168	1557	0	14	6	192	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	500	-	50	670	-	50	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	1	-	-	1	-	-	2	-	-	-8	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	9	948	42	175	1622	0	15	6	200	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1622	0	0	948	0	0	2128	2939	474	2468	2939	811
Stage 1	-	-	-	-	-	-	967	967	-	1972	1972	-
Stage 2	-	-	-	-	-	-	1161	1972	-	496	967	-
Critical Hdwy	4.2	-	-	4.2	-	-	8	7	7.2	6	5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	7	6	-	5	4	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7	6	-	5	4	-
Follow-up Hdwy	2.25	-	-	2.25	-	-	3.55	4.05	3.35	3.55	4.05	3.35
Pot Cap-1 Maneuver	384	-	-	702	-	-	21	10	515	44	51	379
Stage 1	-	-	-	-	-	-	240	291	-	149	247	-
Stage 2	-	-	-	-	-	-	178	83	-	644	498	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	384	-	-	702	-	-	17	7	515	5	37	379
Mov Cap-2 Maneuver	-	-	-	-	-	-	17	7	-	5	37	-
Stage 1	-	-	-	-	-	-	234	284	-	146	185	-
Stage 2	-	-	-	-	-	-	133	62	-	376	486	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.2	107.5	$ 438.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	12	515	384	-	-	702	-	-	5	379
HCM Lane V/C Ratio	1.736	0.388	0.024	-	-	0.249	-	-	0.208	0.003
HCM Control Delay (s)	$ 982.3	16.4	14.6	-	-	11.8	-	-	$ 861.9	14.5
HCM Lane LOS	F	C	B	-	-	B	-	-	F	B
HCM 95th %tile Q(veh)	3.4	1.8	0.1	-	-	1	-	-	0.4	0

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Exhibit D

Destino Paso
4: SR 46 E & Airport Road

Existing Saturday MD
6/21/2016

Intersection	
Int Delay, s/veh	8.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	308	795	1489	34	2	236
Future Vol, veh/h	308	795	1489	34	2	236
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	328	846	1584	36	2	251

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1584	0	-	0	2662	792
Stage 1	-	-	-	-	1584	-
Stage 2	-	-	-	-	1078	-
Critical Hdwy	4.22	-	-	-	6.92	7.02
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	2.26	-	-	-	3.56	3.36
Pot Cap-1 Maneuver	393	-	-	-	17	324
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	279	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	393	-	-	-	3	324
Mov Cap-2 Maneuver	-	-	-	-	33	-
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	46	-

Approach	EB	WB	SB
HCM Control Delay, s	12.9	0	46.3
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	393	-	-	-	33	324
HCM Lane V/C Ratio	0.834	-	-	-	0.064	0.775
HCM Control Delay (s)	46.3	-	-	-	121.5	45.7
HCM Lane LOS	E	-	-	-	F	E
HCM 95th %tile Q(veh)	7.7	-	-	-	0.2	6.2

Destino Paso
1: Airport Road & Dry Creek Road

Existing Plus Project AM
5/17/2016

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	1	20	0	7	1	216	88	9	99	1
Future Vol, veh/h	0	0	1	20	0	7	1	216	88	9	99	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	0	0	1	25	0	9	1	270	110	11	124	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	423	419	124	420	419	270	124	0	0	270	0	0
Stage 1	146	146	-	273	273	-	-	-	-	-	-	-
Stage 2	277	273	-	147	146	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.56	6.26	7.16	6.56	6.26	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.16	5.56	-	6.16	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.56	-	6.16	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	3.554	4.054	3.354	2.254	-	-	2.254	-	-
Pot Cap-1 Maneuver	534	519	916	537	519	759	1438	-	-	1271	-	-
Stage 1	847	769	-	724	677	-	-	-	-	-	-	-
Stage 2	721	677	-	846	769	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	524	514	916	532	514	759	1438	-	-	1271	-	-
Mov Cap-2 Maneuver	524	514	-	532	514	-	-	-	-	-	-	-
Stage 1	846	762	-	723	676	-	-	-	-	-	-	-
Stage 2	712	676	-	837	762	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.9	11.6	0	0.6
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1438	-	-	916	577	1271	-	-
HCM Lane V/C Ratio	0.001	-	-	0.001	0.058	0.009	-	-
HCM Control Delay (s)	7.5	0	-	8.9	11.6	7.9	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Exhibit D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	178	838	359	37	906	163	295	314	126	122	144
v/c Ratio	0.51	0.61	0.40	0.11	0.77	0.24	0.61	0.43	0.48	0.46	0.40
Control Delay	42.0	20.7	3.5	36.9	26.5	3.7	40.7	29.2	44.8	38.9	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.0	20.7	3.5	36.9	26.5	3.7	40.7	29.2	44.8	38.9	7.5
Queue Length 50th (ft)	43	182	0	8	198	0	71	67	30	56	0
Queue Length 95th (ft)	80	231	31	23	250	26	120	108	61	107	25
Internal Link Dist (ft)		3280			2376			566		648	
Turn Bay Length (ft)	550		490	460		390	160		130		
Base Capacity (vph)	351	2155	1192	527	2312	1205	484	2044	263	978	893
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.39	0.30	0.07	0.39	0.14	0.61	0.15	0.48	0.12	0.16

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	679	291	30	734	132	239	220	34	102	99	117
Future Volume (veh/h)	144	679	291	30	734	132	239	220	34	102	99	117
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1610	1863	1863	1610	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	178	838	359	37	906	163	295	272	42	126	122	144
Adj No. of Lanes	2	2	1	2	2	1	2	2	0	2	1	1
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	18	2	2	18	2	2	2	2	2	2	2
Cap, veh/h	265	1128	579	228	1178	605	392	720	110	202	334	279
Arrive On Green	0.08	0.37	0.37	0.07	0.39	0.39	0.11	0.23	0.23	0.06	0.18	0.18
Sat Flow, veh/h	3442	3059	1570	3442	3059	1571	3442	3074	469	3442	1863	1557
Grp Volume(v), veh/h	178	838	359	37	906	163	295	155	159	126	122	144
Grp Sat Flow(s),veh/h/ln	1721	1530	1570	1721	1530	1571	1721	1770	1773	1721	1863	1557
Q Serve(g_s), s	3.7	17.5	8.3	0.7	19.0	5.2	6.1	5.4	5.5	2.6	4.2	6.1
Cycle Q Clear(g_c), s	3.7	17.5	8.3	0.7	19.0	5.2	6.1	5.4	5.5	2.6	4.2	6.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	265	1128	579	228	1178	605	392	415	415	202	334	279
V/C Ratio(X)	0.67	0.74	0.62	0.16	0.77	0.27	0.75	0.37	0.38	0.62	0.37	0.52
Avail Cap(c_a), veh/h	375	2289	1175	562	2456	1261	515	1108	1110	281	1039	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.0	20.2	6.9	32.4	19.7	15.5	31.6	23.6	23.7	33.8	26.5	27.3
Incr Delay (d2), s/veh	2.9	1.0	1.1	0.3	1.1	0.2	4.4	0.6	0.6	3.1	0.7	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	7.5	4.7	0.4	8.1	2.3	3.1	2.7	2.8	1.3	2.2	2.8
LnGrp Delay(d),s/veh	36.0	21.2	8.0	32.7	20.8	15.7	36.0	24.2	24.2	36.9	27.2	28.8
LnGrp LOS	D	C	A	C	C	B	D	C	C	D	C	C
Approach Vol, veh/h		1375			1106			609			392	
Approach Delay, s/veh		19.6			20.5			29.9			30.9	
Approach LOS		B			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	21.2	10.9	33.1	12.4	17.2	9.7	34.3
Change Period (Y+Rc), s	4.0	4.0	6.0	* 6	4.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	6.0	46.0	12.0	* 55	11.0	41.0	8.0	59.0
Max Q Clear Time (g_c+I1), s	4.6	7.5	2.7	19.5	8.1	8.1	5.7	21.0
Green Ext Time (p_c), s	0.0	3.0	4.2	7.4	0.3	3.0	0.1	7.3

Intersection Summary

HCM 2010 Ctrl Delay	23.0
HCM 2010 LOS	C

Notes

Exhibit D

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	1	755	59	227	888	0	8	2	244	0	0	0
Future Vol, veh/h	1	755	59	227	888	0	8	2	244	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	500	-	50	670	-	50	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	1	-	-	1	-	-	2	-	-	-8	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	18	2	2	18	2	2	2	2	2	2	2
Mvmt Flow	1	868	68	261	1021	0	9	2	280	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1021	0	0	868	0	0	1902	2413	434	1980	2413	510
Stage 1	-	-	-	-	-	-	870	870	-	1543	1543	-
Stage 2	-	-	-	-	-	-	1032	1543	-	437	870	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.94	6.94	7.14	5.94	4.94	6.14
Critical Hdwy Stg 1	-	-	-	-	-	-	6.94	5.94	-	4.94	3.94	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.94	5.94	-	4.94	3.94	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	675	-	-	772	-	-	34	25	556	88	94	570
Stage 1	-	-	-	-	-	-	284	333	-	238	347	-
Stage 2	-	-	-	-	-	-	222	147	-	690	540	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	675	-	-	772	-	-	25	17	556	29	62	570
Mov Cap-2 Maneuver	-	-	-	-	-	-	25	17	-	29	62	-
Stage 1	-	-	-	-	-	-	284	333	-	238	230	-
Stage 2	-	-	-	-	-	-	147	97	-	339	539	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.4	27.7	0
HCM LOS			D	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	23	556	675	-	-	772	-	-	-	-
HCM Lane V/C Ratio	0.5	0.504	0.002	-	-	0.338	-	-	-	-
HCM Control Delay (s)	267.8	17.9	10.3	-	-	12	-	-	0	0
HCM Lane LOS	F	C	B	-	-	B	-	-	A	A
HCM 95th %tile Q(veh)	1.5	2.8	0	-	-	1.5	-	-	-	-

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Traffic Vol, veh/h	378	621	970	26	11	145
Future Vol, veh/h	378	621	970	26	11	145
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	10	18	18	10	10	10
Mvmt Flow	445	731	1141	31	13	171

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1141	0	-	0	2396	571
Stage 1	-	-	-	-	1141	-
Stage 2	-	-	-	-	1255	-
Critical Hdwy	4.3	-	-	-	7	7.1
Critical Hdwy Stg 1	-	-	-	-	6	-
Critical Hdwy Stg 2	-	-	-	-	6	-
Follow-up Hdwy	2.3	-	-	-	3.6	3.4
Pot Cap-1 Maneuver	564	-	-	-	25	444
Stage 1	-	-	-	-	250	-
Stage 2	-	-	-	-	217	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	564	-	-	-	~ 5	444
Mov Cap-2 Maneuver	-	-	-	-	37	-
Stage 1	-	-	-	-	250	-
Stage 2	-	-	-	-	46	-

Approach	EB	WB	SB
HCM Control Delay, s	11.8	0	27.2
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	564	-	-	-	37	444
HCM Lane V/C Ratio	0.788	-	-	-	0.35	0.384
HCM Control Delay (s)	31.1	-	-	-	147.6	18.1
HCM Lane LOS	D	-	-	-	F	C
HCM 95th %tile Q(veh)	7.5	-	-	-	1.2	1.8

Notes
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Exhibit D

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	1	118	0	6	0	141	22	4	230	0
Future Vol, veh/h	0	0	1	118	0	6	0	141	22	4	230	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	0	1	149	0	8	0	178	28	5	291	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	483	479	291	480	479	178	291	0	0	178	0	0
Stage 1	301	301	-	178	178	-	-	-	-	-	-	-
Stage 2	182	178	-	302	301	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	489	481	741	491	481	857	1254	-	-	1380	-	-
Stage 1	702	660	-	817	746	-	-	-	-	-	-	-
Stage 2	813	746	-	701	660	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	483	479	741	489	479	857	1254	-	-	1380	-	-
Mov Cap-2 Maneuver	483	479	-	489	479	-	-	-	-	-	-	-
Stage 1	702	657	-	817	746	-	-	-	-	-	-	-
Stage 2	806	746	-	697	657	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.9	15.5	0	0.1
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1254	-	-	741	499	1380	-	-
HCM Lane V/C Ratio	-	-	-	0.002	0.315	0.004	-	-
HCM Control Delay (s)	0	-	-	9.9	15.5	7.6	0	-
HCM Lane LOS	A	-	-	A	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	1.3	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	152	859	293	51	865	139	211	247	189	220	241
v/c Ratio	0.41	0.68	0.36	0.16	0.77	0.21	0.51	0.35	0.50	0.61	0.51
Control Delay	44.4	26.2	3.8	43.6	30.5	4.5	45.6	30.0	46.5	42.5	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.4	26.2	3.8	43.6	30.5	4.5	45.6	30.0	46.5	42.5	11.0
Queue Length 50th (ft)	41	213	0	13	220	0	58	56	52	115	12
Queue Length 95th (ft)	88	331	50	38	344	38	119	107	109	221	84
Internal Link Dist (ft)		3280			2376			566		648	
Turn Bay Length (ft)	550		490	460		390	160		130		
Base Capacity (vph)	474	2382	1263	348	2254	1171	434	1816	395	965	906
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.36	0.23	0.15	0.38	0.12	0.49	0.14	0.48	0.23	0.27

Intersection Summary

Exhibit D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	146	825	281	49	830	133	203	184	53	181	211	231
Future Volume (veh/h)	146	825	281	49	830	133	203	184	53	181	211	231
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1610	1863	1863	1610	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	152	859	293	51	865	139	211	192	55	189	220	241
Adj No. of Lanes	2	2	1	2	2	1	2	2	0	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	18	2	2	18	2	2	2	2	2	2	2
Cap, veh/h	240	1141	586	168	1160	595	306	621	173	280	410	344
Arrive On Green	0.07	0.37	0.37	0.05	0.38	0.38	0.09	0.23	0.23	0.08	0.22	0.22
Sat Flow, veh/h	3442	3059	1571	3442	3059	1571	3442	2727	759	3442	1863	1562
Grp Volume(v), veh/h	152	859	293	51	865	139	211	123	124	189	220	241
Grp Sat Flow(s),veh/h/ln	1721	1530	1571	1721	1530	1571	1721	1770	1717	1721	1863	1562
Q Serve(g_s), s	3.2	18.2	6.9	1.1	18.2	4.5	4.4	4.3	4.5	4.0	7.8	10.6
Cycle Q Clear(g_c), s	3.2	18.2	6.9	1.1	18.2	4.5	4.4	4.3	4.5	4.0	7.8	10.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.44	1.00		1.00
Lane Grp Cap(c), veh/h	240	1141	586	168	1160	595	306	403	391	280	410	344
V/C Ratio(X)	0.63	0.75	0.50	0.30	0.75	0.23	0.69	0.30	0.32	0.67	0.54	0.70
Avail Cap(c_a), veh/h	556	2798	1437	370	2634	1352	509	1095	1062	463	1128	945
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.7	20.3	7.4	34.1	20.0	15.7	32.9	23.8	23.9	33.2	25.6	26.7
Incr Delay (d2), s/veh	2.8	1.0	0.7	1.0	1.0	0.2	2.8	0.4	0.5	2.8	1.1	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	7.8	3.8	0.5	7.8	2.0	2.2	2.1	2.2	2.0	4.1	4.8
LnGrp Delay(d),s/veh	36.4	21.4	8.1	35.1	21.0	15.9	35.7	24.2	24.4	36.0	26.7	29.3
LnGrp LOS	D	C	A	D	C	B	D	C	C	D	C	C
Approach Vol, veh/h		1304			1055			458			650	
Approach Delay, s/veh		20.1			21.0			29.5			30.4	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	20.9	9.6	33.7	10.6	20.4	9.2	34.2
Change Period (Y+Rc), s	4.0	4.0	6.0	* 6	4.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	10.0	46.0	8.0	* 68	11.0	45.0	12.0	64.0
Max Q Clear Time (g_c+I1), s	6.0	6.5	3.1	20.2	6.4	12.6	5.2	20.2
Green Ext Time (p_c), s	0.2	3.6	2.5	7.5	0.3	3.6	0.2	6.9

Intersection Summary	
HCM 2010 Ctrl Delay	23.6
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	2	1000	56	303	1002	1	8	0	218	0	0	1
Future Vol, veh/h	2	1000	56	303	1002	1	8	0	218	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	500	-	50	670	-	50	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	1	-	-	1	-	-	2	-	-	-8	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	18	2	2	18	2	2	2	2	2	2	2
Mvmt Flow	2	1087	61	329	1089	1	9	0	237	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1089	0	0	1087	0	0	2294	2839	543	2296	2839	545
Stage 1	-	-	-	-	-	-	1091	1091	-	1748	1748	-
Stage 2	-	-	-	-	-	-	1203	1748	-	548	1091	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.94	6.94	7.14	5.94	4.94	6.14
Critical Hdwy Stg 1	-	-	-	-	-	-	6.94	5.94	-	4.94	3.94	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.94	5.94	-	4.94	3.94	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	636	-	-	638	-	-	16	12	470	58	60	545
Stage 1	-	-	-	-	-	-	203	256	-	194	301	-
Stage 2	-	-	-	-	-	-	171	114	-	623	469	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	636	-	-	638	-	-	9	6	470	17	29	545
Mov Cap-2 Maneuver	-	-	-	-	-	-	9	6	-	17	29	-
Stage 1	-	-	-	-	-	-	202	255	-	193	146	-
Stage 2	-	-	-	-	-	-	83	55	-	308	468	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.8	48.3	11.6
HCM LOS			E	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	9	470	636	-	-	638	-	-	-	545
HCM Lane V/C Ratio	0.966	0.504	0.003	-	-	0.516	-	-	-	0.002
HCM Control Delay (s)	$ 814.5	20.2	10.7	-	-	16.5	-	-	0	11.6
HCM Lane LOS	F	C	B	-	-	C	-	-	A	B
HCM 95th %tile Q(veh)	1.8	2.8	0	-	-	3	-	-	-	0

Exhibit D

Destino Paso
4: SR 46 E & Airport Road

Existing Plus Project PM
5/17/2016

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Traffic Vol, veh/h	199	1019	936	20	24	370
Future Vol, veh/h	199	1019	936	20	24	370
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	7	18	18	7	7	7
Mvmt Flow	214	1096	1006	22	26	398

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1006	0	-	0	1982	503
Stage 1	-	-	-	-	1006	-
Stage 2	-	-	-	-	976	-
Critical Hdwy	4.24	-	-	-	6.94	7.04
Critical Hdwy Stg 1	-	-	-	-	5.94	-
Critical Hdwy Stg 2	-	-	-	-	5.94	-
Follow-up Hdwy	2.27	-	-	-	3.57	3.37
Pot Cap-1 Maneuver	655	-	-	-	50	501
Stage 1	-	-	-	-	303	-
Stage 2	-	-	-	-	314	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	655	-	-	-	34	501
Mov Cap-2 Maneuver	-	-	-	-	128	-
Stage 1	-	-	-	-	303	-
Stage 2	-	-	-	-	211	-

Approach	EB	WB	SB
HCM Control Delay, s	2.1	0	34.8
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	655	-	-	-	128	501
HCM Lane V/C Ratio	0.327	-	-	-	0.202	0.794
HCM Control Delay (s)	13.1	-	-	-	40.1	34.5
HCM Lane LOS	B	-	-	-	E	D
HCM 95th %tile Q(veh)	1.4	-	-	-	0.7	7.4

Destino Paso
1: Airport Road & Dry Creek Road

Existing+Project Saturday MD
6/21/2016

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	120	1	47	0	9	0	127	17	12	122	1
Future Vol, veh/h	12	120	1	47	0	9	0	127	17	12	122	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	13	135	1	53	0	10	0	143	19	13	137	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	312	307	137	375	307	143	137	0	0	143	0	0
Stage 1	164	164	-	143	143	-	-	-	-	-	-	-
Stage 2	148	143	-	232	164	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.54	6.24	7.14	6.54	6.24	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	3.536	4.036	3.336	2.236	-	-	2.236	-	-
Pot Cap-1 Maneuver	637	604	906	579	604	899	1435	-	-	1427	-	-
Stage 1	833	759	-	855	775	-	-	-	-	-	-	-
Stage 2	850	775	-	766	759	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	625	598	906	474	598	899	1435	-	-	1427	-	-
Mov Cap-2 Maneuver	625	598	-	474	598	-	-	-	-	-	-	-
Stage 1	833	751	-	855	775	-	-	-	-	-	-	-
Stage 2	840	775	-	621	751	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.9	13	0	0.7
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1435	-	-	602	513	1427	-	-
HCM Lane V/C Ratio	-	-	-	0.248	0.123	0.009	-	-
HCM Control Delay (s)	0	-	-	12.9	13	7.5	0	-
HCM Lane LOS	A	-	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1	0.4	0	-	-

Exhibit D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	182	867	150	47	1400	230	134	252	139	214	298
v/c Ratio	0.58	0.55	0.20	0.08	0.83	0.27	0.48	0.41	0.53	0.68	0.73
Control Delay	59.4	29.2	5.0	38.8	30.4	3.5	58.4	40.5	60.6	56.2	29.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.4	29.2	5.0	38.8	30.4	3.5	58.4	40.5	60.6	56.2	29.5
Queue Length 50th (ft)	69	313	0	13	446	3	50	83	53	156	87
Queue Length 95th (ft)	116	391	45	34	624	47	90	125	94	242	191
Internal Link Dist (ft)		3280			2376			566		648	
Turn Bay Length (ft)	550		490	460		390	160		130		
Base Capacity (vph)	337	2116	979	564	1926	937	306	1419	275	748	727
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.41	0.15	0.08	0.73	0.25	0.44	0.18	0.51	0.29	0.41

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	832	144	45	1344	221	129	199	43	133	205	286
Future Volume (veh/h)	175	832	144	45	1344	221	129	199	43	133	205	286
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1900	1827	1827	1827
Adj Flow Rate, veh/h	182	867	150	47	1400	230	134	207	45	139	214	298
Adj No. of Lanes	2	2	1	2	2	1	2	2	0	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	244	1073	475	722	1628	724	194	667	142	198	431	362
Arrive On Green	0.07	0.31	0.31	0.21	0.47	0.47	0.06	0.23	0.23	0.06	0.24	0.24
Sat Flow, veh/h	3375	3471	1538	3375	3471	1543	3375	2842	605	3375	1827	1533
Grp Volume(v), veh/h	182	867	150	47	1400	230	134	125	127	139	214	298
Grp Sat Flow(s),veh/h/ln	1688	1736	1538	1688	1736	1543	1688	1736	1711	1688	1827	1533
Q Serve(g_s), s	5.8	25.1	6.4	1.2	39.1	10.1	4.2	6.5	6.7	4.4	11.0	20.1
Cycle Q Clear(g_c), s	5.8	25.1	6.4	1.2	39.1	10.1	4.2	6.5	6.7	4.4	11.0	20.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	244	1073	475	722	1628	724	194	407	402	198	431	362
V/C Ratio(X)	0.75	0.81	0.32	0.07	0.86	0.32	0.69	0.31	0.32	0.70	0.50	0.82
Avail Cap(c_a), veh/h	341	2134	946	722	1943	864	310	733	722	279	754	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.6	34.7	17.7	34.1	25.7	18.1	50.4	34.4	34.5	50.3	36.0	39.5
Incr Delay (d2), s/veh	5.5	1.5	0.4	0.0	3.6	0.3	4.4	0.4	0.4	4.5	0.9	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	12.3	2.8	0.6	19.5	4.3	2.1	3.1	3.2	2.2	5.7	8.9
LnGrp Delay(d),s/veh	55.1	36.2	18.1	34.2	29.3	18.3	54.8	34.8	34.9	54.8	36.9	44.2
LnGrp LOS	E	D	B	C	C	B	D	C	C	D	D	D
Approach Vol, veh/h		1199			1677			386			651	
Approach Delay, s/veh		36.8			28.0			41.8			44.1	
Approach LOS		D			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	29.6	29.3	39.7	10.3	29.7	11.9	57.1
Change Period (Y+Rc), s	4.0	4.0	6.0	* 6	4.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	9.0	46.0	5.0	* 67	10.0	45.0	11.0	61.0
Max Q Clear Time (g_c+I1), s	6.4	8.7	3.2	27.1	6.2	22.1	7.8	41.1
Green Ext Time (p_c), s	0.1	3.9	1.4	6.6	0.1	3.6	0.2	10.0

Intersection Summary

HCM 2010 Ctrl Delay	34.7
HCM 2010 LOS	C

Notes

Exhibit D

Intersection	
Int Delay, s/veh	10.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	959	40	174	1596	0	14	6	200	1	0	1
Future Vol, veh/h	9	959	40	174	1596	0	14	6	200	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	500	-	50	670	-	50	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	1	-	-	1	-	-	2	-	-	-8	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	9	999	42	181	1663	0	15	6	208	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1663	0	0	999	0	0	2212	3043	499	2546	3043	831
Stage 1	-	-	-	-	-	-	1018	1018	-	2025	2025	-
Stage 2	-	-	-	-	-	-	1194	2025	-	521	1018	-
Critical Hdwy	4.2	-	-	4.2	-	-	8	7	7.2	6	5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	7	6	-	5	4	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7	6	-	5	4	-
Follow-up Hdwy	2.25	-	-	2.25	-	-	3.55	4.05	3.35	3.55	4.05	3.35
Pot Cap-1 Maneuver	370	-	-	671	-	-	18	8	495	40	46	369
Stage 1	-	-	-	-	-	-	222	274	-	141	238	-
Stage 2	-	-	-	-	-	-	169	77	-	629	482	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	370	-	-	671	-	-	~ 14	~ 6	495	-	33	369
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 14	~ 6	-	-	33	-
Stage 1	-	-	-	-	-	-	217	267	-	138	174	-
Stage 2	-	-	-	-	-	-	123	56	-	347	470	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.2	128.5	
HCM LOS			F	-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	10	495	370	-	-	671	-	-	-	369
HCM Lane V/C Ratio	2.083	0.421	0.025	-	-	0.27	-	-	-	0.003
HCM Control Delay (s)	$ 1238.8	17.5	15	-	-	12.3	-	-	-	14.8
HCM Lane LOS	F	C	B	-	-	B	-	-	-	B
HCM 95th %tile Q(veh)	3.6	2.1	0.1	-	-	1.1	-	-	-	0

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	43.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	365	795	1489	55	18	281
Future Vol, veh/h	365	795	1489	55	18	281
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	388	846	1584	59	19	299

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1584	0	-	0	2783	792
Stage 1	-	-	-	-	1584	-
Stage 2	-	-	-	-	1199	-
Critical Hdwy	4.22	-	-	-	6.92	7.02
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	2.26	-	-	-	3.56	3.36
Pot Cap-1 Maneuver	393	-	-	-	~ 14	324
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	240	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	393	-	-	-	0	324
Mov Cap-2 Maneuver	-	-	-	-	~ 3	-
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	~ 3	-

Approach	EB	WB	SB
HCM Control Delay, s	23.7	0	$ 343.6
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	393	-	-	-	3	324
HCM Lane V/C Ratio	0.988	-	-	-	6.383	0.923
HCM Control Delay (s)	75.3	-	-	$ 4632.9	68.8	
HCM Lane LOS	F	-	-	-	F	F
HCM 95th %tile Q(veh)	11.8	-	-	-	3.9	9.1

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Exhibit D

Destino Paso
1: Airport Road & Dry Creek Road

Near Term AM
11/08/2016

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	20	0	7	1	229	93	9	103	1
Future Vol, veh/h	0	0	1	20	0	7	1	229	93	9	103	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	0	0	1	25	0	9	1	286	116	11	129	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	444	440	129	441	440	286	129	0	0	286	0	0
Stage 1	151	151	-	289	289	-	-	-	-	-	-	-
Stage 2	293	289	-	152	151	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.56	6.26	7.16	6.56	6.26	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.16	5.56	-	6.16	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.56	-	6.16	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	3.554	4.054	3.354	2.254	-	-	2.254	-	-
Pot Cap-1 Maneuver	517	505	910	520	505	744	1432	-	-	1253	-	-
Stage 1	842	765	-	710	666	-	-	-	-	-	-	-
Stage 2	707	666	-	841	765	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	507	500	910	515	500	744	1432	-	-	1253	-	-
Mov Cap-2 Maneuver	507	500	-	515	500	-	-	-	-	-	-	-
Stage 1	841	758	-	709	665	-	-	-	-	-	-	-
Stage 2	698	665	-	832	758	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	11.8	0	0.6
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1432	-	-	910	560	1253	-	-
HCM Lane V/C Ratio	0.001	-	-	0.001	0.06	0.009	-	-
HCM Control Delay (s)	7.5	0	-	9	11.8	7.9	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Destino Paso
2: Golden Hill Rd & SR 46 E

Near Term AM
11/08/2016

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	268	880	448	67	938	228	342	428	152	162	177
v/c Ratio	0.67	0.69	0.49	0.18	0.78	0.31	0.65	0.55	0.59	0.60	0.46
Control Delay	50.2	27.3	3.9	42.5	31.8	4.3	44.0	33.0	53.5	47.8	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.2	27.3	3.9	42.5	31.8	4.3	44.0	33.0	53.5	47.8	8.7
Queue Length 50th (ft)	80	246	0	18	252	0	100	113	46	92	0
Queue Length 95th (ft)	118	265	32	41	325	33	136	140	75	144	32
Internal Link Dist (ft)		3280			2376			566		648	
Turn Bay Length (ft)	550		490	460		390	160		130		
Base Capacity (vph)	407	1480	978	371	1220	753	666	1758	259	723	718
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.59	0.46	0.18	0.77	0.30	0.51	0.24	0.59	0.22	0.25

Intersection Summary

Exhibit D

Destino Paso
2: Golden Hill Rd & SR 46 E

Near Term AM
11/08/2016

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	713	363	54	760	185	277	296	51	123	131	143
Future Volume (veh/h)	217	713	363	54	760	185	277	296	51	123	131	143
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1610	1863	1863	1610	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	268	880	448	67	938	228	342	365	63	152	162	177
Adj No. of Lanes	2	2	1	2	2	1	2	2	0	2	1	1
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	18	2	2	18	2	2	2	2	2	2	2
Cap, veh/h	351	1116	573	266	1113	571	442	770	132	226	358	300
Arrive On Green	0.10	0.36	0.36	0.08	0.36	0.36	0.13	0.26	0.26	0.07	0.19	0.19
Sat Flow, veh/h	3442	3059	1570	3442	3059	1570	3442	3018	516	3442	1863	1559
Grp Volume(v), veh/h	268	880	448	67	938	228	342	213	215	152	162	177
Grp Sat Flow(s),veh/h/ln	1721	1530	1570	1721	1530	1570	1721	1770	1764	1721	1863	1559
Q Serve(g_s), s	6.4	21.6	13.1	1.5	23.7	9.1	8.1	8.6	8.7	3.6	6.5	8.7
Cycle Q Clear(g_c), s	6.4	21.6	13.1	1.5	23.7	9.1	8.1	8.6	8.7	3.6	6.5	8.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	351	1116	573	266	1113	571	442	452	450	226	358	300
V/C Ratio(X)	0.76	0.79	0.78	0.25	0.84	0.40	0.77	0.47	0.48	0.67	0.45	0.59
Avail Cap(c_a), veh/h	449	1595	819	266	1341	688	734	985	983	285	794	665
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.9	23.9	8.9	36.6	24.6	20.0	35.6	26.6	26.7	38.5	30.2	31.1
Incr Delay (d2), s/veh	5.8	1.8	3.2	0.5	4.3	0.5	2.9	0.8	0.8	4.3	0.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	9.3	7.1	0.8	10.7	4.0	4.0	4.3	4.3	1.9	3.4	3.9
LnGrp Delay(d),s/veh	42.7	25.7	12.1	37.1	28.9	20.4	38.5	27.4	27.5	42.8	31.0	32.9
LnGrp LOS	D	C	B	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1596			1233			770			491	
Approach Delay, s/veh		24.7			27.8			32.3			35.4	
Approach LOS		C			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	25.5	12.5	36.8	14.9	20.2	12.6	36.7
Change Period (Y+Rc), s	4.0	4.0	6.0	* 6	4.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	7.0	47.0	4.0	* 44	18.0	36.0	11.0	37.0
Max Q Clear Time (g_c+I1), s	5.6	10.7	3.5	23.6	10.1	10.7	8.4	25.7
Green Ext Time (p_c), s	0.1	4.2	0.3	7.1	0.7	4.0	0.2	5.0

Intersection Summary	
HCM 2010 Ctrl Delay	28.4
HCM 2010 LOS	C

Notes

Destino Paso
3: Union Road & SR 46 E

Near Term AM
11/08/2016

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	821	64	230	991	13	8	2	247	0	0	0
Future Vol, veh/h	1	821	64	230	991	13	8	2	247	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	500	-	50	670	-	50	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	1	-	-	1	-	-	2	-	-	-8	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	18	2	2	18	2	2	2	2	2	2	2
Mvmt Flow	1	944	74	264	1139	15	9	2	284	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1139	0	0	944	0	0	2044	2614	472	2143	2614	570
Stage 1	-	-	-	-	-	-	946	946	-	1668	1668	-
Stage 2	-	-	-	-	-	-	1098	1668	-	475	946	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.94	6.94	7.14	5.94	4.94	6.14
Critical Hdwy Stg 1	-	-	-	-	-	-	6.94	5.94	-	4.94	3.94	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.94	5.94	-	4.94	3.94	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	609	-	-	722	-	-	26	18	524	71	76	527
Stage 1	-	-	-	-	-	-	253	304	-	210	318	-
Stage 2	-	-	-	-	-	-	201	126	-	666	515	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	609	-	-	722	-	-	19	11	524	20	48	527
Mov Cap-2 Maneuver	-	-	-	-	-	-	19	11	-	20	48	-
Stage 1	-	-	-	-	-	-	253	304	-	210	202	-
Stage 2	-	-	-	-	-	-	128	80	-	302	514	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.4	34.8	0
HCM LOS			D	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	17	524	609	-	-	722	-	-	-	-
HCM Lane V/C Ratio	0.676	0.542	0.002	-	-	0.366	-	-	-	-
HCM Control Delay (s)	$ 408	19.7	10.9	-	-	12.8	-	-	0	0
HCM Lane LOS	F	C	B	-	-	B	-	-	A	A
HCM 95th %tile Q(veh)	1.8	3.2	0	-	-	1.7	-	-	-	-

Exhibit D

Destino Paso
4: SR 46 E & Airport Road

Near Term AM
11/08/2016

Intersection	
Int Delay, s/veh	8.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	359	709	1093	10	5	141
Future Vol, veh/h	359	709	1093	10	5	141
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	10	18	18	10	10	10
Mvmt Flow	422	834	1286	12	6	166

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1286	0	-	0	2548	643
Stage 1	-	-	-	-	1286	-
Stage 2	-	-	-	-	1262	-
Critical Hdwy	4.3	-	-	-	7	7.1
Critical Hdwy Stg 1	-	-	-	-	6	-
Critical Hdwy Stg 2	-	-	-	-	6	-
Follow-up Hdwy	2.3	-	-	-	3.6	3.4
Pot Cap-1 Maneuver	494	-	-	-	19	397
Stage 1	-	-	-	-	208	-
Stage 2	-	-	-	-	215	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	494	-	-	-	~ 3	397
Mov Cap-2 Maneuver	-	-	-	-	25	-
Stage 1	-	-	-	-	208	-
Stage 2	-	-	-	-	31	-

Approach	EB	WB	SB
HCM Control Delay, s	14.1	0	26.2
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	494	-	-	-	25	397
HCM Lane V/C Ratio	0.855	-	-	-	0.235	0.418
HCM Control Delay (s)	41.9	-	-	-	188.7	20.4
HCM Lane LOS	E	-	-	-	F	C
HCM 95th %tile Q(veh)	8.9	-	-	-	0.7	2

Notes
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Destino Paso
1: Airport Road & Dry Creek Road

Near Term PM
11/08/2016

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	122	0	6	0	146	25	4	240	0
Future Vol, veh/h	0	0	1	122	0	6	0	146	25	4	240	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	0	1	154	0	8	0	185	32	5	304	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	503	499	304	500	499	185	304	0	0	185	0	0
Stage 1	314	314	-	185	185	-	-	-	-	-	-	-
Stage 2	189	185	-	315	314	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	474	469	729	476	469	850	1240	-	-	1372	-	-
Stage 1	690	651	-	810	741	-	-	-	-	-	-	-
Stage 2	806	741	-	690	651	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	468	467	729	474	467	850	1240	-	-	1372	-	-
Mov Cap-2 Maneuver	468	467	-	474	467	-	-	-	-	-	-	-
Stage 1	690	648	-	810	741	-	-	-	-	-	-	-
Stage 2	799	741	-	686	648	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.9	16.1	0	0.1
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1240	-	-	729	484	1372	-	-
HCM Lane V/C Ratio	-	-	-	0.002	0.335	0.004	-	-
HCM Control Delay (s)	0	-	-	9.9	16.1	7.6	0	-
HCM Lane LOS	A	-	-	A	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	1.5	0	-	-

Exhibit D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	199	918	365	76	921	173	265	318	252	309	323
v/c Ratio	0.58	0.75	0.44	0.27	0.83	0.26	0.60	0.37	0.63	0.72	0.61
Control Delay	55.3	33.1	4.2	52.9	39.0	5.0	51.4	30.4	54.3	47.9	17.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.3	33.1	4.2	52.9	39.0	5.0	51.4	30.4	54.3	47.9	17.2
Queue Length 50th (ft)	69	306	0	24	294	0	91	87	87	201	58
Queue Length 95th (ft)	121	404	59	57	443	48	148	128	146	308	155
Internal Link Dist (ft)		3280			2376			566		648	
Turn Bay Length (ft)	550		490	460		390	160		130		
Base Capacity (vph)	374	1485	937	286	1303	757	544	1567	442	794	788
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.62	0.39	0.27	0.71	0.23	0.49	0.20	0.57	0.39	0.41

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	191	881	350	73	884	166	254	231	74	242	297	310
Future Volume (veh/h)	191	881	350	73	884	166	254	231	74	242	297	310
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1610	1863	1863	1610	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	199	918	365	76	921	173	265	241	77	252	309	323
Adj No. of Lanes	2	2	1	2	2	1	2	2	0	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	18	2	2	18	2	2	2	2	2	2	2
Cap, veh/h	274	1131	581	166	1101	565	350	716	223	332	493	414
Arrive On Green	0.08	0.37	0.37	0.05	0.36	0.36	0.10	0.27	0.27	0.10	0.26	0.26
Sat Flow, veh/h	3442	3059	1570	3442	3059	1570	3442	2650	825	3442	1863	1565
Grp Volume(v), veh/h	199	918	365	76	921	173	265	159	159	252	309	323
Grp Sat Flow(s),veh/h/ln	1721	1530	1570	1721	1530	1570	1721	1770	1706	1721	1863	1565
Q Serve(g_s), s	5.2	25.1	11.8	2.0	25.6	7.4	7.0	6.7	7.0	6.6	13.6	17.7
Cycle Q Clear(g_c), s	5.2	25.1	11.8	2.0	25.6	7.4	7.0	6.7	7.0	6.6	13.6	17.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.48	1.00		1.00
Lane Grp Cap(c), veh/h	274	1131	581	166	1101	565	350	478	461	332	493	414
V/C Ratio(X)	0.73	0.81	0.63	0.46	0.84	0.31	0.76	0.33	0.35	0.76	0.63	0.78
Avail Cap(c_a), veh/h	408	1615	829	185	1417	727	593	877	846	482	863	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.7	26.3	10.7	43.0	27.2	21.4	40.6	27.2	27.3	40.9	30.1	31.6
Incr Delay (d2), s/veh	3.6	2.2	1.1	2.0	3.6	0.3	3.4	0.4	0.4	4.2	1.3	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	10.9	6.0	1.0	11.3	3.2	3.5	3.3	3.3	3.3	7.1	8.0
LnGrp Delay(d),s/veh	45.4	28.5	11.8	44.9	30.8	21.7	43.9	27.6	27.7	45.1	31.4	34.8
LnGrp LOS	D	C	B	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1482			1170			583			884	
Approach Delay, s/veh		26.6			30.4			35.0			36.5	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	29.1	10.5	40.3	13.4	28.6	11.4	39.4
Change Period (Y+Rc), s	4.0	4.0	6.0	* 6	4.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	13.0	46.0	5.0	* 49	16.0	43.0	11.0	43.0
Max Q Clear Time (g_c+I1), s	8.6	9.0	4.0	27.1	9.0	19.7	7.2	27.6
Green Ext Time (p_c), s	0.3	5.2	0.7	7.3	0.5	4.8	0.2	5.8

Intersection Summary

HCM 2010 Ctrl Delay	31.0
HCM 2010 LOS	C

Notes

Exhibit D

Intersection	
Int Delay, s/veh	8.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	1130	64	309	1112	19	9	0	229	0	0	1
Future Vol, veh/h	2	1130	64	309	1112	19	9	0	229	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	500	-	50	670	-	50	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	1	-	-	1	-	-	2	-	-	-8	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	18	2	2	18	2	2	2	2	2	2	2
Mvmt Flow	2	1228	70	336	1209	21	10	0	249	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1209	0	0	1228	0	0	2509	3113	614	2498	3113	604
Stage 1	-	-	-	-	-	-	1233	1233	-	1880	1880	-
Stage 2	-	-	-	-	-	-	1276	1880	-	618	1233	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.94	6.94	7.14	5.94	4.94	6.14
Critical Hdwy Stg 1	-	-	-	-	-	-	6.94	5.94	-	4.94	3.94	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.94	5.94	-	4.94	3.94	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	573	-	-	563	-	-	11	8	420	44	45	505
Stage 1	-	-	-	-	-	-	163	216	-	169	274	-
Stage 2	-	-	-	-	-	-	153	96	-	584	428	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	573	-	-	563	-	-	~ 6	3	420	9	18	505
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 6	3	-	9	18	-
Stage 1	-	-	-	-	-	-	162	215	-	168	110	-
Stage 2	-	-	-	-	-	-	62	39	-	237	427	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	4.4	78.2	12.1
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	6	420	573	-	-	563	-	-	-	505
HCM Lane V/C Ratio	1.63	0.593	0.004	-	-	0.597	-	-	-	0.002
HCM Control Delay (s)	$ 1425.3	25.3	11.3	-	-	20.4	-	-	0	12.1
HCM Lane LOS	F	D	B	-	-	C	-	-	A	B
HCM 95th %tile Q(veh)	2.2	3.7	0	-	-	3.9	-	-	-	0

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	179	1180	1086	7	6	354
Future Vol, veh/h	179	1180	1086	7	6	354
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	7	18	18	7	7	7
Mvmt Flow	192	1269	1168	8	6	381

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1168	0	-	0	2187	584
Stage 1	-	-	-	-	1168	-
Stage 2	-	-	-	-	1019	-
Critical Hdwy	4.24	-	-	-	6.94	7.04
Critical Hdwy Stg 1	-	-	-	-	5.94	-
Critical Hdwy Stg 2	-	-	-	-	5.94	-
Follow-up Hdwy	2.27	-	-	-	3.57	3.37
Pot Cap-1 Maneuver	566	-	-	-	36	443
Stage 1	-	-	-	-	248	-
Stage 2	-	-	-	-	298	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	566	-	-	-	24	443
Mov Cap-2 Maneuver	-	-	-	-	111	-
Stage 1	-	-	-	-	248	-
Stage 2	-	-	-	-	197	-

Approach	EB	WB	SB
HCM Control Delay, s	1.9	0	45.7
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	566	-	-	-	111	443
HCM Lane V/C Ratio	0.34	-	-	-	0.058	0.859
HCM Control Delay (s)	14.6	-	-	-	39.4	45.8
HCM Lane LOS	B	-	-	-	E	E
HCM 95th %tile Q(veh)	1.5	-	-	-	0.2	8.7

Exhibit D

Destino Paso
1: Airport Road & Dry Creek Road

Near Term Saturday MD
11/08/2016

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	120	1	53	0	9	0	133	19	12	139	1
Future Vol, veh/h	12	120	1	53	0	9	0	133	19	12	139	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	13	135	1	60	0	10	0	149	21	13	156	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	337	332	156	400	332	149	156	0	0	149	0	0
Stage 1	183	183	-	149	149	-	-	-	-	-	-	-
Stage 2	154	149	-	251	183	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.54	6.24	7.14	6.54	6.24	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	3.536	4.036	3.336	2.236	-	-	2.236	-	-
Pot Cap-1 Maneuver	613	584	884	557	584	892	1412	-	-	1420	-	-
Stage 1	814	744	-	849	770	-	-	-	-	-	-	-
Stage 2	844	770	-	749	744	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	601	578	884	453	578	892	1412	-	-	1420	-	-
Mov Cap-2 Maneuver	601	578	-	453	578	-	-	-	-	-	-	-
Stage 1	814	737	-	849	770	-	-	-	-	-	-	-
Stage 2	834	770	-	605	737	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.3	13.6	0	0.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1412	-	-	582	488	1420	-	-
HCM Lane V/C Ratio	-	-	-	0.257	0.143	0.009	-	-
HCM Control Delay (s)	0	-	-	13.3	13.6	7.6	0	-
HCM Lane LOS	A	-	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1	0.5	0	-	-

Destino Paso
2: Golden Hill Rd & SR 46 E

Near Term Saturday MD
11/08/2016

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	224	917	232	78	1459	261	191	322	176	269	344
v/c Ratio	0.67	0.65	0.31	0.12	0.88	0.31	0.63	0.47	0.64	0.77	0.75
Control Delay	67.8	37.0	4.6	45.2	39.2	5.5	67.4	43.6	70.2	64.1	30.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.8	37.0	4.6	45.2	39.2	5.5	67.4	43.6	70.2	64.1	30.4
Queue Length 50th (ft)	95	375	0	26	587	15	81	117	75	219	114
Queue Length 95th (ft)	149	443	54	58	#851	74	130	163	123	317	228
Internal Link Dist (ft)		3280			2376			566		648	
Turn Bay Length (ft)	550		490	460		390	160		130		
Base Capacity (vph)	368	1887	926	636	1655	839	342	1217	289	628	656
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.49	0.25	0.12	0.88	0.31	0.56	0.26	0.61	0.43	0.52

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Exhibit D

Destino Paso
2: Golden Hill Rd & SR 46 E

Near Term Saturday MD
11/08/2016

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	215	880	223	75	1401	251	183	242	67	169	258	330
Future Volume (veh/h)	215	880	223	75	1401	251	183	242	67	169	258	330
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1900	1827	1827	1827
Adj Flow Rate, veh/h	224	917	232	78	1459	261	191	252	70	176	269	344
Adj No. of Lanes	2	2	1	2	2	1	2	2	0	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	277	1098	487	675	1561	693	244	711	193	227	473	398
Arrive On Green	0.08	0.32	0.32	0.20	0.45	0.45	0.07	0.26	0.26	0.07	0.26	0.26
Sat Flow, veh/h	3375	3471	1538	3375	3471	1543	3375	2692	731	3375	1827	1535
Grp Volume(v), veh/h	224	917	232	78	1459	261	191	160	162	176	269	344
Grp Sat Flow(s),veh/h/ln	1688	1736	1538	1688	1736	1543	1688	1736	1688	1688	1827	1535
Q Serve(g_s), s	8.6	32.3	12.5	2.5	52.5	14.7	7.3	9.9	10.2	6.7	16.8	28.1
Cycle Q Clear(g_c), s	8.6	32.3	12.5	2.5	52.5	14.7	7.3	9.9	10.2	6.7	16.8	28.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.43	1.00		1.00
Lane Grp Cap(c), veh/h	277	1098	487	675	1561	693	244	458	446	227	473	398
V/C Ratio(X)	0.81	0.84	0.48	0.12	0.93	0.38	0.78	0.35	0.36	0.78	0.57	0.86
Avail Cap(c_a), veh/h	359	1796	796	675	1611	716	334	607	591	282	611	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.3	41.7	22.2	43.0	34.4	24.0	60.0	39.2	39.4	60.3	42.3	46.5
Incr Delay (d2), s/veh	10.0	1.9	0.7	0.1	10.4	0.3	8.1	0.5	0.5	10.2	1.1	11.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	15.7	5.8	1.2	27.4	6.3	3.7	4.8	4.8	3.5	8.7	13.2
LnGrp Delay(d),s/veh	69.3	43.6	22.9	43.1	44.8	24.3	68.1	39.7	39.9	70.5	43.4	58.2
LnGrp LOS	E	D	C	D	D	C	E	D	D	E	D	E
Approach Vol, veh/h		1373			1798			513			789	
Approach Delay, s/veh		44.3			41.7			50.3			55.9	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	38.7	32.3	47.6	13.5	38.1	14.8	65.1
Change Period (Y+Rc), s	4.0	4.0	6.0	* 6	4.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	11.0	46.0	7.0	* 68	13.0	44.0	14.0	61.0
Max Q Clear Time (g_c+I1), s	8.7	12.2	4.5	34.3	9.3	30.1	10.6	54.5
Green Ext Time (p_c), s	0.1	5.0	2.0	7.3	0.2	3.9	0.2	4.6

Intersection Summary	
HCM 2010 Ctrl Delay	46.0
HCM 2010 LOS	D

Notes

Destino Paso
3: Union Road & SR 46 E

Near Term Saturday MD
11/08/2016

Intersection	
Int Delay, s/veh	13.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	1059	48	182	1712	22	14	6	209	1	0	1
Future Vol, veh/h	9	1059	48	182	1712	22	14	6	209	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	500	-	50	670	-	50	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	1	-	-	1	-	-	2	-	-	-8	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	9	1103	50	190	1783	23	15	6	218	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1783	0	0	1103	0	0	2393	3285	552	2736	3285	892
Stage 1	-	-	-	-	-	-	1122	1122	-	2163	2163	-
Stage 2	-	-	-	-	-	-	1271	2163	-	573	1122	-
Critical Hdwy	4.2	-	-	4.2	-	-	8	7	7.2	6	5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	7	6	-	5	4	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7	6	-	5	4	-
Follow-up Hdwy	2.25	-	-	2.25	-	-	3.55	4.05	3.35	3.55	4.05	3.35
Pot Cap-1 Maneuver	331	-	-	611	-	-	~ 13	~ 6	456	31	35	340
Stage 1	-	-	-	-	-	-	189	241	-	122	214	-
Stage 2	-	-	-	-	-	-	150	64	-	599	450	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	331	-	-	611	-	-	~ 10	~ 4	456	-	23	340
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 10	~ 4	-	-	23	-
Stage 1	-	-	-	-	-	-	184	234	-	119	147	-
Stage 2	-	-	-	-	-	-	103	44	-	296	438	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.3	184.6	
HCM LOS			F	-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	7	456	331	-	-	611	-	-	-	340
HCM Lane V/C Ratio	2.976	0.477	0.028	-	-	0.31	-	-	-	0.003
HCM Control Delay (s)	$ 1905.5	19.9	16.2	-	-	13.5	-	-	-	15.6
HCM Lane LOS	F	C	C	-	-	B	-	-	-	C
HCM 95th %tile Q(veh)	3.8	2.5	0.1	-	-	1.3	-	-	-	0

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Exhibit D

Destino Paso
4: SR 46 E & Airport Road

Near Term Saturday MD
11/08/2016

Intersection	
Int Delay, s/veh	8.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	319	950	1645	34	2	271
Future Vol, veh/h	319	950	1645	34	2	271
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	339	1011	1750	36	2	288

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1750	0	-	0	2934	875
Stage 1	-	-	-	-	1750	-
Stage 2	-	-	-	-	1184	-
Critical Hdwy	4.22	-	-	-	6.92	7.02
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	2.26	-	-	-	3.56	3.36
Pot Cap-1 Maneuver	~ 337	-	-	-	11	~ 285
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	245	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	~ 337	-	-	-	0	~ 285
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	21.8	0	
HCM LOS			-

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	~ 337	-	-	-	-	285
HCM Lane V/C Ratio	1.007	-	-	-	-	1.012
HCM Control Delay (s)	86.9	-	-	-	-	96.1
HCM Lane LOS	F	-	-	-	-	F
HCM 95th %tile Q(veh)	11.4	-	-	-	-	10.6

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Destino Paso
1: Airport Road & Dry Creek Road

Near Term Plus Project AM
11/08/2016

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	21	0	7	1	230	94	9	105	1
Future Vol, veh/h	0	0	1	21	0	7	1	230	94	9	105	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	0	0	1	26	0	9	1	288	118	11	131	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	448	444	131	444	444	288	131	0	0	288	0	0
Stage 1	154	154	-	290	290	-	-	-	-	-	-	-
Stage 2	294	290	-	154	154	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.56	6.26	7.16	6.56	6.26	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.16	5.56	-	6.16	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.56	-	6.16	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	3.554	4.054	3.354	2.254	-	-	2.254	-	-
Pot Cap-1 Maneuver	514	502	908	517	502	742	1430	-	-	1251	-	-
Stage 1	839	762	-	709	665	-	-	-	-	-	-	-
Stage 2	706	665	-	839	762	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	504	497	908	512	497	742	1430	-	-	1251	-	-
Mov Cap-2 Maneuver	504	497	-	512	497	-	-	-	-	-	-	-
Stage 1	838	755	-	708	664	-	-	-	-	-	-	-
Stage 2	697	664	-	830	755	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	11.9	0	0.6
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1430	-	-	908	555	1251	-	-
HCM Lane V/C Ratio	0.001	-	-	0.001	0.063	0.009	-	-
HCM Control Delay (s)	7.5	0	-	9	11.9	7.9	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Exhibit D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	268	921	448	68	954	230	342	432	156	162	177
v/c Ratio	0.68	0.70	0.49	0.20	0.79	0.31	0.65	0.55	0.61	0.60	0.46
Control Delay	50.6	26.8	3.8	43.9	32.0	4.2	44.3	33.1	54.5	48.1	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.6	26.8	3.8	43.9	32.0	4.2	44.3	33.1	54.5	48.1	8.7
Queue Length 50th (ft)	80	258	0	18	258	0	100	114	47	92	0
Queue Length 95th (ft)	118	281	32	41	333	33	136	141	77	144	32
Internal Link Dist (ft)		3280			2376			566		648	
Turn Bay Length (ft)	550		490	460		390	160		130		
Base Capacity (vph)	403	1490	982	336	1210	749	660	1742	257	716	713
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.62	0.46	0.20	0.79	0.31	0.52	0.25	0.61	0.23	0.25

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	746	363	55	773	186	277	296	54	126	131	143
Future Volume (veh/h)	217	746	363	55	773	186	277	296	54	126	131	143
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1610	1863	1863	1610	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	268	921	448	68	954	230	342	365	67	156	162	177
Adj No. of Lanes	2	2	1	2	2	1	2	2	0	2	1	1
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	18	2	2	18	2	2	2	2	2	2	2
Cap, veh/h	350	1152	591	236	1122	576	441	761	138	229	360	302
Arrive On Green	0.10	0.38	0.38	0.07	0.37	0.37	0.13	0.25	0.25	0.07	0.19	0.19
Sat Flow, veh/h	3442	3059	1571	3442	3059	1570	3442	2986	543	3442	1863	1559
Grp Volume(v), veh/h	268	921	448	68	954	230	342	215	217	156	162	177
Grp Sat Flow(s),veh/h/ln	1721	1530	1571	1721	1530	1570	1721	1770	1759	1721	1863	1559
Q Serve(g_s), s	6.5	23.0	13.0	1.6	24.6	9.3	8.2	8.8	9.0	3.8	6.6	8.9
Cycle Q Clear(g_c), s	6.5	23.0	13.0	1.6	24.6	9.3	8.2	8.8	9.0	3.8	6.6	8.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.31	1.00		1.00
Lane Grp Cap(c), veh/h	350	1152	591	236	1122	576	441	451	449	229	360	302
V/C Ratio(X)	0.77	0.80	0.76	0.29	0.85	0.40	0.78	0.48	0.48	0.68	0.45	0.59
Avail Cap(c_a), veh/h	442	1571	806	236	1321	678	723	971	965	281	783	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.5	23.8	8.6	37.9	25.0	20.1	36.2	27.1	27.1	39.1	30.5	31.4
Incr Delay (d2), s/veh	6.1	2.1	2.8	0.7	4.8	0.4	3.0	0.8	0.8	4.9	0.9	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	10.1	6.9	0.8	11.1	4.1	4.1	4.4	4.4	2.0	3.5	3.9
LnGrp Delay(d),s/veh	43.6	26.0	11.4	38.6	29.8	20.6	39.1	27.8	27.9	44.0	31.4	33.2
LnGrp LOS	D	C	B	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1637			1252			774			495	
Approach Delay, s/veh		24.9			28.5			32.9			36.0	
Approach LOS		C			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	25.9	11.9	38.3	15.0	20.6	12.7	37.4
Change Period (Y+Rc), s	4.0	4.0	6.0	* 6	4.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	7.0	47.0	4.0	* 44	18.0	36.0	11.0	37.0
Max Q Clear Time (g_c+I1), s	5.8	11.0	3.6	25.0	10.2	10.9	8.5	26.6
Green Ext Time (p_c), s	0.1	4.2	0.3	7.2	0.7	4.0	0.2	4.8

Intersection Summary

HCM 2010 Ctrl Delay	28.8
HCM 2010 LOS	C

Notes

Exhibit D

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	860	64	233	1006	13	8	2	254	0	0	0
Future Vol, veh/h	1	860	64	233	1006	13	8	2	254	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	500	-	50	670	-	50	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	1	-	-	1	-	-	2	-	-	-8	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	18	2	2	18	2	2	2	2	2	2	2
Mvmt Flow	1	989	74	268	1156	15	9	2	292	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1156	0	0	989	0	0	2105	2683	494	2190	2683	578
Stage 1	-	-	-	-	-	-	991	991	-	1692	1692	-
Stage 2	-	-	-	-	-	-	1114	1692	-	498	991	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.94	6.94	7.14	5.94	4.94	6.14
Critical Hdwy Stg 1	-	-	-	-	-	-	6.94	5.94	-	4.94	3.94	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.94	5.94	-	4.94	3.94	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	600	-	-	695	-	-	23	16	507	67	71	522
Stage 1	-	-	-	-	-	-	236	289	-	205	313	-
Stage 2	-	-	-	-	-	-	196	122	-	652	500	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	600	-	-	695	-	-	16	10	507	17	44	522
Mov Cap-2 Maneuver	-	-	-	-	-	-	16	10	-	17	44	-
Stage 1	-	-	-	-	-	-	236	289	-	205	192	-
Stage 2	-	-	-	-	-	-	120	75	-	274	499	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.5	40.7	0
HCM LOS			E	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	14	507	600	-	-	695	-	-	-	-
HCM Lane V/C Ratio	0.821	0.576	0.002	-	-	0.385	-	-	-	-
HCM Control Delay (s)	$ 532.7	21.3	11	-	-	13.4	-	-	0	0
HCM Lane LOS	F	C	B	-	-	B	-	-	A	A
HCM 95th %tile Q(veh)	1.9	3.6	0	-	-	1.8	-	-	-	-

Intersection	
Int Delay, s/veh	19.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	405	709	1093	26	11	159
Future Vol, veh/h	405	709	1093	26	11	159
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	10	18	18	10	10	10
Mvmt Flow	476	834	1286	31	13	187

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1286	0	-	0	2656	643
Stage 1	-	-	-	-	1286	-
Stage 2	-	-	-	-	1370	-
Critical Hdwy	4.3	-	-	-	7	7.1
Critical Hdwy Stg 1	-	-	-	-	6	-
Critical Hdwy Stg 2	-	-	-	-	6	-
Follow-up Hdwy	2.3	-	-	-	3.6	3.4
Pot Cap-1 Maneuver	494	-	-	-	16	397
Stage 1	-	-	-	-	208	-
Stage 2	-	-	-	-	187	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	494	-	-	-	~ 1	397
Mov Cap-2 Maneuver	-	-	-	-	~ 6	-
Stage 1	-	-	-	-	208	-
Stage 2	-	-	-	-	~ 7	-

Approach	EB	WB	SB
HCM Control Delay, s	22.2	0	128.6
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	494	-	-	-	6	397
HCM Lane V/C Ratio	0.965	-	-	-	2.157	0.471
HCM Control Delay (s)	61.1	-	-	$	1671.6	21.9
HCM Lane LOS	F	-	-	-	F	C
HCM 95th %tile Q(veh)	12.3	-	-	-	2.7	2.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Exhibit D

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	123	0	6	0	148	26	4	242	0
Future Vol, veh/h	0	0	1	123	0	6	0	148	26	4	242	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	0	1	156	0	8	0	187	33	5	306	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	507	503	306	504	503	187	306	0	0	187	0	0
Stage 1	316	316	-	187	187	-	-	-	-	-	-	-
Stage 2	191	187	-	317	316	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	471	467	727	473	467	847	1238	-	-	1369	-	-
Stage 1	689	650	-	808	740	-	-	-	-	-	-	-
Stage 2	804	740	-	688	650	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	465	465	727	471	465	847	1238	-	-	1369	-	-
Mov Cap-2 Maneuver	465	465	-	471	465	-	-	-	-	-	-	-
Stage 1	689	647	-	808	740	-	-	-	-	-	-	-
Stage 2	797	740	-	684	647	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10	16.3	0	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1238	-	-	727	481	1369	-	-
HCM Lane V/C Ratio	-	-	-	0.002	0.339	0.004	-	-
HCM Control Delay (s)	0	-	-	10	16.3	7.6	0	-
HCM Lane LOS	A	-	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	1.5	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	199	945	365	80	957	177	265	321	255	309	323
v/c Ratio	0.59	0.75	0.43	0.27	0.83	0.26	0.61	0.38	0.65	0.73	0.62
Control Delay	56.4	33.4	4.1	53.2	39.0	4.9	52.5	31.0	55.6	49.3	17.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.4	33.4	4.1	53.2	39.0	4.9	52.5	31.0	55.6	49.3	17.8
Queue Length 50th (ft)	70	320	0	26	311	0	92	89	89	205	61
Queue Length 95th (ft)	121	421	59	#62	#495	48	148	130	147	308	157
Internal Link Dist (ft)		3280			2376			566		648	
Turn Bay Length (ft)	550		490	460		390	160		130		
Base Capacity (vph)	363	1443	921	293	1266	742	529	1523	429	771	771
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.65	0.40	0.27	0.76	0.24	0.50	0.21	0.59	0.40	0.42

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Exhibit D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	191	907	350	77	919	170	254	231	77	245	297	310
Future Volume (veh/h)	191	907	350	77	919	170	254	231	77	245	297	310
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1610	1863	1863	1610	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	199	945	365	80	957	177	265	241	80	255	309	323
Adj No. of Lanes	2	2	1	2	2	1	2	2	0	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	18	2	2	18	2	2	2	2	2	2	2
Cap, veh/h	272	1150	591	173	1126	578	348	702	227	332	490	412
Arrive On Green	0.08	0.38	0.38	0.05	0.37	0.37	0.10	0.27	0.27	0.10	0.26	0.26
Sat Flow, veh/h	3442	3059	1571	3442	3059	1570	3442	2623	848	3442	1863	1565
Grp Volume(v), veh/h	199	945	365	80	957	177	265	160	161	255	309	323
Grp Sat Flow(s),veh/h/ln	1721	1530	1571	1721	1530	1570	1721	1770	1702	1721	1863	1565
Q Serve(g_s), s	5.4	26.6	12.1	2.2	27.4	7.7	7.2	7.0	7.3	6.9	14.0	18.3
Cycle Q Clear(g_c), s	5.4	26.6	12.1	2.2	27.4	7.7	7.2	7.0	7.3	6.9	14.0	18.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	272	1150	591	173	1126	578	348	474	455	332	490	412
V/C Ratio(X)	0.73	0.82	0.62	0.46	0.85	0.31	0.76	0.34	0.35	0.77	0.63	0.78
Avail Cap(c_a), veh/h	397	1571	807	180	1379	708	577	853	821	469	840	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.9	26.9	10.9	44.0	27.7	21.5	41.8	28.1	28.3	42.1	31.1	32.6
Incr Delay (d2), s/veh	3.8	2.6	1.1	1.9	4.4	0.3	3.5	0.4	0.5	4.9	1.3	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	11.6	6.2	1.1	12.3	3.4	3.6	3.4	3.5	3.5	7.4	8.3
LnGrp Delay(d),s/veh	46.7	29.5	11.9	46.0	32.1	21.8	45.2	28.6	28.7	46.9	32.4	36.0
LnGrp LOS	D	C	B	D	C	C	D	C	C	D	C	D
Approach Vol, veh/h		1509			1214			586			887	
Approach Delay, s/veh		27.5			31.5			36.1			37.9	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	29.5	10.8	41.9	13.6	29.1	11.5	41.1
Change Period (Y+Rc), s	4.0	4.0	6.0	* 6	4.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	13.0	46.0	5.0	* 49	16.0	43.0	11.0	43.0
Max Q Clear Time (g_c+I1), s	8.9	9.3	4.2	28.6	9.2	20.3	7.4	29.4
Green Ext Time (p_c), s	0.3	5.2	0.6	7.3	0.5	4.8	0.2	5.7

Intersection Summary	
HCM 2010 Ctrl Delay	32.1
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	11.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	1161	64	316	1154	19	9	0	234	0	0	1
Future Vol, veh/h	2	1161	64	316	1154	19	9	0	234	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	500	-	50	670	-	50	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	1	-	-	1	-	-	2	-	-	-8	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	18	2	2	18	2	2	2	2	2	2	2
Mvmt Flow	2	1262	70	343	1254	21	10	0	254	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1254	0	0	1262	0	0	2580	3207	631	2576	3207	627
Stage 1	-	-	-	-	-	-	1266	1266	-	1941	1941	-
Stage 2	-	-	-	-	-	-	1314	1941	-	635	1266	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.94	6.94	7.14	5.94	4.94	6.14
Critical Hdwy Stg 1	-	-	-	-	-	-	6.94	5.94	-	4.94	3.94	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.94	5.94	-	4.94	3.94	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	551	-	-	547	-	-	~ 9	7	409	40	40	490
Stage 1	-	-	-	-	-	-	155	207	-	159	262	-
Stage 2	-	-	-	-	-	-	144	89	-	574	419	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	551	-	-	547	-	-	~ 4	3	409	8	15	490
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 4	3	-	8	15	-
Stage 1	-	-	-	-	-	-	154	206	-	158	98	-
Stage 2	-	-	-	-	-	-	54	33	-	216	417	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	4.7	110.5	12.4
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	4	409	551	-	-	547	-	-	-	490
HCM Lane V/C Ratio	2.446	0.622	0.004	-	-	0.628	-	-	-	0.002
HCM Control Delay (s)	$ 2277.3	27.2	11.6	-	-	22	-	-	0	12.4
HCM Lane LOS	F	D	B	-	-	C	-	-	A	B
HCM 95th %tile Q(veh)	2.3	4.1	0	-	-	4.3	-	-	-	0

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Exhibit D

Destino Paso
4: SR 46 E & Airport Road

Near Term Plus Project PM
11/08/2016

Intersection	
Int Delay, s/veh	11

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	215	1180	1086	20	24	403
Future Vol, veh/h	215	1180	1086	20	24	403
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	7	18	18	7	7	7
Mvmt Flow	231	1269	1168	22	26	433

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1168	0	-	0	2265	584
Stage 1	-	-	-	-	1168	-
Stage 2	-	-	-	-	1097	-
Critical Hdwy	4.24	-	-	-	6.94	7.04
Critical Hdwy Stg 1	-	-	-	-	5.94	-
Critical Hdwy Stg 2	-	-	-	-	5.94	-
Follow-up Hdwy	2.27	-	-	-	3.57	3.37
Pot Cap-1 Maneuver	566	-	-	-	32	443
Stage 1	-	-	-	-	248	-
Stage 2	-	-	-	-	271	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	566	-	-	-	~ 19	443
Mov Cap-2 Maneuver	-	-	-	-	97	-
Stage 1	-	-	-	-	248	-
Stage 2	-	-	-	-	160	-

Approach	EB	WB	SB
HCM Control Delay, s	2.4	0	67.5
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	566	-	-	-	97	443
HCM Lane V/C Ratio	0.408	-	-	-	0.266	0.978
HCM Control Delay (s)	15.7	-	-	-	55.1	68.2
HCM Lane LOS	C	-	-	-	F	F
HCM 95th %tile Q(veh)	2	-	-	-	1	12.2

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Destino Paso
1: Airport Road & Dry Creek Road

Near Term+Project Saturday MD
11/08/2016

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	120	1	55	0	9	0	135	20	12	141	1
Future Vol, veh/h	12	120	1	55	0	9	0	135	20	12	141	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	13	135	1	62	0	10	0	152	22	13	158	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	342	337	158	405	337	152	158	0	0	152	0	0
Stage 1	185	185	-	152	152	-	-	-	-	-	-	-
Stage 2	157	152	-	253	185	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.54	6.24	7.14	6.54	6.24	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	3.536	4.036	3.336	2.236	-	-	2.236	-	-
Pot Cap-1 Maneuver	608	581	882	553	581	889	1409	-	-	1417	-	-
Stage 1	812	743	-	846	768	-	-	-	-	-	-	-
Stage 2	841	768	-	747	743	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	596	575	882	449	575	889	1409	-	-	1417	-	-
Mov Cap-2 Maneuver	596	575	-	449	575	-	-	-	-	-	-	-
Stage 1	812	736	-	846	768	-	-	-	-	-	-	-
Stage 2	831	768	-	603	736	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.4	13.8	0	0.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1409	-	-	578	483	1417	-	-
HCM Lane V/C Ratio	-	-	-	0.259	0.149	0.01	-	-
HCM Control Delay (s)	0	-	-	13.4	13.8	7.6	0	-
HCM Lane LOS	A	-	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1	0.5	0	-	-

Exhibit D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	224	959	232	81	1493	265	191	326	180	269	344
v/c Ratio	0.68	0.66	0.30	0.14	0.90	0.31	0.63	0.46	0.71	0.77	0.76
Control Delay	68.7	36.4	4.4	47.0	40.4	5.6	68.1	43.1	75.5	64.9	31.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.7	36.4	4.4	47.0	40.4	5.6	68.1	43.1	75.5	64.9	31.0
Queue Length 50th (ft)	96	392	0	28	614	16	81	118	79	221	117
Queue Length 95th (ft)	151	462	53	61	#886	77	132	164	#142	320	231
Internal Link Dist (ft)		3280			2376			566		648	
Turn Bay Length (ft)	550		490	460		390	160		130		
Base Capacity (vph)	364	1896	930	603	1666	843	339	1205	260	608	640
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.51	0.25	0.13	0.90	0.31	0.56	0.27	0.69	0.44	0.54

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	215	921	223	78	1433	254	183	242	71	173	258	330
Future Volume (veh/h)	215	921	223	78	1433	254	183	242	71	173	258	330
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1900	1827	1827	1827
Adj Flow Rate, veh/h	224	959	232	81	1493	265	191	252	74	180	269	344
Adj No. of Lanes	2	2	1	2	2	1	2	2	0	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	276	1141	506	649	1577	701	243	695	199	229	470	395
Arrive On Green	0.08	0.33	0.33	0.19	0.45	0.45	0.07	0.26	0.26	0.07	0.26	0.26
Sat Flow, veh/h	3375	3471	1539	3375	3471	1543	3375	2656	762	3375	1827	1535
Grp Volume(v), veh/h	224	959	232	81	1493	265	191	163	163	180	269	344
Grp Sat Flow(s),veh/h/ln	1688	1736	1539	1688	1736	1543	1688	1736	1682	1688	1827	1535
Q Serve(g_s), s	8.7	34.3	12.5	2.7	55.1	15.1	7.4	10.2	10.6	7.0	17.1	28.7
Cycle Q Clear(g_c), s	8.7	34.3	12.5	2.7	55.1	15.1	7.4	10.2	10.6	7.0	17.1	28.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	276	1141	506	649	1577	701	243	454	440	229	470	395
V/C Ratio(X)	0.81	0.84	0.46	0.12	0.95	0.38	0.79	0.36	0.37	0.79	0.57	0.87
Avail Cap(c_a), veh/h	353	1791	794	649	1609	715	328	597	578	252	587	493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.4	41.6	21.7	44.7	35.0	24.1	61.1	40.2	40.4	61.4	43.2	47.5
Incr Delay (d2), s/veh	10.6	2.2	0.6	0.1	12.0	0.3	8.6	0.5	0.5	14.0	1.1	13.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	16.7	5.8	1.2	29.0	6.5	3.8	4.9	5.0	3.7	8.8	13.6
LnGrp Delay(d),s/veh	71.0	43.8	22.3	44.8	47.0	24.4	69.7	40.7	40.9	75.3	44.3	60.7
LnGrp LOS	E	D	C	D	D	C	E	D	D	E	D	E
Approach Vol, veh/h		1415			1839			517			793	
Approach Delay, s/veh		44.6			43.6			51.5			58.5	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.1	39.0	31.7	50.0	13.6	38.4	14.9	66.8
Change Period (Y+Rc), s	4.0	4.0	6.0	* 6	4.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	10.0	46.0	7.0	* 69	13.0	43.0	14.0	62.0
Max Q Clear Time (g_c+I1), s	9.0	12.6	4.7	36.3	9.4	30.7	10.7	57.1
Green Ext Time (p_c), s	0.1	5.0	1.9	7.7	0.2	3.7	0.2	3.7

Intersection Summary

HCM 2010 Ctrl Delay	47.4
HCM 2010 LOS	D

Notes

Exhibit D

Intersection	
Int Delay, s/veh	18.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	1108	48	188	1750	22	14	6	217	1	0	1
Future Vol, veh/h	9	1108	48	188	1750	22	14	6	217	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	500	-	50	670	-	50	-	-	25	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	1	-	-	1	-	-	2	-	-	-8	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	9	1154	50	196	1823	23	15	6	226	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1823	0	0	1154	0	0	2476	3388	577	2814	3388	911
Stage 1	-	-	-	-	-	-	1173	1173	-	2215	2215	-
Stage 2	-	-	-	-	-	-	1303	2215	-	599	1173	-
Critical Hdwy	4.2	-	-	4.2	-	-	8	7	7.2	6	5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	7	6	-	5	4	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7	6	-	5	4	-
Follow-up Hdwy	2.25	-	-	2.25	-	-	3.55	4.05	3.35	3.55	4.05	3.35
Pot Cap-1 Maneuver	320	-	-	584	-	-	~ 11	~ 5	438	28	31	332
Stage 1	-	-	-	-	-	-	175	227	-	115	206	-
Stage 2	-	-	-	-	-	-	143	60	-	584	435	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	320	-	-	584	-	-	~ 8	~ 3	438	-	20	332
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 8	~ 3	-	-	20	-
Stage 1	-	-	-	-	-	-	170	221	-	112	137	-
Stage 2	-	-	-	-	-	-	95	40	-	267	423	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.4	256.2	
HCM LOS			F	-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	5	438	320	-	-	584	-	-	-	332
HCM Lane V/C Ratio	4.167	0.516	0.029	-	-	0.335	-	-	-	0.003
HCM Control Delay (s)	$ 2800.5	21.7	16.6	-	-	14.2	-	-	-	15.9
HCM Lane LOS	F	C	C	-	-	B	-	-	-	C
HCM 95th %tile Q(veh)	4	2.9	0.1	-	-	1.5	-	-	-	0

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	16.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	376	950	1645	55	18	316
Future Vol, veh/h	376	950	1645	55	18	316
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	400	1011	1750	59	19	336

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1750	0	-	0	3055	875
Stage 1	-	-	-	-	1750	-
Stage 2	-	-	-	-	1305	-
Critical Hdwy	4.22	-	-	-	6.92	7.02
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	2.26	-	-	-	3.56	3.36
Pot Cap-1 Maneuver	~ 337	-	-	-	~ 9	~ 285
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	211	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	~ 337	-	-	-	0	~ 285
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	40.9	0	
HCM LOS			-

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	~ 337	-	-	-	-	285
HCM Lane V/C Ratio	1.187	-	-	-	-	1.18
HCM Control Delay (s)	144.2	-	-	-	-	149.3
HCM Lane LOS	F	-	-	-	-	F
HCM 95th %tile Q(veh)	16.8	-	-	-	-	14.9

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Exhibit D

Destino Paso
4: SR 46 E & Airport Road

Existing+Hotel 1 Saturday MD
11/10/2016

Intersection	
Int Delay, s/veh	12.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	335	795	1489	44	10	257
Future Vol, veh/h	335	795	1489	44	10	257
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	356	846	1584	47	11	273

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1584	0	-	0	2720	792
Stage 1	-	-	-	-	1584	-
Stage 2	-	-	-	-	1136	-
Critical Hdwy	4.22	-	-	-	6.92	7.02
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	2.26	-	-	-	3.56	3.36
Pot Cap-1 Maneuver	393	-	-	-	16	324
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	260	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	393	-	-	-	~ 2	324
Mov Cap-2 Maneuver	-	-	-	-	22	-
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	24	-

Approach	EB	WB	SB
HCM Control Delay, s	17.1	0	63
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	393	-	-	-	22	324
HCM Lane V/C Ratio	0.907	-	-	-	0.484	0.844
HCM Control Delay (s)	57.8	-	-	-	274	54.8
HCM Lane LOS	F	-	-	-	F	F
HCM 95th %tile Q(veh)	9.5	-	-	-	1.4	7.4

Notes
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Destino Paso
4: SR 46 E & Airport Road

Existing+Hotel 1+2 Saturday MD
11/10/2016

Intersection	
Int Delay, s/veh	17.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	351	795	1489	49	14	270
Future Vol, veh/h	351	795	1489	49	14	270
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	373	846	1584	52	15	287

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1584	0	-	0	2754	792
Stage 1	-	-	-	-	1584	-
Stage 2	-	-	-	-	1170	-
Critical Hdwy	4.22	-	-	-	6.92	7.02
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	2.26	-	-	-	3.56	3.36
Pot Cap-1 Maneuver	393	-	-	-	15	324
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	249	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	393	-	-	-	~ 1	324
Mov Cap-2 Maneuver	-	-	-	-	~ 12	-
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	~ 13	-

Approach	EB	WB	SB
HCM Control Delay, s	20.4	0	96.9
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	393	-	-	-	12	324
HCM Lane V/C Ratio	0.95	-	-	-	1.241	0.887
HCM Control Delay (s)	66.5	-	-	-	$ 772.2	61.9
HCM Lane LOS	F	-	-	-	F	F
HCM 95th %tile Q(veh)	10.7	-	-	-	2.6	8.3

Notes
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Exhibit D

Destino Paso
4: SR 46 E & Airport Road

Existing+Hotel 1+2+3 Saturday MD
11/10/2016

Intersection	
Int Delay, s/veh	20.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	356	795	1489	51	15	274
Future Vol, veh/h	356	795	1489	51	15	274
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	379	846	1584	54	16	291

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1584	0	-	0	2764	792
Stage 1	-	-	-	-	1584	-
Stage 2	-	-	-	-	1180	-
Critical Hdwy	4.22	-	-	-	6.92	7.02
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	2.26	-	-	-	3.56	3.36
Pot Cap-1 Maneuver	393	-	-	-	~ 15	324
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	246	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	393	-	-	-	~ 1	324
Mov Cap-2 Maneuver	-	-	-	-	~ 9	-
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	~ 9	-

Approach	EB	WB	SB
HCM Control Delay, s	21.5	0	121.7
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	393	-	-	-	9	324
HCM Lane V/C Ratio	0.964	-	-	-	1.773	0.9
HCM Control Delay (s)	69.5	-	-	-	$ 1170	64.3
HCM Lane LOS	F	-	-	-	F	F
HCM 95th %tile Q(veh)	11.1	-	-	-	2.9	8.6

Notes
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Destino Paso
4: SR 46 E & Airport Road

Near Term+ Hotel 1 Saturday MD
11/15/2016

Intersection	
Int Delay, s/veh	11.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	346	950	1645	44	10	292
Future Vol, veh/h	346	950	1645	44	10	292
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	368	1011	1750	47	11	311

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1750	0	-	0	2991	875
Stage 1	-	-	-	-	1750	-
Stage 2	-	-	-	-	1241	-
Critical Hdwy	4.22	-	-	-	6.92	7.02
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	2.26	-	-	-	3.56	3.36
Pot Cap-1 Maneuver	~ 337	-	-	-	~ 10	~ 285
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	228	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	~ 337	-	-	-	0	~ 285
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	29.9	0	
HCM LOS			-

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	~ 337	-	-	-	-	285
HCM Lane V/C Ratio	1.092	-	-	-	-	1.09
HCM Control Delay (s)	111.8	-	-	-	-	119.1
HCM Lane LOS	F	-	-	-	-	F
HCM 95th %tile Q(veh)	13.9	-	-	-	-	12.5

Notes
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Exhibit D

Destino Paso
4: SR 46 E & Airport Road

Near Term+Hotels 1+2 Saturday MD
11/15/2016

Intersection	
Int Delay, s/veh	14

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	362	950	1645	49	14	305
Future Vol, veh/h	362	950	1645	49	14	305
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	385	1011	1750	52	15	324

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1750	0	-	0	3026	875
Stage 1	-	-	-	-	1750	-
Stage 2	-	-	-	-	1276	-
Critical Hdwy	4.22	-	-	-	6.92	7.02
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	2.26	-	-	-	3.56	3.36
Pot Cap-1 Maneuver	~ 337	-	-	-	~ 9	~ 285
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	218	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	~ 337	-	-	-	0	~ 285
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	35.5	0	
HCM LOS			-

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	~ 337	-	-	-	-	285
HCM Lane V/C Ratio	1.143	-	-	-	-	1.138
HCM Control Delay (s)	128.6	-	-	-	-	135.1
HCM Lane LOS	F	-	-	-	-	F
HCM 95th %tile Q(veh)	15.4	-	-	-	-	13.8

Notes
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Destino Paso
4: SR 46 E & Airport Road

Near Term+Hotels 1+2+3 Saturday MD
11/15/2016

Intersection	
Int Delay, s/veh	14.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	367	950	1645	51	15	309
Future Vol, veh/h	367	950	1645	51	15	309
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	390	1011	1750	54	16	329

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1750	0	-	0	3036	875
Stage 1	-	-	-	-	1750	-
Stage 2	-	-	-	-	1286	-
Critical Hdwy	4.22	-	-	-	6.92	7.02
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	2.26	-	-	-	3.56	3.36
Pot Cap-1 Maneuver	~ 337	-	-	-	~ 9	~ 285
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	216	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	~ 337	-	-	-	0	~ 285
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	37.4	0	
HCM LOS			-

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	~ 337	-	-	-	-	285
HCM Lane V/C Ratio	1.159	-	-	-	-	1.153
HCM Control Delay (s)	134.1	-	-	-	-	140.2
HCM Lane LOS	F	-	-	-	-	F
HCM 95th %tile Q(veh)	15.9	-	-	-	-	14.2

Notes
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Exhibit D

Destino Paso
4: SR 46 E & Airport Road

Mitigated Existing+Hotel 1 Saturday MD
11/10/2016

Intersection	
Int Delay, s/veh	11.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	335	795	1489	44	2	257
Future Vol, veh/h	335	795	1489	44	2	257
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	356	846	1584	47	2	273

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1584	0	-	0	2720	792
Stage 1	-	-	-	-	1584	-
Stage 2	-	-	-	-	1136	-
Critical Hdwy	4.22	-	-	-	6.92	7.02
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	2.26	-	-	-	3.56	3.36
Pot Cap-1 Maneuver	393	-	-	-	16	324
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	260	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	393	-	-	-	~ 2	324
Mov Cap-2 Maneuver	-	-	-	-	22	-
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	24	-

Approach	EB	WB	SB
HCM Control Delay, s	17.1	0	55.8
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	393	-	-	-	22	324
HCM Lane V/C Ratio	0.907	-	-	-	0.097	0.844
HCM Control Delay (s)	57.8	-	-	-	185.5	54.8
HCM Lane LOS	F	-	-	-	F	F
HCM 95th %tile Q(veh)	9.5	-	-	-	0.3	7.4

Notes
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Destino Paso
4: SR 46 E & Airport Road

Mitigated Existing+Hotel 1+2 Saturday MD
11/10/2016

Intersection	
Int Delay, s/veh	13.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	351	795	1489	49	2	270
Future Vol, veh/h	351	795	1489	49	2	270
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	373	846	1584	52	2	287

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1584	0	-	0	2754	792
Stage 1	-	-	-	-	1584	-
Stage 2	-	-	-	-	1170	-
Critical Hdwy	4.22	-	-	-	6.92	7.02
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	2.26	-	-	-	3.56	3.36
Pot Cap-1 Maneuver	393	-	-	-	15	324
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	249	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	393	-	-	-	~ 1	324
Mov Cap-2 Maneuver	-	-	-	-	12	-
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	13	-

Approach	EB	WB	SB
HCM Control Delay, s	20.4	0	64.1
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	393	-	-	-	12	324
HCM Lane V/C Ratio	0.95	-	-	-	0.177	0.887
HCM Control Delay (s)	66.5	-	-	-	$ 361.1	61.9
HCM Lane LOS	F	-	-	-	F	F
HCM 95th %tile Q(veh)	10.7	-	-	-	0.5	8.3

Notes
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Exhibit D

Destino Paso
4: SR 46 E & Airport Road

Mitigated Existing+Hotel 1+2+3 Saturday MD
11/10/2016

Intersection	
Int Delay, s/veh	15.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	356	795	1489	51	2	274
Future Vol, veh/h	356	795	1489	51	2	274
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	379	846	1584	54	2	291

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1584	0	-	0	2764	792
Stage 1	-	-	-	-	1584	-
Stage 2	-	-	-	-	1180	-
Critical Hdwy	4.22	-	-	-	7.62	7.02
Critical Hdwy Stg 1	-	-	-	-	6.62	-
Critical Hdwy Stg 2	-	-	-	-	6.62	-
Follow-up Hdwy	2.26	-	-	-	3.56	3.36
Pot Cap-1 Maneuver	393	-	-	-	9	324
Stage 1	-	-	-	-	109	-
Stage 2	-	-	-	-	196	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	393	-	-	-	~ 1	324
Mov Cap-2 Maneuver	-	-	-	-	3	-
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	7	-

Approach	EB	WB	SB
HCM Control Delay, s	21.5	0	76.6
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	393	-	-	-	3	324
HCM Lane V/C Ratio	0.964	-	-	-	0.709	0.9
HCM Control Delay (s)	69.5	-	-	$	1761.9	64.3
HCM Lane LOS	F	-	-	-	F	F
HCM 95th %tile Q(veh)	11.1	-	-	-	0.8	8.6

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Destino Paso
3: Union Road & SR 46 E

Mitigated Existing+Project Saturday MD
11/10/2016

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	959	40	174	1596	0	0	0	200	0	0	1
Future Vol, veh/h	9	959	40	174	1596	0	0	0	200	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	500	-	50	670	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	1	-	-	1	-	-	2	-	-	-8	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	9	999	42	181	1663	0	0	0	208	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1663	0	0	999	0	0	-	-	499	-	-	831
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.2	-	-	4.2	-	-	-	-	7.2	-	-	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.25	-	-	2.25	-	-	-	-	3.35	-	-	3.35
Pot Cap-1 Maneuver	370	-	-	671	-	-	0	0	495	0	0	369
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	370	-	-	671	-	-	-	-	495	-	-	369
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.2	17.5	14.8
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	495	370	-	-	671	-	-	369
HCM Lane V/C Ratio	0.421	0.025	-	-	0.27	-	-	0.003
HCM Control Delay (s)	17.5	15	-	-	12.3	-	-	14.8
HCM Lane LOS	C	B	-	-	B	-	-	B
HCM 95th %tile Q(veh)	2.1	0.1	-	-	1.1	-	-	0

Exhibit D

Intersection	
Int Delay, s/veh	16.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	365	795	1489	55	2	281
Future Vol, veh/h	365	795	1489	55	2	281
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	388	846	1584	59	2	299

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1584	0	-	0	2783	792
Stage 1	-	-	-	-	1584	-
Stage 2	-	-	-	-	1199	-
Critical Hdwy	4.22	-	-	-	6.92	7.02
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	2.26	-	-	-	3.56	3.36
Pot Cap-1 Maneuver	393	-	-	-	14	324
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	240	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	393	-	-	-	0	324
Mov Cap-2 Maneuver	-	-	-	-	3	-
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	3	-

Approach	EB	WB	SB
HCM Control Delay, s	23.7	0	80.8
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	393	-	-	-	3	324
HCM Lane V/C Ratio	0.988	-	-	-	0.709	0.923
HCM Control Delay (s)	75.3	-	-	$	1761.9	68.8
HCM Lane LOS	F	-	-	-	F	F
HCM 95th %tile Q(veh)	11.8	-	-	-	0.8	9.1

Intersection	
Int Delay, s/veh	11.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	346	950	1645	44	2	292
Future Vol, veh/h	346	950	1645	44	2	292
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	368	1011	1750	47	2	311

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1750	0	-	0	2991	875
Stage 1	-	-	-	-	1750	-
Stage 2	-	-	-	-	1241	-
Critical Hdwy	4.22	-	-	-	6.92	7.02
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	2.26	-	-	-	3.56	3.36
Pot Cap-1 Maneuver	~ 337	-	-	-	10	~ 285
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	228	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	~ 337	-	-	-	0	~ 285
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	29.9	0	
HCM LOS			-

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	~ 337	-	-	-	-	285
HCM Lane V/C Ratio	1.092	-	-	-	-	1.09
HCM Control Delay (s)	111.8	-	-	-	-	119.1
HCM Lane LOS	F	-	-	-	-	F
HCM 95th %tile Q(veh)	13.9	-	-	-	-	12.5

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Exhibit D

Intersection	
Int Delay, s/veh	14.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	362	950	1645	49	2	305
Future Vol, veh/h	362	950	1645	49	2	305
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	385	1011	1750	52	2	324

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1750	0	-	0	3026	875
Stage 1	-	-	-	-	1750	-
Stage 2	-	-	-	-	1276	-
Critical Hdwy	4.22	-	-	-	6.92	7.02
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	2.26	-	-	-	3.56	3.36
Pot Cap-1 Maneuver	~ 337	-	-	-	9	~ 285
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	218	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	~ 337	-	-	-	0	~ 285
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	35.5	0	
HCM LOS			-

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	~ 337	-	-	-	-	285
HCM Lane V/C Ratio	1.143	-	-	-	-	1.138
HCM Control Delay (s)	128.6	-	-	-	-	135.1
HCM Lane LOS	F	-	-	-	-	F
HCM 95th %tile Q(veh)	15.4	-	-	-	-	13.8

Notes
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	14.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	367	950	1645	51	2	309
Future Vol, veh/h	367	950	1645	51	2	309
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	390	1011	1750	54	2	329

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1750	0	-	0	3036	875
Stage 1	-	-	-	-	1750	-
Stage 2	-	-	-	-	1286	-
Critical Hdwy	4.22	-	-	-	7.62	7.02
Critical Hdwy Stg 1	-	-	-	-	6.62	-
Critical Hdwy Stg 2	-	-	-	-	6.62	-
Follow-up Hdwy	2.26	-	-	-	3.56	3.36
Pot Cap-1 Maneuver	~ 337	-	-	-	5	~ 285
Stage 1	-	-	-	-	85	-
Stage 2	-	-	-	-	168	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	~ 337	-	-	-	-	~ 285
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	85	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	37.4	0	
HCM LOS			-

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	~ 337	-	-	-	-	285
HCM Lane V/C Ratio	1.159	-	-	-	-	1.153
HCM Control Delay (s)	134.1	-	-	-	-	140.2
HCM Lane LOS	F	-	-	-	-	F
HCM 95th %tile Q(veh)	15.9	-	-	-	-	14.2

Notes
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Exhibit D

Destino Paso
4: SR 46 E & Airport Road

Mitigated Near Term+Project Saturday MD
11/15/2016

Intersection	
Int Delay, s/veh	16.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	376	950	1645	55	2	316
Future Vol, veh/h	376	950	1645	55	2	316
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	950	-	-	600	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	400	1011	1750	59	2	336

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1750	0	-	0	3055	875
Stage 1	-	-	-	-	1750	-
Stage 2	-	-	-	-	1305	-
Critical Hdwy	4.22	-	-	-	6.92	7.02
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	2.26	-	-	-	3.56	3.36
Pot Cap-1 Maneuver	~ 337	-	-	-	9	~ 285
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	211	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	~ 337	-	-	-	0	~ 285
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	40.9	0	
HCM LOS			-

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	~ 337	-	-	-	-	285
HCM Lane V/C Ratio	1.187	-	-	-	-	1.18
HCM Control Delay (s)	144.2	-	-	-	-	149.3
HCM Lane LOS	F	-	-	-	-	F
HCM 95th %tile Q(veh)	16.8	-	-	-	-	14.9

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Destino Paso
103: Jardine Road - Sat & SR 46 E - Sat

Existing Jardine
11/17/2016

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	122	751	0	0	919	18	0	0	0	14	0	140
Future Vol, veh/h	122	751	0	0	919	18	0	0	0	14	0	140
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	900	-	-	680	-	680	-	-	-	300	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	126	774	0	0	947	19	0	0	0	14	0	144

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	947	0	0	774	0	0	1500	1973	387	1586	1973	474
Stage 1	-	-	-	-	-	-	1026	1026	-	947	947	-
Stage 2	-	-	-	-	-	-	474	947	-	639	1026	-
Critical Hdwy	4.22	-	-	4.22	-	-	7.62	6.62	7.02	7.62	6.62	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Follow-up Hdwy	2.26	-	-	2.26	-	-	3.56	4.06	3.36	3.56	4.06	3.36
Pot Cap-1 Maneuver	696	-	-	812	-	-	81	59	600	70	59	526
Stage 1	-	-	-	-	-	-	244	302	-	273	329	-
Stage 2	-	-	-	-	-	-	530	329	-	421	302	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	696	-	-	812	-	-	51	48	600	60	48	526
Mov Cap-2 Maneuver	-	-	-	-	-	-	157	155	-	186	192	-
Stage 1	-	-	-	-	-	-	200	247	-	224	329	-
Stage 2	-	-	-	-	-	-	385	329	-	345	247	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0	0	15.5
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	696	-	-	812	-	-	186	526
HCM Lane V/C Ratio	-	0.181	-	-	-	-	-	0.078	0.274
HCM Control Delay (s)	0	11.3	-	-	0	-	-	26	14.4
HCM Lane LOS	A	B	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	-	0.7	-	-	0	-	-	0.2	1.1

Exhibit D

Destino Paso
103: Jardine Road - Sat & SR 46 E - Sat

Existing Jardine+Hotel 1
11/14/2016

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	122	759	0	0	929	18	0	0	0	14	0	140
Future Vol, veh/h	122	759	0	0	929	18	0	0	0	14	0	140
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	900	-	-	680	-	680	-	-	-	300	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	126	782	0	0	958	19	0	0	0	14	0	144

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	958	0	0	782	0	0	1513	1992	391	1601	1992	479
Stage 1	-	-	-	-	-	-	1034	1034	-	958	958	-
Stage 2	-	-	-	-	-	-	479	958	-	643	1034	-
Critical Hdwy	4.22	-	-	4.22	-	-	7.62	6.62	7.02	7.62	6.62	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Follow-up Hdwy	2.26	-	-	2.26	-	-	3.56	4.06	3.36	3.56	4.06	3.36
Pot Cap-1 Maneuver	690	-	-	806	-	-	79	57	597	68	57	522
Stage 1	-	-	-	-	-	-	241	299	-	269	325	-
Stage 2	-	-	-	-	-	-	526	325	-	419	299	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	690	-	-	806	-	-	49	47	597	58	47	522
Mov Cap-2 Maneuver	-	-	-	-	-	-	155	153	-	182	189	-
Stage 1	-	-	-	-	-	-	197	244	-	220	325	-
Stage 2	-	-	-	-	-	-	381	325	-	342	244	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0	0	15.6
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	690	-	-	806	-	-	182	522
HCM Lane V/C Ratio	-	0.182	-	-	-	-	-	0.079	0.276
HCM Control Delay (s)	0	11.4	-	-	0	-	-	26.5	14.5
HCM Lane LOS	A	B	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	-	0.7	-	-	0	-	-	0.3	1.1

Destino Paso
103: Jardine Road - Sat & SR 46 E - Sat

Existing Jardine+Hotel 1+2
11/14/2016

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	122	763	0	0	934	18	0	0	0	14	0	140
Future Vol, veh/h	122	763	0	0	934	18	0	0	0	14	0	140
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	900	-	-	680	-	680	-	-	-	300	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	126	787	0	0	963	19	0	0	0	14	0	144

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	963	0	0	787	0	0	1519	2001	393	1608	2001	481
Stage 1	-	-	-	-	-	-	1038	1038	-	963	963	-
Stage 2	-	-	-	-	-	-	481	963	-	645	1038	-
Critical Hdwy	4.22	-	-	4.22	-	-	7.62	6.62	7.02	7.62	6.62	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Follow-up Hdwy	2.26	-	-	2.26	-	-	3.56	4.06	3.36	3.56	4.06	3.36
Pot Cap-1 Maneuver	686	-	-	802	-	-	78	56	595	67	56	521
Stage 1	-	-	-	-	-	-	240	298	-	267	323	-
Stage 2	-	-	-	-	-	-	525	323	-	418	298	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	686	-	-	802	-	-	48	46	595	58	46	521
Mov Cap-2 Maneuver	-	-	-	-	-	-	154	151	-	181	188	-
Stage 1	-	-	-	-	-	-	196	243	-	218	323	-
Stage 2	-	-	-	-	-	-	380	323	-	341	243	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0	0	15.6
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	686	-	-	802	-	-	181	521
HCM Lane V/C Ratio	-	0.183	-	-	-	-	-	0.08	0.277
HCM Control Delay (s)	0	11.4	-	-	0	-	-	26.6	14.5
HCM Lane LOS	A	B	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	-	0.7	-	-	0	-	-	0.3	1.1

Exhibit D

Destino Paso
103: Jardine Road - Sat & SR 46 E - Sat

Existing Jardine+Hotel 1+2+3
11/14/2016

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	122	764	0	0	936	18	0	0	0	14	0	140
Future Vol, veh/h	122	764	0	0	936	18	0	0	0	14	0	140
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	900	-	-	680	-	680	-	-	-	300	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	126	788	0	0	965	19	0	0	0	14	0	144

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	965	0	0	788	0	0	1521	2004	394	1610	2004	482
Stage 1	-	-	-	-	-	-	1039	1039	-	965	965	-
Stage 2	-	-	-	-	-	-	482	965	-	645	1039	-
Critical Hdwy	4.22	-	-	4.22	-	-	7.62	6.62	7.02	7.62	6.62	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Follow-up Hdwy	2.26	-	-	2.26	-	-	3.56	4.06	3.36	3.56	4.06	3.36
Pot Cap-1 Maneuver	685	-	-	802	-	-	78	56	594	67	56	520
Stage 1	-	-	-	-	-	-	239	297	-	266	323	-
Stage 2	-	-	-	-	-	-	524	323	-	418	297	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	685	-	-	802	-	-	48	46	594	58	46	520
Mov Cap-2 Maneuver	-	-	-	-	-	-	153	151	-	181	188	-
Stage 1	-	-	-	-	-	-	195	242	-	217	323	-
Stage 2	-	-	-	-	-	-	379	323	-	341	242	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0	0	15.7
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	685	-	-	802	-	-	181	520
HCM Lane V/C Ratio	-	0.184	-	-	-	-	-	0.08	0.278
HCM Control Delay (s)	0	11.4	-	-	0	-	-	26.6	14.6
HCM Lane LOS	A	B	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	-	0.7	-	-	0	-	-	0.3	1.1

Destino Paso
103: Jardine Road - Sat & SR 46 E - Sat

Existing Jardine+Project
11/14/2016

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	122	767	0	0	940	18	0	0	0	14	0	140
Future Vol, veh/h	122	767	0	0	940	18	0	0	0	14	0	140
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	900	-	-	680	-	680	-	-	-	300	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	126	791	0	0	969	19	0	0	0	14	0	144

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	969	0	0	791	0	0	1527	2011	395	1616	2011	485
Stage 1	-	-	-	-	-	-	1042	1042	-	969	969	-
Stage 2	-	-	-	-	-	-	485	969	-	647	1042	-
Critical Hdwy	4.22	-	-	4.22	-	-	7.62	6.62	7.02	7.62	6.62	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Follow-up Hdwy	2.26	-	-	2.26	-	-	3.56	4.06	3.36	3.56	4.06	3.36
Pot Cap-1 Maneuver	683	-	-	800	-	-	77	56	593	66	56	517
Stage 1	-	-	-	-	-	-	238	296	-	265	321	-
Stage 2	-	-	-	-	-	-	522	321	-	417	296	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	683	-	-	800	-	-	48	46	593	57	46	517
Mov Cap-2 Maneuver	-	-	-	-	-	-	152	150	-	180	187	-
Stage 1	-	-	-	-	-	-	194	241	-	216	321	-
Stage 2	-	-	-	-	-	-	376	321	-	340	241	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0	0	15.7
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	683	-	-	800	-	-	180	517
HCM Lane V/C Ratio	-	0.184	-	-	-	-	-	0.08	0.279
HCM Control Delay (s)	0	11.5	-	-	0	-	-	26.7	14.6
HCM Lane LOS	A	B	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	-	0.7	-	-	0	-	-	0.3	1.1

Exhibit D

Destino Paso
103: Jardine Road - Sat & SR 46 E - Sat

Near Term Jardine
11/15/2016

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	122	952	0	0	1679	18	0	0	0	14	0	140
Future Vol, veh/h	122	952	0	0	1679	18	0	0	0	14	0	140
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	900	-	-	680	-	680	-	-	-	300	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	126	981	0	0	1731	19	0	0	0	14	0	144

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1731	0	0	981	0	0	2098	2964	491	2473	2964	865
Stage 1	-	-	-	-	-	-	1233	1233	-	1731	1731	-
Stage 2	-	-	-	-	-	-	865	1731	-	742	1233	-
Critical Hdwy	4.22	-	-	4.22	-	-	7.62	6.62	7.02	7.62	6.62	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Follow-up Hdwy	2.26	-	-	2.26	-	-	3.56	4.06	3.36	3.56	4.06	3.36
Pot Cap-1 Maneuver	343	-	-	676	-	-	28	13	513	~ 14	13	289
Stage 1	-	-	-	-	-	-	181	240	-	88	135	-
Stage 2	-	-	-	-	-	-	307	135	-	365	240	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	343	-	-	676	-	-	10	8	513	~ 10	8	289
Mov Cap-2 Maneuver	-	-	-	-	-	-	26	9	-	52	93	-
Stage 1	-	-	-	-	-	-	115	152	-	56	135	-
Stage 2	-	-	-	-	-	-	154	135	-	231	152	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	0	0	35.6
HCM LOS			A	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	343	-	-	676	-	-	52	289
HCM Lane V/C Ratio	-	0.367	-	-	-	-	-	0.278	0.499
HCM Control Delay (s)	0	21.4	-	-	0	-	-	98.9	29.3
HCM Lane LOS	A	C	-	-	A	-	-	F	D
HCM 95th %tile Q(veh)	-	1.6	-	-	0	-	-	1	2.6

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Destino Paso
103: Jardine Road - Sat & SR 46 E - Sat

Mitigated Existing Jardine+Hotel 1
11/14/2016

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	122	751	0	0	929	18	0	0	0	22	0	140
Future Vol, veh/h	122	751	0	0	929	18	0	0	0	22	0	140
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	900	-	-	680	-	680	-	-	-	300	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	126	774	0	0	958	19	0	0	0	23	0	144

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	958	0	0	774	0	0	1505	1984	387	1597	1984	479
Stage 1	-	-	-	-	-	-	1026	1026	-	958	958	-
Stage 2	-	-	-	-	-	-	479	958	-	639	1026	-
Critical Hdwy	4.22	-	-	4.22	-	-	7.62	6.62	7.02	7.62	6.62	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Follow-up Hdwy	2.26	-	-	2.26	-	-	3.56	4.06	3.36	3.56	4.06	3.36
Pot Cap-1 Maneuver	690	-	-	812	-	-	80	58	600	68	58	522
Stage 1	-	-	-	-	-	-	244	302	-	269	325	-
Stage 2	-	-	-	-	-	-	526	325	-	421	302	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	690	-	-	812	-	-	50	47	600	58	47	522
Mov Cap-2 Maneuver	-	-	-	-	-	-	156	153	-	183	191	-
Stage 1	-	-	-	-	-	-	199	247	-	220	325	-
Stage 2	-	-	-	-	-	-	381	325	-	344	247	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0	0	16.3
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	690	-	-	812	-	-	183	522
HCM Lane V/C Ratio	-	0.182	-	-	-	-	-	0.124	0.276
HCM Control Delay (s)	0	11.4	-	-	0	-	-	27.4	14.5
HCM Lane LOS	A	B	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	-	0.7	-	-	0	-	-	0.4	1.1

Exhibit D

Destino Paso
103: Jardine Road - Sat & SR 46 E - Sat

Mitigated Existing Jardine+Hotel 1+2
11/14/2016

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	122	751	0	0	934	18	0	0	0	26	0	140
Future Vol, veh/h	122	751	0	0	934	18	0	0	0	26	0	140
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	900	-	-	680	-	680	-	-	-	300	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	126	774	0	0	963	19	0	0	0	27	0	144

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	963	0	0	774	0	0	1507	1989	387	1602	1989	481
Stage 1	-	-	-	-	-	-	1026	1026	-	963	963	-
Stage 2	-	-	-	-	-	-	481	963	-	639	1026	-
Critical Hdwy	4.22	-	-	4.22	-	-	7.62	6.62	7.02	7.62	6.62	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Follow-up Hdwy	2.26	-	-	2.26	-	-	3.56	4.06	3.36	3.56	4.06	3.36
Pot Cap-1 Maneuver	686	-	-	812	-	-	80	57	600	68	57	521
Stage 1	-	-	-	-	-	-	244	302	-	267	323	-
Stage 2	-	-	-	-	-	-	525	323	-	421	302	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	686	-	-	812	-	-	50	47	600	58	47	521
Mov Cap-2 Maneuver	-	-	-	-	-	-	156	152	-	182	190	-
Stage 1	-	-	-	-	-	-	199	247	-	218	323	-
Stage 2	-	-	-	-	-	-	380	323	-	344	247	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0	0	16.6
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	686	-	-	812	-	-	182	521
HCM Lane V/C Ratio	-	0.183	-	-	-	-	-	0.147	0.277
HCM Control Delay (s)	0	11.4	-	-	0	-	-	28.2	14.5
HCM Lane LOS	A	B	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	-	0.7	-	-	0	-	-	0.5	1.1

Destino Paso
103: Jardine Road - Sat & SR 46 E - Sat

Mitigated Existing Jardine+Hotel 1+2+3
11/14/2016

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	122	751	0	0	936	18	0	0	0	27	0	140
Future Vol, veh/h	122	751	0	0	936	18	0	0	0	27	0	140
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	900	-	-	680	-	680	-	-	-	300	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	126	774	0	0	965	19	0	0	0	28	0	144

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	965	0	0	774	0	0	1508	1991	387	1604	1991	482
Stage 1	-	-	-	-	-	-	1026	1026	-	965	965	-
Stage 2	-	-	-	-	-	-	482	965	-	639	1026	-
Critical Hdwy	4.22	-	-	4.22	-	-	7.62	6.62	7.02	7.62	6.62	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Follow-up Hdwy	2.26	-	-	2.26	-	-	3.56	4.06	3.36	3.56	4.06	3.36
Pot Cap-1 Maneuver	685	-	-	812	-	-	80	57	600	68	57	520
Stage 1	-	-	-	-	-	-	244	302	-	266	323	-
Stage 2	-	-	-	-	-	-	524	323	-	421	302	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	685	-	-	812	-	-	50	47	600	58	47	520
Mov Cap-2 Maneuver	-	-	-	-	-	-	155	152	-	181	190	-
Stage 1	-	-	-	-	-	-	199	246	-	217	323	-
Stage 2	-	-	-	-	-	-	379	323	-	344	246	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0	0	16.8
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	685	-	-	812	-	-	181	520
HCM Lane V/C Ratio	-	0.184	-	-	-	-	-	0.154	0.278
HCM Control Delay (s)	0	11.4	-	-	0	-	-	28.5	14.6
HCM Lane LOS	A	B	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	-	0.7	-	-	0	-	-	0.5	1.1

Exhibit D

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	122	751	0	0	940	18	0	0	0	30	0	140
Future Vol, veh/h	122	751	0	0	940	18	0	0	0	30	0	140
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	900	-	-	680	-	680	-	-	-	300	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	126	774	0	0	969	19	0	0	0	31	0	144

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	969	0	0	774	0	0	1511	1995	387	1608	1995	485
Stage 1	-	-	-	-	-	-	1026	1026	-	969	969	-
Stage 2	-	-	-	-	-	-	485	969	-	639	1026	-
Critical Hdwy	4.22	-	-	4.22	-	-	7.62	6.62	7.02	7.62	6.62	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Follow-up Hdwy	2.26	-	-	2.26	-	-	3.56	4.06	3.36	3.56	4.06	3.36
Pot Cap-1 Maneuver	683	-	-	812	-	-	80	57	600	67	57	517
Stage 1	-	-	-	-	-	-	244	302	-	265	321	-
Stage 2	-	-	-	-	-	-	522	321	-	421	302	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	683	-	-	812	-	-	49	46	600	57	46	517
Mov Cap-2 Maneuver	-	-	-	-	-	-	154	151	-	180	189	-
Stage 1	-	-	-	-	-	-	199	246	-	216	321	-
Stage 2	-	-	-	-	-	-	376	321	-	343	246	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0	0	17.2
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	683	-	-	812	-	-	180	517
HCM Lane V/C Ratio	-	0.184	-	-	-	-	-	0.172	0.279
HCM Control Delay (s)	0	11.5	-	-	0	-	-	29.1	14.6
HCM Lane LOS	A	B	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	-	0.7	-	-	0	-	-	0.6	1.1