

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
ACTION AGENDA SUMMARY

DEPT: Chief Executive Office

BOARD AGENDA # *B-3

Urgent Routine

AGENDA DATE January 25, 2011

CEO Concurs with Recommendation YES NO
(Information Attached)

4/5 Vote Required YES NO

SUBJECT:

Approval of Matters Related to the Juvenile Commitment Center Construction Project Including: Using the Juvenile Justice Facilities Master Plan as Accepted by the Board of Supervisors in March of 2009 as the Plan Required by the State Corrections Standards Authority for Funding Under the Department of Corrections 2007 Local Youthful Offender Rehabilitative Facility Construction Funding Program (SB 81); and Approval of the Mitigated Negative Declaration Pursuant to the California Environmental Quality Act (CEQA) for the Project

STAFF RECOMMENDATIONS:

1. Approve using the Juvenile Justice Facilities Master Plan, which was accepted by the Board of Supervisors on March 20, 2009 as the long term staffing and operating plan required to be submitted to the State Corrections Standards Authority to meet the SB81 detailed operating plan requirements.
2. Adopt the Mitigated Negative Declaration pursuant to CEQA Guidelines Section 15074(b), by finding that on the basis of the whole record, including the Initial Study and any comments received, that there is no substantial evidence the project will have a significant effect on the environment and that the Mitigated Negative Declaration reflects Stanislaus County's independent judgment and analysis.

(Continued on Page 2)

FISCAL IMPACT:

On March 31, 2009, the Board of Supervisors acknowledged an award for up to \$18 million from the State of California to build a Juvenile Youth Treatment Facility (YTF) with funds under the Department of Corrections 2007 Local Youthful Offender Rehabilitative Construction Funding (SB 81) and directed staff to negotiate a contract with the State. At that time, the Board also approved the Juvenile Justice Facilities Master Plan which provided the County with a road map to guide the planning of its juvenile detention housing and support facilities for the next three decades, through year 2038.

(Continued on Page 2)

BOARD ACTION AS FOLLOWS:

No. 2011-065

On motion of Supervisor O'Brien, Seconded by Supervisor DeMartini
and approved by the following vote,

Ayes: Supervisors: O'Brien, Chiesa, Withrow, DeMartini, and Chairman Monteith

Noes: Supervisors: None

Excused or Absent: Supervisors: None

Abstaining: Supervisor: None

1) Approved as recommended

2) Denied

3) Approved as amended

4) Other:

MOTION:



ATTEST: CHRISTINE FERRARO TALLMAN, Clerk

File No.

Approval of Matters Related to the Juvenile Commitment Center Construction Project Including: Using the Juvenile Justice Facilities Master Plan as Accepted by the Board of Supervisors in March of 2009 as the Plan Required by the State Corrections Standards Authority for Funding Under the Department of Corrections 2007 Local Youthful Offender Rehabilitative Facility Construction Funding Program (SB 81); and Approval of the Mitigated Negative Declaration Pursuant to the California Environmental Quality Act (CEQA) for the Project
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STAFF RECOMMENDATIONS: (Continued)

3. Adopt the Mitigation Monitoring Plan pursuant to CEQA Guidelines Section 15074(d).
4. Order the filing of a Notice of Determination with the Stanislaus County Clerk-Recorders Office pursuant to Public Resources Code Section 21152 and CEQA Guidelines Section 15075

FISCAL IMPACT: (Continued)

As required by Title 15, Section 1850 of the California Code of Regulations, at the time the County submits its design development plans and specifications for State review and approval for the 60 bed commitment facility, it must also submit a staffing plan, along with an analysis of other anticipated operating costs for the facility over a 30-year life cycle. To meet this requirement, the County planned to use and has submitted the official Stanislaus County Juvenile Justice Facilities Master Plan (accepted by the Board of Supervisors on March 20, 2009) for the State's initial review. The Corrections Standards Authority has determined that this plan complies with regulations, and requires the Board of Supervisors by this action to approve the official of this plan.

It is important to note that the original Juvenile Justice Facility Plan goes well beyond the scope of the current Commitment Center Project (60 beds funded primarily with State funds); but does include the level of staffing and operational detail that is one of the State requirements to be met in order for the County's Juvenile Commitment Project to proceed toward final State approval.

At this time, the Chief Executive Officer is recommending the Board of Supervisors approve using the Juvenile Justice Facilities Master Plan, which was accepted by the Board of Supervisors on March 20, 2009 as the long term staffing and operating plan required to be submitted to the State Corrections Standards Authority to meet the SB81 detailed operating plan requirements. A full copy of the previously accepted plan is available from the clerk.

The Plan identifies the need beyond a 30-year period for an additional 180 beds in three phases, with 60 beds being added at each phase. The new beds, when added to the existing 158 beds at the Juvenile Hall would ultimately result in a total system-wide bed capacity of 338. The Plan includes a summary of the estimated staffing levels and forecasted operational costs associated with completion of each phase. The plan forecasts expenses and exposure well beyond the 60 Bed Commitment Center. It is

Approval of Matters Related to the Juvenile Commitment Center Construction Project Including: Using the Juvenile Justice Facilities Master Plan as Accepted by the Board of Supervisors in March of 2009 as the Plan Required by the State Corrections Standards Authority for Funding Under the Department of Corrections 2007 Local Youthful Offender Rehabilitative Facility Construction Funding Program (SB 81); and Approval of the Mitigated Negative Declaration Pursuant to the California Environmental Quality Act (CEQA) for the Project
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important that the only commitment made by the County will be to staff and operate the first phase, the 60 bed Commitment Center.

As described to the Board of Supervisors on December 21, 2010, it is the intent of the Probation Department wherever possible to use existing resources present at the Juvenile Hall to further assist with the operational costs of the new facility including reducing population at the existing facility and transferring court-committed individuals and concurrent staffing to the new facility during the initial years. The Department anticipates using Juvenile Probation Camp Funding and Youthful Offender Block Grant Funding to provide enhanced programming at the new facility.

As previously reported to the Board of Supervisors, it is expected that at some point in future years population increases at the juvenile hall as population and or arrest numbers increase. It is very difficult to project a timeline for this, but it is certain to occur. Current projections in today's dollars estimate that the personnel costs to reoccupy the juvenile hall beds at approximately \$460,000 for every 10 beds that are filled.

Construction Project Overview

The project financing plan approved by the Board of Supervisors on December 21, 2010 includes funding of \$24,232,528. The financing plan approved includes cash match funding of \$3,389,490. The primary sources of cash match funding include the original \$1.725 million in Public Facility Fees previously approved for use by the Board of Supervisors, and funding of \$2,732,528 from the Criminal Justice Facilities Fund.

The financing plan also includes in-kind match funding of \$2,720,048. The primary sources of in-kind match funding will come from the value of the land, County administration, Probation administration, and Transition Team planning for the new facility. At the completion of programming, the Board of Supervisors approved that 3.7 acres be used for the first phase of the project. Based on the County's appraisal the value of the land qualifying for the in-kind match is \$1,775,000.

Approval of Matters Related to the Juvenile Commitment Center Construction Project Including: Using the Juvenile Justice Facilities Master Plan as Accepted by the Board of Supervisors in March of 2009 as the Plan Required by the State Corrections Standards Authority for Funding Under the Department of Corrections 2007 Local Youthful Offender Rehabilitative Facility Construction Funding Program (SB 81); and Approval of the Mitigated Negative Declaration Pursuant to the California Environmental Quality Act (CEQA) for the Project

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The previously approved Sources for funding include the following:

| Juvenile Commitment Center Sources | <i>Amount</i> |
|--|---------------|
| State Funding | \$18,000,000 |
| Detention Public Facility Fees | \$1,450,000 |
| Criminal Justice Public Facility Fees | \$275,000 |
| Criminal Justice Facilities Fund | \$2,732,528 |
| Land | \$1,775,000 |
| Total | \$24,232,528 |

The previously approved Uses for funding include the following:

| Juvenile Commitment Center Uses | <i>Amount</i> |
|--|---------------|
| Cash Uses for Design/Construction | \$22,457,528 |
| Non-Cash Uses for Land/Site Acquisition | \$1,775,000 |
| Total | \$24,232,528 |

As the project progresses, all funding decisions will be brought back to the Board of Supervisors at each phase of the project for consideration, review, and approval.

DISCUSSION:

On March 31, 2009, the Board of Supervisors acknowledged an award up to \$18 million from the State of California Corrections Standards Authority for the construction of a 60-Bed Juvenile Youth Treatment Facility and directed staff to negotiate a contract with the State to build the Juvenile Youth Treatment Facility (YTF) with funds under the Department of Corrections 2007 Youthful Offender Rehabilitative Facility Construction Funding Program (SB-81).

In March, 2009, the Board of Supervisors also accepted the Juvenile Justice Facilities Master Plan, created in collaboration between the Chief Executive Office, the Probation Department, and consultant, Daniel C. Smith & Associates, Inc. The Juvenile Justice Facilities Master Plan provides the County with a road map to guide the planning of its juvenile detention housing and support facilities for the next three decades, through year 2038. The intent of the Plan was to a) establish a Youth Treatment Facility (YTF) to house and rehabilitate court-committed juveniles, for which there are currently no dedicated facilities; b) to successfully secure State funding available through SB81 to fund the first phase of the YTF's construction; and, c) to establish a plan to solve the County's short and long-term juvenile detention bed needs through year 2038.

Approval of Matters Related to the Juvenile Commitment Center Construction Project Including: Using the Juvenile Justice Facilities Master Plan as Accepted by the Board of Supervisors in March of 2009 as the Plan Required by the State Corrections Standards Authority for Funding Under the Department of Corrections 2007 Local Youthful Offender Rehabilitative Facility Construction Funding Program (SB 81); and Approval of the Mitigated Negative Declaration Pursuant to the California Environmental Quality Act (CEQA) for the Project

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The Board of Supervisors also authorized staff to release Requests for Proposal (RFP's) for professional services including Architect, Surveyor, Soils Engineer, Phase I Environmental review, and required Property Appraisal for the project. The original projected cost for construction of the new Juvenile Youth Treatment Facility was estimated to be \$24.1 million.

Today's Recommended Actions

Approval of Staffing Plan and Operational Analysis

At the time the County submits its design development plans and specifications for State review and approval for the 60 bed commitment facility, it must also submit a preliminary staffing plan, along with an analysis of other anticipated operating costs for the facility over a 30-year life cycle. To meet this requirement, the County has submitted the Juvenile Justice Facilities Master Plan to the State for their initial review. The Corrections Standards Authority has determined that the preliminary staffing plan complies with regulations, and now the Board of Supervisors must approve its use as the staffing and operating cost analysis for the 30 year lifecycle.

At this time, the Chief Executive Officer is recommending the Board of Supervisors approve using the 30-year staffing and operational cost plan as detailed in the March 20, 2009 Juvenile Justice Facilities Master Plan Summary.

Environmental Review

Pursuant to the California Environmental Quality Act (CEQA), the proposed project was circulated to all interested parties and responsible agencies, including the State Clearinghouse, for review and comment. The Initial Study evaluated a variety of potential impacts from the proposed project related to noise, traffic, lighting, air quality, cultural resources, hydrology and other issues. A traffic analysis was prepared by KD Anderson & Associates and circulated with the Initial Study. Seven (7) mitigation measures are proposed which reduce any potentially significant impacts to a less than significant level. A comment was received from the Modesto Irrigation District (MID) regarding construction related requirements as they relate to existing overhead and underground electrical facilities. (See Attachment 1) MID requested coordination with their Electrical Engineering Department prior to construction of the Commitment Center to ensure that existing MID facilities are protected, relocated, expanded or removed as necessary. These are standard conditions for construction and do not require additional environmental consideration. As such, a Mitigated Negative Declaration is being recommended for adoption. A Notice of Intent to Adopt a Mitigated Negative

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Declaration was posted with the Clerk-Recorder on December 23, 2010. Based on the Initial Study, and the entire record, staff recommends the Board take the following actions:

- Adopt the Mitigated Negative Declaration pursuant to CEQA Guidelines Section 15074(b), by finding that on the basis of the whole record, including the Initial Study and any comments received, that there is no substantial evidence the project will have a significant effect on the environment and that the Mitigated Negative Declaration reflects Stanislaus County's independent judgment and analysis. (See Attachment 2)
- Adopt the Mitigation Monitoring Plan pursuant to CEQA Guidelines Section 15074(d). (See Attachment 3)
- Order the filing of a Notice of Determination with the Stanislaus County Clerk-Recorders Office pursuant to Public Resources Code Section 21 152 and CEQA Guidelines Section 15075.

POLICY ISSUES:

Approval of this action supports the Board's priority of A Safe Community and Efficient Delivery of Public Services.

STAFFING IMPACTS:

Current Capital projects staff working in collaboration with the Probation Department will continue to implement the project.

CONTACT PERSON:

Patricia Hill Thomas, Chief Operations Officer. Telephone: 209-525-6333

Jerry Powers, Chief Probation Officer. Telephone 209-525-5400

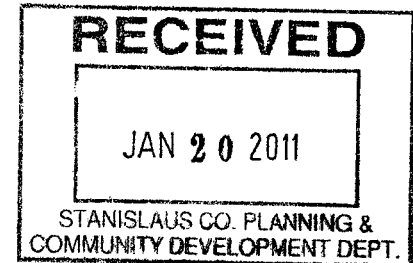
Kirk Ford, Director of Planning and Community Development. Telephone 209-525-6330

ATTACHMENTS AVAILABLE
FROM YOUR CLERK

Attachment 1

January 18, 2011

Stanislaus County
Department Of Planning & Community Development
1010 10th St Ste 3400
Modesto, CA 95354-0868



**RE: CEQA – Juvenile Hall Commitment Center
APN: 081-012-006**

Thank you for allowing the District to comment on this referral. Following are the recommendations from our Risk & Property, Electrical, Irrigation and Domestic Water Divisions:

Irrigation/ Domestic Water/Risk & Property

- No comments at this time.

Electrical

- Please refer to M.I.D.'s previous response provided on 09/29/1997, for location of M.I.D.'s existing electric facilities and comments, which include:
- In conjunction with related site improvement requirements, existing overhead electric facilities within or adjacent to the proposed project shall be protected, relocated, or removed as required by the District's Electric Engineering Department. Appropriate easements for electric facilities shall be granted as required.
- The proposed expansion may not be located over existing underground electric facilities. Underground electric facilities under the proposed expansion will be required to be relocated.
- Costs for relocation and/or under grounding the District's facilities at the request of others will be borne by the requesting party. Estimates for relocating or under grounding existing facilities will be supplied upon request.
- Existing electric service to the project site may not be adequate to serve the proposed load additions. Customer should contact the District's Electric Engineering Department to arrange for electric service for the proposed project.

- Contractor shall verify actual depth and location of all underground utilities prior to start of construction. Notify "Underground Service Alert" (USA) (Toll Free 800-227-2600) before trenching, grading, excavating, drilling, pipe pushing, tree planting, post-hole digging, etc. USA will supply information or mark location of any underground facilities.

The Modesto Irrigation District reserves its future rights to utilize its property, including its canal and electrical easements and rights-of-way, in a manner it deems necessary for the installation and maintenance of electric, irrigation, agricultural and urban drainage, domestic water and telecommunication facilities. These needs, which have not yet been determined, may consist of poles, crossarms, wires, cables, braces, insulators, transformers, service lines, open channels, pipelines, control structures and any necessary appurtenances, as may, in District's opinion, be necessary or desirable.

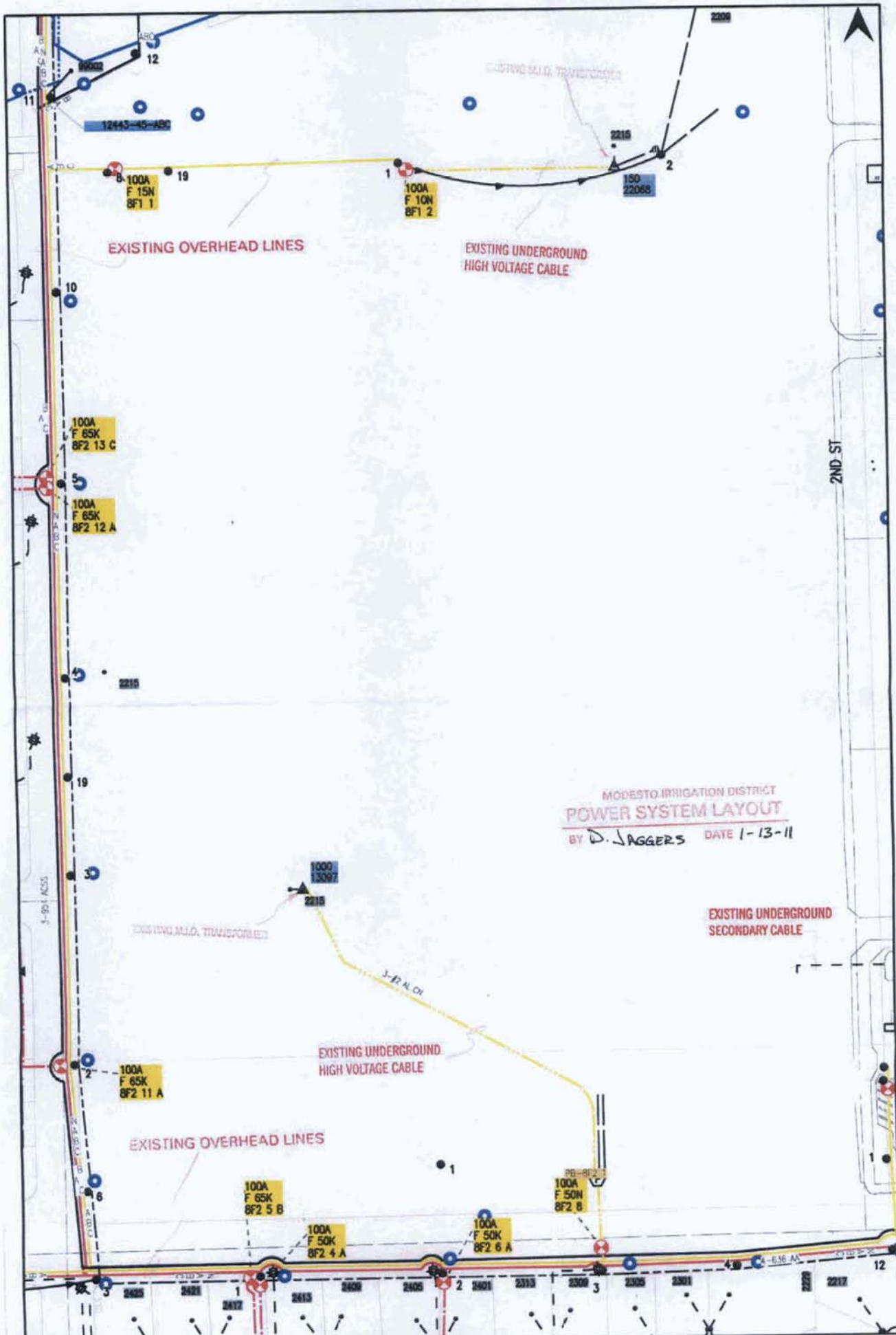
If you have any questions, please contact me at 526-7433.

Sincerely,



Celia Aceves
Risk & Property Analyst

Xc: File



MODESTO IRRIGATION DISTRICT
POWER SYSTEM LAYOUT
 BY D. JAGGERS DATE 1-13-11

EXISTING UNDERGROUND
 SECONDARY CABLE

Attachment 2

MITIGATED NEGATIVE DECLARATION

NAME OF PROJECT: Juvenile Hall Commitment Center

LOCATION OF PROJECT: 2215 Blue Gum Avenue, in the City of Modesto. (APN: 081-012-006)

PROJECT DEVELOPER: Stanislaus County
1010 10th Street
Modesto, CA 95354

DESCRIPTION OF PROJECT: This is a request to construct a new 60-bed, 38,800 square foot "Juvenile Commitment Facility" on a 34.4± acre County-owned property located directly adjacent to the County's existing Juvenile Justice Center at 2215 Blue Gum Avenue, in the City of Modesto.

Based upon the Initial Study, dated **December 21, 2010**, the Environmental Coordinator finds as follows:

1. This project does not have the potential to degrade the quality of the environment, nor to curtail the diversity of the environment.
2. This project will not have a detrimental effect upon either short-term or long-term environmental goals.
3. This project will not have impacts which are individually limited but cumulatively considerable.
4. This project will not have environmental impacts which will cause substantial adverse effects upon human beings, either directly or indirectly.

The aforementioned findings are contingent upon the following mitigation measures (if indicated) which shall be incorporated into this project:

1. *All exterior lighting shall be designed (aimed down and toward the site) to provide adequate illumination without a glare effect. The County will work with the City of Modesto to ensure that design, lighting, and landscape standards are appropriate for the location.*
2. *Construction of the project shall comply with standardized dust controls adopted by the San Joaquin Valley Air Pollution Control District.*
3. *During the construction phases of the project, if any human remains, or significant or potentially unique objects are found, all construction activities in the area shall cease until a qualified archeologist can be consulted. Construction activities shall not resume in the area until an on-site archeological mitigation program has been approved by a qualified archaeologist.*
4. *A Grading and Drainage Plan with engineering calculations shall comply with State of California or City of Modesto's Standards and be approved or found to be acceptable prior to issuance of any building construction. The plan shall be implemented prior to final and/or occupancy of the first building to be constructed.*

Juvenile Hall Commitment Center
Mitigated Negative Declaration
Page 2

5. *Construction and operation of the new facility shall comply with the City of Modesto Noise Element*
6. *Stanislaus County will dedicate adequate right-of-way to widen Blue Gum Avenue as required.*
7. *Improvements to 2nd Street will be made, at a minimum, to County standards within the County property prior to occupancy of the Juvenile Hall Commitment Center.*

The Initial Study and other environmental documents are available for public review at the Department of Planning and Community Development, 1010 10th Street, Suite 3400, Modesto, California.

Initial Study prepared by: Bill Carlson, Senior Planner

Submit comments to: Stanislaus County
Planning and Community Development Department
1010 10th Street, Suite 3400
Modesto, California 95354

Attachment 3

Stanislaus County

Planning and Community Development

1010 10th Street, Suite 3400
Modesto, CA 95354

Phone: (209) 525-6330
Fax: (209) 525-5911

Mitigation Monitoring Plan

Adapted from CEQA Guidelines sec. 15097 Final Text, October 26, 1998

December 21, 2010

1. Project title and location: Juvenile Hall Commitment Center
2215 Blue Gum Avenue, in the City of Modesto.
(APN: 081-012-006)
2. Project Applicant name and address: Stanislaus County
1010 10th Street
Modesto, CA 95354
3. Person Responsible for Implementing Mitigation Program (Applicant Representative): Patricia Hill Thomas
Chief Operations Officer/Project Manager
4. Contact person at County: Bill Carlson, Senior Planner, (209) 525-6330

MITIGATION MEASURES AND MONITORING PROGRAM:

List all Mitigation Measures by topic as identified in the Mitigated Negative Declaration and complete the form for each measure.

I. AESTHETICS

- No. 1 Mitigation Measure: All exterior lighting shall be designed (aimed down and toward the site) to provide adequate illumination without a glare effect. The County will work with the City of Modesto to ensure that design, lighting, and landscape standards are appropriate for the location.

| | |
|---|--|
| Who Implements the Measure: | Applicant |
| When should the measure be implemented: | Prior to issuance of a building permit |
| When should it be completed: | Upon completion of construction/continuous |
| Who verifies compliance: | Stanislaus County Capital Projects |
| Other Responsible Agencies: | Stanislaus County Planning Department, City of Modesto Planning Department |

III. AIR QUALITY

- No. 2 Mitigation Measure: Construction of the project shall comply with standardized dust controls adopted by the San Joaquin Valley Air Pollution Control District.

| | |
|---|--------------------------------------|
| Who Implements the Measure: | Applicant |
| When should the measure be implemented: | At any time construction takes place |
| When should it be completed: | Upon completion of construction |

Who verifies compliance: Stanislaus County Capital Projects
Other Responsible Agencies: Stanislaus County Planning Department, City of Modesto Planning Department

V. CULTURAL RESOURCES

No. 3 Mitigation Measure: During the construction phases of the project, if any human remains, or significant or potentially unique objects are found, all construction activities in the area shall cease until a qualified archeologist can be consulted. Construction activities shall not resume in the area until an on-site archeological mitigation program has been approved by a qualified archaeologist.

Who Implements the Measure: Applicant
When should the measure be implemented: At any time construction takes place
When should it be completed: Upon completion of construction
Who verifies compliance: Stanislaus County Capital Projects
Other Responsible Agencies: Stanislaus County Planning Department and Building Permits Division, City of Modesto Planning Department

IX. HYDROLOGY AND WATER QUALITY

No. 4 Mitigation Measure: A Grading and Drainage Plan with engineering calculations shall comply with State of California or City of Modesto's Standards and be approved or found to be acceptable prior to issuance of any building construction. The plan shall be implemented prior to final and/or occupancy of the first building to be constructed.

Who Implements the Measure: Applicant
When should the measure be implemented: At any time construction takes place
When should it be completed: Upon completion of construction
Who verifies compliance: Stanislaus County Capital Projects
Other Responsible Agencies: Stanislaus County and City of Modesto Departments of Public Works

XII. NOISE

No. 5 Mitigation Measure: Construction and operation of the new facility shall comply with the City of Modesto Noise Element.

Who Implements the Measure: Applicant
When should the measure be implemented: Ongoing
When should it be completed: Ongoing

Who verifies compliance: Stanislaus County Capital Projects
Other Responsible Agencies: Stanislaus County Planning Department, City of Modesto Planning Department

XVI. TRANSPORTATION/TRAFFIC

No. 6 Mitigation Measure: Stanislaus County will dedicate adequate right-of-way to widen Blue Gum Avenue as required.

Who Implements the Measure: Applicant
When should the measure be implemented: Prior to construction
When should it be completed: Contiguous with construction of the project
Who verifies compliance: Stanislaus County Capital Projects
Other Responsible Agencies: Stanislaus County Department of Public Works, Stanislaus County Planning Department, City of Modesto Planning Department

No. 7 Mitigation Measure: Improvements to 2nd Street will be made, at a minimum, to County standards within the County property prior to occupancy of the Juvenile Hall Commitment Center.

Who Implements the Measure: Applicant
When should the measure be implemented: Contiguous with construction of the project
When should it be completed: At project completion
Who verifies compliance: Stanislaus County Capital Projects
Other Responsible Agencies: Stanislaus County Department of Public Works, Stanislaus County Planning Department, City of Modesto Planning Department

I, the undersigned, do hereby certify that I understand and agree to be responsible for implementing the Mitigation Program for the above listed project.

Signature on file _____
Person Responsible for Implementing
Mitigation Program

December 22, 2010 _____
Date



CEQA Referral Initial Study and Notice of Intent to Adopt a Mitigated Negative Declaration

Date: December 23, 2010
To: Distribution List (See Attachment A)
From: Planning and Community Development
Subject: JUVENILE HALL COMMITMENT CENTER
Comment Period: December 23, 2010 - January 24, 2011
Respond By: January 24, 2011
Public Hearing Date: January 25, 2011

You may have previously received an Early Consultation Notice regarding this project, and your comments, if provided, were incorporated into the Initial Study. Based on all comments received, Stanislaus County anticipates adopting a Mitigated Negative Declaration for this project. This referral provides notice of a 30-day comment period during which Responsible and Trustee Agencies and other interested parties may provide comments to this Department regarding our proposal to adopt the Mitigated Negative Declaration.

All applicable project documents are available for review at: Stanislaus County Department of Planning and Community Development, 1010 10th Street, Suite 3400, Modesto, CA 95354. Please provide any additional comments to the above address or call us at (209) 525-6330 if you have any questions. Thank you.

Applicant: Stanislaus County
Project Location: 2215 Blue Gum Avenue, in the City of Modesto.
APN: 081-012-006
Williamson Act Contract: N/A
General Plan: RPD (Redeveloped Planning District)
Zoning: R-3 (Medium High Density Residential)

Project Description: This is a request to construct a new 60-bed, 38,800 square foot "Juvenile Commitment Facility" on a 34.4± acre County-owned property located directly adjacent to the County's existing Juvenile Justice Center at 2215 Blue Gum Avenue, in the City of Modesto. A more detailed project description is available in the Initial Study and its attachments.

Full document with attachments available for viewing at:
<http://www.stancounty.com/planning/pl/act-projects.shtm>

I:\Planning\Staff Reports\Juvenile Hall Commitment Center\CEQA-30-day-referral.wpd

JUVENILE HALL COMMITMENT CENTER

Attachment A

Distribution List

| | | | |
|---|---|---|---|
| X | AGRICULTURE COMMISSIONER | | NATURAL RESOURCES CONSERVATION |
| | AIRPORT LAND USE COMMISSION | X | PACIFIC GAS & ELECTRIC |
| | ALLIANCE | X | PARKS & FACILITIES |
| | ANIMAL SERVICES | X | PROBATION |
| X | BUILDING PERMITS DIVISION - STEVE TREAT | X | PUBLIC WORKS - ANGIE HALVERSON |
| X | CAL TRANS DISTRICT 10 | X | PUBLIC WORKS - DAVID LEAMON |
| | CEMETERY DISTRICT | | RAILROAD |
| | CENTRAL VALLEY FLOOD PROTECTION | X | REDEVELOPMENT: MODESTO |
| X | CHIEF EXECUTIVE OFFICE | | REGIONAL WATER QUALITY CONTROL |
| X | CITY OF: MODESTO | X | RISK MANAGEMENT |
| | COMMUNITY SERVICES AGENCY (CSA) | X | SAN JOAQUIN VALLEY APCD |
| | COMMUNITY SERVICES / SANITARY DIST | X | SCHOOL DIST 1: HART-RANSOM |
| X | COOPERATIVE EXTENSION | X | SCHOOL DIST 2: MODESTO |
| | CORPS OF ENGINEERS | X | SHERIFF |
| X | COUNTY COUNSEL | | StanCOG |
| | COUNTY OF: | X | STAN CO ERC |
| | DEPARTMENT OF CONSERVATION Land Resources / Mine Reclamation | | STAN CO FARM BUREAU |
| | DEPT OF FORESTRY | X | STANISLAUS FIRE PREVENTION BUREAU |
| X | ENVIRONMENTAL RESOURCES | X | STATE CLEARINGHOUSE |
| X | FIRE PROTECTION DIST: MODESTO | | STATE LANDS COMMISSION |
| | FISH & GAME | X | SUPERVISOR DIST 3: GROVER |
| X | HAZARDOUS MATERIALS | | SURROUNDING LAND OWNERS <i>(on file w/the Clerk to the Board of Supervisors)</i> |
| | HOSPITAL DIST: | X | TELEPHONE COMPANY: AT&T |
| X | IRRIGATION DIST: MODESTO | | TRIBAL CONTACTS |
| X | LAFCO | | TUOLUMNE RIVER TRUST |
| X | MOSQUITO DIST: EASTSIDE | X | UNITED STATES MILITARY AGENCIES (SB 1462) (5 AGENCIES) |
| X | MOUNTAIN VALLEY EMERGENCY MEDICAL SERVICES | | US FISH & WILDLIFE |
| | MUNICIPAL ADVISORY COUNCIL: | | WATER DIST: |

**STANISLAUS COUNTY
CEQA REFERRAL RESPONSE FORM**

TO: Stanislaus County Planning & Community Development
1010 10th Street, Suite 3400
Modesto, CA 95354

FROM: _____

PROJECT: JUVENILE HALL COMMITMENT CENTER

Based on this agency's particular field(s) of expertise, it is our position the above described project:

- Will not have a significant effect on the environment.
- May have a significant effect on the environment.
- No Comments.

Listed below are specific impacts which support our determination (e.g., traffic general, carrying capacity, soil types, air quality, etc.) - (attach additional sheet if necessary)

- 1.
- 2.
- 3.
- 4.

Listed below are possible mitigation measures for the above-listed impacts *PLEASE BE SURE TO INCLUDE WHEN THE MITIGATION OR CONDITION NEEDS TO BE IMPLEMENTED (PRIOR TO RECORDING A MAP, PRIOR TO ISSUANCE OF A BUILDING PERMIT, ETC.):*

- 1.
- 2.
- 3.
- 4.

In addition, our agency has the following comments (attach additional sheets if necessary).

Response prepared by:

Name Title Date



Stanislaus County Planning and Community Development

1010 10th Street, Suite 3400
Modesto, California 95354

Phone: (209) 525-6330
Fax: (209) 525-5911

CEQA INITIAL STUDY

Adapted from CEQA Guidelines APPENDIX G Environmental Checklist Form, Final Text, December 30, 2009

1. **Project title:** Juvenile Hall Commitment Center
2. **Lead agency name and address:** Stanislaus County
1010 10th Street, Suite 3400
Modesto, CA 95354
3. **Contact person and phone number:** Bill Carlson, Senior Planner
(209) 525-6330
4. **Project location:** 2215 Blue Gum Avenue, in the City of Modesto.
(APN: 081-012-006)
5. **Project sponsor's name and address:** Stanislaus County
1010 10th Street
Modesto, CA 95354
6. **General Plan designation:** RPD (Redeveloped Planning District)
7. **Zoning:** R-3 (Medium High Density Residential)
8. **Description of project:**

This is a request to construct a new 60-bed, 38,800 square foot "Juvenile Commitment Facility" on a 34.4± acre County-owned property located directly adjacent to the County's existing Juvenile Justice Center at 2215 Blue Gum Avenue. The existing Juvenile Justice Center is the location of the Juvenile Probation and Probation Administration functions, Juvenile Courts operated by the Superior Court of California, and the Juvenile Hall.

The existing Juvenile Hall contains 158 beds and services for youth committed to custody which may be pending court proceedings, awaiting adjudication, or after sentencing. At the present time, a number of factors including space availability, length of commitment term, type and severity of offense are considered in determining whether a sentenced youth is held in custody at the Stanislaus County Juvenile Hall or transferred to the California Youth Authority outside of Stanislaus County or to other care services.

The proposed facility will contain several elements to support the sentenced youth in custody including secure living and sleeping spaces, day rooms, staff work areas, education and vocational training rooms, indoor gymnasium and outdoor recreation areas, security control, visitation and building support facilities. The project will be built in two phases. The first phase will be a 38,800 square foot building with 60 new beds. Access to the site will use existing access on Blue Gum and 2nd Street. A new 60-space parking lot will be constructed adjacent to 2nd Street. A new kitchen facility will be included to support the existing Juvenile Hall and new Juvenile Commitment Center, replacing the smaller kitchen within the existing Juvenile Hall. The existing laundry facilities at the Juvenile Hall will accommodate the needs of both the existing and new facilities. New administrative offices, multi-purpose rooms, and classrooms for the facility are also proposed.

The Second Phase will consist of an additional 120 beds and would be located to the north of Phase 1, with the proposed facility including parking for staff, visitors, and deliveries.

The Phase 1 expansion will result in a total capacity in the Commitment Center and Juvenile Hall of 218 beds. It is likely, from an operational standpoint, that some of the population from the existing Juvenile Hall will be transferred in to the new facility and initial staffing increases may not be necessary. At maximum capacity, however, with full utilization of all 218 beds, approximately 10 additional staff will be required during the day shift, 5 additional staff for the evening shift, and 4 additional staff for the graveyard shift.

Because the site is within the City limits, water, sewer, police, and fire protection services will be provided by the City of Modesto.

The complete project description is attached to this document.

- 9. Surrounding land uses and setting:** The site is bounded by residential development to the west and south, the MID Lateral No. 23 and alfalfa fields to the north, and the Modesto Junior College campus to the east.
- 10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):** City of Modesto
State of California

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture & Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology /Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials | <input checked="" type="checkbox"/> Hydrology / Water Quality |
| <input type="checkbox"/> Land Use / Planning | <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise |
| <input type="checkbox"/> Population / Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Bill Carlson, Senior Planner

 Prepared By

December 21, 2010

 Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration.

Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

- a) **Earlier Analysis Used.** Identify and state where they are available for review.
 - b) **Impacts Adequately Addressed.** Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) **Mitigation Measures.** For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
 - 7) **Supporting Information Sources:** A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
 - 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
 - 9) The explanation of each issue should identify:
 - a) the significant criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significant.

ISSUES

| I. AESTHETICS -- Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Included | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| a) Have a substantial adverse effect on a scenic vista? | | | X | |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | | | | X |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | | | X | |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | | X | | |
| <p>Discussion: The site itself is not considered to be a scenic resource or a unique scenic vista. The project is in the city limits of Modesto and will be directly adjacent to the existing Juvenile Justice Center and the Modesto Junior College West Campus. The project will not result in any degradation to the existing visual character of the site or surrounding neighborhoods. Building elevations submitted for this project show that the development will be consistent with existing area developments and is in an architectural style that is common in public facilities.</p> <p>Lighting from the facility has the potential to impact adjacent residential neighborhoods although there are no significant impacts from the existing facility. To prevent glare onto neighboring properties, all exterior lighting could be designed (aimed down and toward the site) to provide adequate illumination without a glare effect. This can include but not be limited to: the use of shielded light fixtures to prevent sky glow (light spilling into the night sky) and the installation of shielded fixtures to prevent light trespass (glare and spill light that shines onto neighboring properties).</p> | | | | |
| <p>Mitigation:</p> <p>1. All exterior lighting shall be designed (aimed down and toward the site) to provide adequate illumination without a glare effect. The County will work with the City of Modesto to ensure that design, lighting, and landscape standards are appropriate for the location.</p> | | | | |
| <p>References: Stanislaus County General Plan and Support Documentation¹.</p> | | | | |
| | | | | |
| II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. – Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Included | Less Than Significant Impact | No Impact |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | | | X | |

| | | | | |
|--|--|--|---|--|
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | | | X | |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | | | X | |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | | | X | |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | | | X | |

Discussion: The project site is not agricultural and is not enrolled in the Williamson Act. The site is urbanized and is directly adjacent to the County's existing Juvenile Justice Center and the Modesto Junior College West Campus. The project site is made up of Class 2 Modesto loam soils with 0-1 percent slope. There is some limited agricultural production on parcels located to the north of the site; however, because of its location, this project will have limited, if any, impacts on agricultural resources.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation¹; and Soil Survey, Eastern Stanislaus Area, Soil Conservation Service, California, September 1964.



| III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Included | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | | | X | |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | | | X | |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | | X | | |
| d) Expose sensitive receptors to substantial pollutant concentrations? | | | X | |
| e) Create objectionable odors affecting a substantial number of people? | | | X | |

Discussion: The project site is within the San Joaquin Valley Air Basin, which has been classified as "severe non-attainment" for ozone and respirable particulate matter (PM-10) as defined by the Federal Clean Air Act. The San Joaquin Valley Air Pollution Control District (SJVAPCD) has been established by the State in an effort to control and minimize air pollution. As such, the District maintains permit authority over stationary sources of pollutants.

The primary source of air pollutants generated by this project would be classified as being generated from "mobile" sources. Mobile sources would generally include dust from roads, farming, and automobile exhausts. Mobile sources are generally regulated by the Air Resources Board of the California EPA which sets emissions for vehicles and acts on issues regarding cleaner burning fuels and alternative fuel technologies. As such, the District has addressed most criteria air pollutants through basin wide programs and policies to prevent cumulative deterioration of air quality within the Basin.

Mitigation:

2. Construction of the project shall comply with standardized dust controls adopted by the San Joaquin Valley Air Pollution Control District.

References: San Joaquin Valley Air Pollution Control District - Regulation VIII Fugitive Dust/PM-10 Synopsis; and the Stanislaus County General Plan and Support Documentation¹.

| IV. BIOLOGICAL RESOURCES -- Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Included | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | | | | X |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? | | | | X |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | | | | X |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | | | | X |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | | | X |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | | | | X |

Discussion: It does not appear this project will result in impacts to endangered species or habitats, locally designated species, or wildlife dispersal or mitigation corridors. The project site has been developed with other government buildings since the 1960s.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation¹; and the California Department of Fish and Game California Natural Diversity Database.

| V. CULTURAL RESOURCES -- Would the project: | | | | |
|---|--------------------------------|--|------------------------------|-----------|
| | Potentially Significant Impact | Less Than Significant With Mitigation Included | Less Than Significant Impact | No Impact |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5? | | | X | |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5? | | | X | |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | | X | |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | | X | | |
| <p>Discussion: It does not appear this project will result in significant impacts to any archaeological or cultural resources. A standard mitigation measure has been added to mitigate the potential impact should any human remains or significant or potentially unique objects be found during construction.</p> <p>Mitigation:</p> <p>3. <i>During the construction phases of the project, if any human remains, or significant or potentially unique objects are found, all construction activities in the area shall cease until a qualified archeologist can be consulted. Construction activities shall not resume in the area until an on-site archeological mitigation program has been approved by a qualified archaeologist.</i></p> <p>References: Stanislaus County General Plan and Support Documentation¹.</p> | | | | |
| VI. GEOLOGY AND SOILS -- Would the project: | | | | |
| | Potentially Significant Impact | Less Than Significant With Mitigation Included | Less Than Significant Impact | No Impact |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | | | | X |
| ii) Strong seismic ground shaking? | | | | X |
| iii) Seismic-related ground failure, including liquefaction? | | | | X |
| iv) Landslides? | | | | X |
| b) Result in substantial soil erosion or the loss of topsoil? | | | | X |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | | | | X |

| | | | | |
|--|--|--|---|---|
| d) Be located on expansive soil, as defined in Table 1804.2 of the California Building Code (2007), creating substantial risks to life or property? | | | | X |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | | | X | |

Discussion: As contained in Chapter 5 of the General Plan Support Documentation, the areas of the County subject to significant geologic hazard are located in the Diablo Range, west of Interstate 5; however, as per the 2007 California Building Code, all of Stanislaus County is located within a geologic hazard zone (Seismic Design Category D, E, or F) and a soils test may be required at building permit application. Results from the soils test will determine if unstable or expansive soils are present. If such soils are present, special engineering of the structure will be required to compensate for the soil deficiency. Any structures resulting from this project will be designed and built according to building standards appropriate to withstand shaking for the area in which they are constructed. Any earth moving is subject to Modesto's Public Works Standards and Specifications which considers the potential for erosion and run-off prior to permit approval. Likewise, any addition of a septic tank or alternative waste water disposal system would require the approval of the Department of Environmental Resources through the building permit process, which also takes soil type into consideration within the specific design requirements.

Mitigation: None.

References: California Building Code (2007); and the Stanislaus County General Plan and Support Documentation - Safety Element¹.



| VII. GREENHOUSE GAS EMISSIONS – Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Included | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | | | X | |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | | | X | |

Discussion: The existing site will not have a significant impact on green house gas emissions and the project will not conflict with any adopted plan for greenhouse emissions.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation¹.



| VIII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Included | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | | | | X |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | | | | X |

| | | | | |
|--|--|--|--|---|
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | | | | X |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | | | | X |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | | | | X |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | | | | X |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | | X |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | | | | X |

Discussion: No known hazardous materials are on-site. Pesticide exposure is a risk in agricultural areas. Sources of exposure include contaminated groundwater which is consumed and drift from spray applications. Application of sprays is strictly controlled by the Agricultural Commissioner and can only be accomplished after first obtaining permits. The County Department of Environmental Resources (DER) is responsible for overseeing hazardous materials in this area.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation¹.



| IX. HYDROLOGY AND WATER QUALITY -- Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Included | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| a) Violate any water quality standards or waste discharge requirements? | | | X | |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | | | X | |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? | | X | | |

| | | | | |
|---|--|---|---|---|
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | | X | | |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | | X | | |
| f) Otherwise substantially degrade water quality? | | | X | |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | | | | X |
| h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | | | | X |
| i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | | | | X |
| j) Inundation by seiche, tsunami, or mudflow? | | | | X |

Discussion: In order to minimize potential impacts related to stormwater and drainage, all storm run-off should be maintained on-site and flow into either existing or new drainage basins that would be designed to meet the new demand. A standard mitigation measure has been added to address this issue. Areas subject to flooding have been identified in accordance with the Federal Emergency Management Act. The project site itself is not located within a recognized flood zone and, as such, flooding is not an issue with respect to this project.

Mitigation:
 4. A Grading and Drainage Plan with engineering calculations shall comply with State of California or City of Modesto's Standards and be approved or found to be acceptable prior to issuance of any building construction. The plan shall be implemented prior to final and/or occupancy of the first building to be constructed.

References: Stanislaus County General Plan and Support Documentation¹.



| X. LAND USE AND PLANNING -- Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Included | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| a) Physically divide an established community? | | | | X |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | | | | X |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | | | | X |

Discussion: The project site is designated in the Modesto General Plan as Redevelopment Project District (RPD) and is zoned Medium High Density Residential (R-3). The proposal is not known to conflict with any State agency or County policy with jurisdiction over the land which would be affected by this proposal. The proposed development is logically situated so as to minimize the disruption to any surrounding agricultural operations and will not conflict with any applicable

habitat conservation plan or natural community conservation plan. This site has been developed for decades and additional development or expansion of uses in the general area would be considered "infill". The facility currently operates as a residential hall for juveniles and has had no significant impacts or land use conflicts on adjacent residential uses. No increased or additional conflicts are expected.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation¹.



| XI. MINERAL RESOURCES -- Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Included | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | | | | X |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | | | | X |

Discussion: The location of all commercially viable mineral resources in Stanislaus County has been mapped by the State Division of Mines and Geology in Special Report 173. There are no known significant resources on the site.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation¹.



| XII. NOISE -- Would the project result in: | Potentially Significant Impact | Less Than Significant With Mitigation Included | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | | X | | |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | | | | X |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | | X | | |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | | | X | |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | | | | X |

| | | | | |
|--|--|--|--|---|
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | | | | X |
|--|--|--|--|---|

Discussion: The proposed project is located within the City limits of the City of Modesto and, as such, must comply with the City of Modesto's Noise Element of their General Plan. The City's Noise Element requires: all new development of noise-sensitive land uses not be permitted in noise-impacted areas unless effective mitigation measures are incorporated into the project design to reduce noise levels. The standards laid out within the Noise Element document allow a maximum hourly Leq, and dBA noise exposure for stationary sources for daytime hours and nighttime hours. To date, there have been no known issues related to operation of the existing facility related to excessive noise and it is unlikely that the new facility will be any different. Construction activities have the potential to result in minor noise impacts to the adjacent residential neighborhoods.

Mitigation:
5. Construction and operation of the new facility shall comply with the City of Modesto Noise Element.

References: City of Modesto General Plan; and the Stanislaus County General Plan and Support Documentation¹.



| XIII. POPULATION AND HOUSING -- Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Included | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | | | | X |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | | | | X |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | | | | X |

Discussion: The proposed use of the site will not create significant service extensions or new infrastructure that could be considered growth inducing. No housing or persons will be displaced by the project.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation¹.



| XIV. PUBLIC SERVICES | Potentially Significant Impact | Less Than Significant With Mitigation Included | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | X | |
| Fire protection? | | | X | |

| | | | | |
|--------------------------|--|--|---|---|
| Police protection? | | | X | |
| Schools? | | | | X |
| Parks? | | | | X |
| Other public facilities? | | | X | |

Discussion: The Juvenile Hall Commitment Center is an expansion of an existing public safety facility and, as such, will have an overall positive impact on public safety services. Fire protection is currently provided by the City of Modesto and no increases in the level of service requirements are expected. There will also be no impact to schools, parks, or other government services with this project.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation¹.



| XV. RECREATION -- | Potentially Significant Impact | Less Than Significant With Mitigation Included | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | | | | X |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | | | | X |

Discussion: The proposed project will not increase significant demands on recreational facilities; as such, no impacts are associated with the proposed project.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation¹.



| XVI. TRANSPORTATION/TRAFFIC -- Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Included | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | | X | | |
| b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? | | | X | |

| | | | | |
|--|--|--|---|--|
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | | | X | |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | X | |
| e) Result in inadequate emergency access? | | | X | |
| f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? | | | X | |

Discussion: A traffic impact analysis was conducted by KD Anderson in May of 2010. Phase 1 of this project is projected to generate approximately 40 and 34 new trips in the a.m. and p.m. peak traffic hours, respectively. Development of Phase 2 is projected to generate an additional 80 a.m. peak trips and 68 p.m. peak trips. The existing Level of Service in the area is at a Level of Service (LOS) "A" to "C". At full build-out, the LOS is still at "A" and "B" except that the southbound approach of Blue Gum Avenue and 4th Street will increase to a LOS "D". Satisfactory intersection and roadway operations are currently experienced in the study area. With the addition of project generated traffic (phase 1 and Phase 2) added to current background traffic, satisfactory intersection and roadway operations are projected to continue. The stop sign controlled study intersections are projected to continue to operate satisfactorily and will not warrant signalization. The project as proposed will not result in any significant impact to the State Highway system.

The analysis also suggests that although 2nd Street traffic volumes are projected to remain relatively low, 2nd Street could be improved to meet City Standards to facilitate truck access to the site. Also, the report suggests a pavement overlay be installed north of the college access driveway, as the existing pavement condition is very poor.

The City of Modesto provided comments to the traffic analysis and suggested modifications to the proposed dedications and improvements suggested in the traffic analysis. A Memorandum between the County and City was completed on November 18, 2010, which defines specific actions the County will take in order to minimize traffic impacts (attached).

In accordance with the Memorandum, Stanislaus County will dedicate the right-of-way to widen Blue Gum Avenue as required. Construction of the improvements related to impacts created by Stanislaus County to Blue Gum Avenue including curb, gutter, sidewalk, drainage, and street lights will be deferred and set as a requirement for any future County development projects and/or traffic generating expansions at the site.

Stanislaus County will retain 2nd Street as a private roadway and will work with other users of the roadway to rename 2nd Street so as not to continue duplication of other road names within the City Limits. Improvements to the private 2nd Street roadway will be made, at a minimum, to County Standards within the County property prior to occupancy of the Juvenile Hall Commitment Center.

Stanislaus County also agreed to work with Yosemite Community College District and the City of Modesto to collectively find traffic solutions to address the challenges posed by the continued growth and expansion of the campus area.

Mitigation:

- 6. Stanislaus County will dedicate adequate right-of-way to widen Blue Gum Avenue as required.
- 7. Improvements to 2nd Street will be made, at a minimum, to County standards within the County property prior to occupancy of the Juvenile Hall Commitment Center.

References: KD Anderson Traffic Impact Analysis dated May 20, 2010; memo from Stanislaus County Chief Executive Office dated November 18, 2010; and the Stanislaus County General Plan and Support Documentation¹.



| XVII. UTILITIES AND SERVICE SYSTEMS -- Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Included | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | | | X | |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | | X |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | | X |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | | | X | |
| e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | | | | X |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | | | | X |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | | | X | |
| <p>Discussion: Limitations on providing services have not been identified. The site will be served by the City of Modesto for both water and waste water.</p> | | | | |
| <p>Mitigation: None.</p> | | | | |
| <p>References: Stanislaus County General Plan and Support Documentation¹.</p> | | | | |
| | | | | |
| XVIII. MANDATORY FINDINGS OF SIGNIFICANCE -- | Potentially Significant Impact | Less Than Significant With Mitigation Included | Less Than Significant Impact | No Impact |
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | | | | X |

| | | | | |
|---|--|---|---|--|
| <p>b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</p> | | | X | |
| <p>c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p> | | X | | |
| <p>Discussion: Any potential project issues with aesthetics, air quality, cultural resources, water quality, noise, and traffic impacts have been mitigated to a less than significant level for the proposed project. Review of this project has not indicated any features which might significantly impact the environmental quality of the site and/or the surrounding area.</p> | | | | |

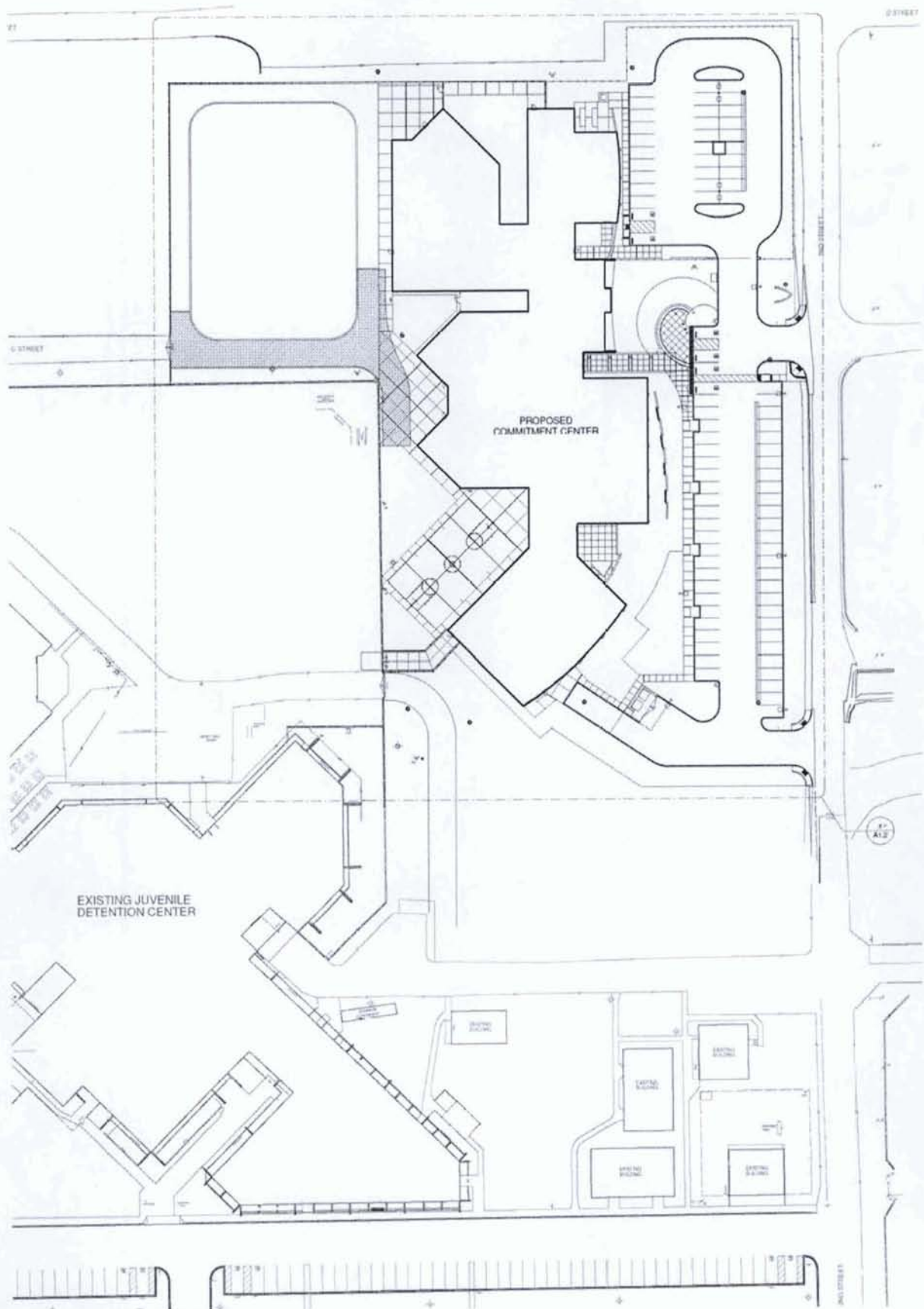
I:\Planning\Staff Reports\Juvenile Hall Commitment Center\revised Initial Study.wpd

- Attachments:
- Attachment 1 - Site plans and maps
 - Attachment 2 - Project Description
 - Attachment 3 - Memo from Stanislaus County Chief Executive Office dated November 18, 2010
 - Attachment 4 - Traffic Impact Analysis

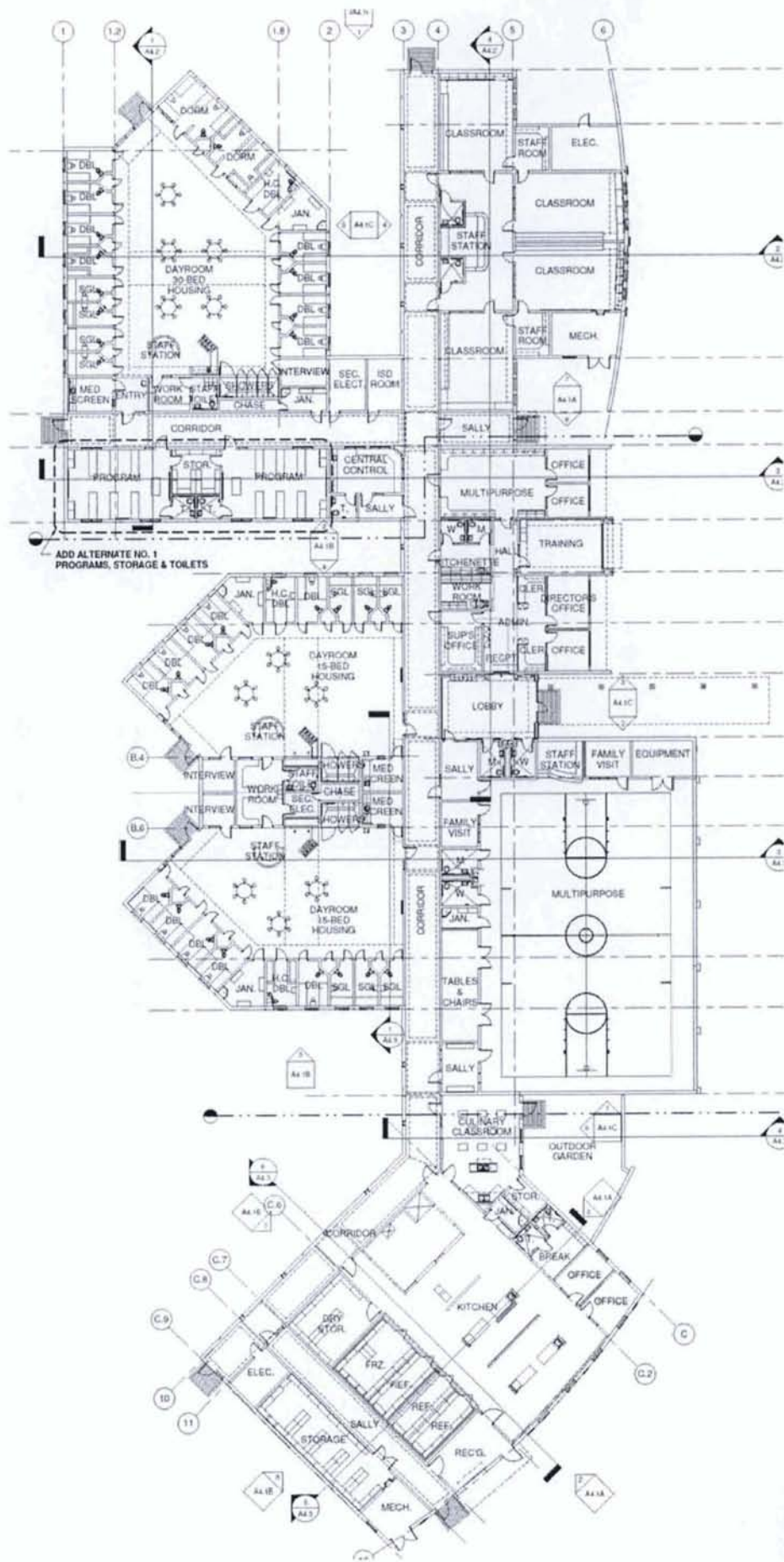
¹Stanislaus County General Plan and Support Documentation adopted in October 1994, as amended. Optional and updated elements of the General Plan and Support Documentation: **Agricultural Element** adopted on December 18, 2007; **Housing Element** adopted on April 20, 2010 and pending certification by the California Department of Housing and Community Development; **Circulation Element** and **Noise Element** adopted on April 18, 2006.

Juvenile Commitment Center Site Map





Site Plan










ADD ALTERNATE NO. 1 PROGRAMS, STORAGE & TOILETS

Floor Plan



COLOR KEY:

-  HOUSING
-  CLASSROOMS
-  INDOOR REC/ PROGRAMS, VISITATION
-  ADMINISTRATION, STAFF SUPPORT
-  FOOD SERVICE
-  UTILITIES, STORAGE
-  CIRCULATION

OVERALL PLAN

STANISLAUS COUNTY JUVENILE COMMITMENT CENTER

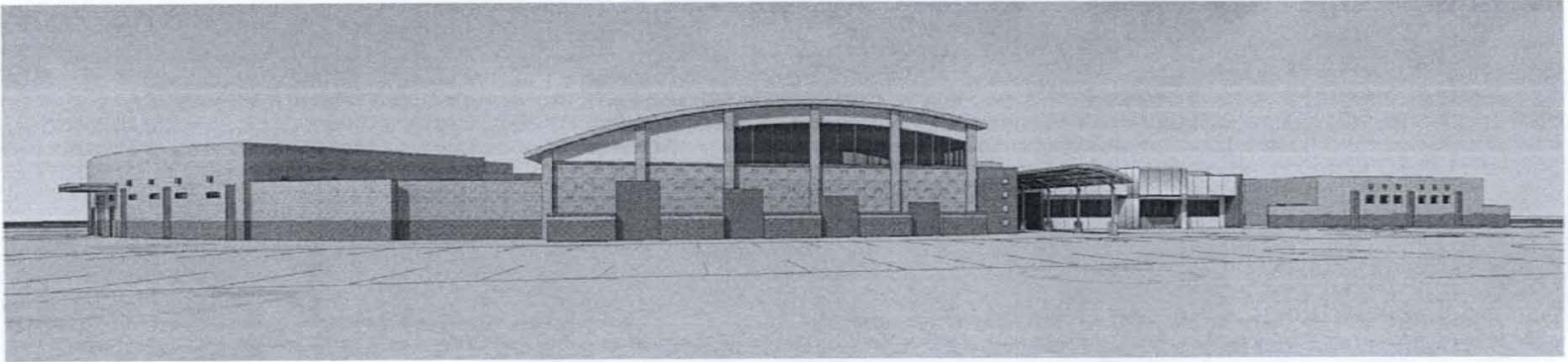
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#29174

06/14/2010

Juvenile Commitment Facility Rendering



JUVENILE COMMITMENT CENTER PROGRAM DESCRIPTION

Stanislaus County proposes to develop a facility for the secure housing, training and mentoring of local youth that have been sentenced by the Courts. This new “Juvenile Commitment Facility” would be located directly adjacent to the County’s existing Juvenile Justice Center at 2215 Blue Gum Avenue on existing County property designated for expansion of the Juvenile Hall. The existing Juvenile Justice Center is the location of the Juvenile Probation and Probation Administration functions, Juvenile Courts operated by the Superior Court of California and the Juvenile Hall.

The existing Juvenile Hall contains 158 beds and services for youth committed to custody which may be pending court proceedings, awaiting adjudication or after sentencing. At the present time, a number of factors, including space availability, length of commitment term, type and severity of offense are considered in determining whether a sentenced youth is held in custody at the Stanislaus County Juvenile Hall, transferred to the California Youth Authority outside of Stanislaus County or to other care services.

The State of California has recognized that the placement of local sentenced youth outside of their home communities restrains the ability for their families to visit and participate in the rehabilitation and assistance of these wards insofar as creating a normalized family environment – a key factor in a many juvenile delinquencies. When youth remain in their home communities their families have greater access to visitation, counseling and normalization of their home environments resulting in a significantly greater opportunity to rehabilitate troubled youth and reduce recidivism and future returns to custody. By creating local facilities for sentenced youth, the State could also provide the needed capacity to accommodate growth in the California Youth Authority system and provide greater benefit to the committed juveniles and their families.

The State passed Senate Bill 81 to provide grant funds to counties for the development of Juvenile Commitment Facilities. Stanislaus County applied for and received an award of \$18 million toward the cost of a \$24 million, 60 bed facility of approximately 47,200 square feet with future, long-term expansion capability. The grant application proposed use of approximately 4 acres of the existing Juvenile Justice Center site at 2215 Blue Gum Avenue in Modesto for this initial 60 bed Juvenile Commitment Center project adjacent to and accessed by an existing private driveway (also referred to as “Second Street”) at the eastern border of the site. This site was identified for several reasons:

1. The Juvenile Commitment Center project could be logically connected to the existing Juvenile Justice Center facilities by a walkway and corridor;
2. The proposed Juvenile Commitment Center site compliments the master plan for the future growth of the Juvenile Hall and does not preclude the development of long-term capacity increase as originally envisioned when the Center was originally planned;
3. The location of the Juvenile Commitment Center project site adjacent to the private driveway (Second Street) provided the needed access within the site’s existing circulation

system – and not imposing any additional points of access to the site from Blue Gum Avenue (to the South) or Poust Road (to the West.)

4. Siting the Juvenile Commitment Center as proposed off the private driveway on the east side of the property would be at the furthest point possible from neighboring residential areas across Poust Road on the opposite side of the existing facilities. This would minimize or eliminate temporary construction-related impacts and ongoing noise and illumination impacts at the new facility.

The proposed facility will contain several elements to support the sentenced youth in custody, including secure living and sleeping spaces, dayrooms, staff work areas, education and vocational training rooms, indoor gymnasium and outdoor recreation areas, security control, visitation and building support facilities. A new kitchen facility will be included to support the Juvenile Hall and Juvenile Commitment Center, replacing the smaller kitchen existing within the Juvenile Hall. The existing Laundry facilities at the Juvenile Hall will accommodate the needs of both the existing and new facilities. The proposed facility will include parking for staff, visitors and deliveries from the County's driveway (Second Street.)

Several important differences exist between the functions of the Juvenile Hall and the proposed Juvenile Commitment Center. Youth housed in the proposed Juvenile Commitment Center will have been sentenced by the Superior Court to the term of their commitment. Most of the visitations will be personal visits by families and would not include judicial staff, prosecutors, attorneys, probation counselors, witnesses, etc.

Youth committed to the proposed facility will serve longer terms – up to a year or longer – compared to youth held at the Juvenile Hall, typically several days or weeks. Because the terms of commitment for youth at the proposed center will be established by the court, youth will become “settled in” for their stay within the residential setting of the Juvenile Commitment Center. This can be contrasted to the short-term stays of youth within the Juvenile Hall which are more transitional and require more intensive supervision and require more visitation and counseling.

**Total Personnel Assigned to Blue Gum Complex -
General Business Hours (Monday – Friday)**

| Department | Existing Number of Employees | Phase I Expansion Estimated Number of Employees With Reduced Population at Juvenile Hall | Existing plus Phase I Expansion – Total Number of Employees With Reduced Population at Juvenile Hall | Expansion Phase I with Full Utilization of All Beds |
|--|-------------------------------------|---|---|--|
| Probation Staff & Probation Administration | 70 | 0 | 70 | 0 |
| Court Personnel & Court Security | 12 | 0 | 12 | 0 |
| District Attorney/Public Defender | 6 | 0 | 6 | 0 |
| BHRS (includes both personnel assigned to Juvenile Hall and out of custody programs) | 23 | 2 | 25 | 2 |
| Total Employees Assigned during General Business Hours (M-F) | 111 | 113 | 113 | 115 |

Juvenile Hall – Shift Assignments (Does not include Administrative Staff Working M-F)

| AM Shift/Department | Number of Employees - Existing | Phase 1 Expansion Estimated Number of Employees With Reduced Population at Juvenile Hall | Existing plus Phase 1 Expansion – Total Number of Employees With Reduced Population at Juvenile Hall | Expansion Phase 1 with Full Utilization of All Beds |
|--|---------------------------------------|---|---|--|
| Juvenile Hall Staff | 25 | 1 | 26 | 5 |
| School Staff | 20 | 0 | 20 | 3 |
| Kitchen | 5 | 0 | 5 | 0 |
| Medical | 3 | 0 | 3 | 1 |
| Total Staff Assigned to Juvenile Hall Day Shift | 53 | 1 | 54 | 63 |

Juvenile Hall – Shift Assignments (Does not include Administrative Staff Working M-F)

| PM Shift/Department | Number of Employees - Existing | Phase 1 Expansion Estimated Number of Employees With Reduced Population at Juvenile Hall | Existing plus Phase 1 Expansion – Total Number of Employees With Reduced Population at Juvenile Hall | Expansion Phase 1 with Full Utilization of All Beds |
|---|---------------------------------------|---|---|--|
| Juvenile Hall Staff | 23 | 1 | 24 | 4 |
| School Staff | 0 | 0 | 0 | 0 |
| Kitchen | 4 | 0 | 4 | 0 |
| Medical | 1 | 0 | 1 | 0 |
| Total Staff Assigned to Juvenile Hall PM Shift | 28 | 1 | 29 | 33 |

Juvenile Hall – Shift Assignments (Does not include Administrative Staff Working M-F)

| Graveyard Shift/Department | Number of Employees - Existing | Phase 1 Expansion Estimated Number of Employees With Reduced Population at Juvenile Hall | Existing plus Phase 1 Expansion – Total Number of Employees With Reduced Population at Juvenile Hall | Expansion Phase 1 with Full Utilization of All Beds |
|--|---------------------------------------|---|---|--|
| Juvenile Hall Staff | 12 | 1 | 13 | 3 |
| School Staff | 0 | 0 | 0 | 0 |
| Kitchen | 0 | 0 | 0 | 0 |
| Medical | 1 | 0 | 1 | 0 |
| Total Staff Assigned to Juvenile Hall Graveyard Shift | 13 | 1 | 14 | 17 |

Number of Beds:

| | |
|--|------------|
| Existing | 158 |
| Phase 1 | 60 |
| Total Rated Bed Capacity after Expansion of Phase 1 | 218 |

MEMORANDUM



To: Brent Sinclair, Director
Community and Economic Development Department
City of Modesto
1010 10th Street, Suite 3300
Modesto, CA 95354

From: Patricia Hill Thomas (209) 525-6333
Chief Operations Officer Thomasp@stancounty.com
Stanislaus County Chief Executive Office
1010 10th Street, Suite 6800
Modesto, CA 95354

Date: November 18, 2010

Re: City Comments to Traffic Impact Analysis for Stanislaus County Juvenile
Commitment Center dated June 10, 2010

Dear Mr. Sinclair,

Thank you again for our earlier conversation regarding the comments to the traffic impact analysis for Stanislaus County's Juvenile Commitment Center project. I am afraid the original comments from Jeffrey Barnes, City of Modesto Traffic Engineer provided to Patrick Kelly in the City's Planning Department anticipated the full build-out plan for our Juvenile Justice Center complex at 2215 Blue Gum Avenue. As a result, Mr. Barnes comments reflect the need to consider larger potential traffic impacts that would result from the master planned future build-out of the site, rather than our much smaller immediate Juvenile Commitment Center project. Mr. Barnes' letter dated June 10, 2010 is attached.

During our brief discussion, you indicated that the City of Modesto would require dedication of the right-of-way along the Blue Gum Avenue frontage of the site, and that the additional conditions in Items 1, 2, 4 and 5 are not required as a condition by the City for development of the smaller Juvenile Commitment Center project. Specifically, the County suggests the following changes to the City's conditions:

- #1 Stanislaus County will dedicate the right-of-way to widen Blue Gum Avenue as required. Construction of the improvements related to impacts created by Stanislaus County to Blue Gum Avenue including curb, gutter, sidewalk, drainage and street lights will be deferred and set as a requirement for any future County development projects and/or traffic generating expansions at this site.

Memorandum to Brent Sinclair

November 18, 2010

- #2 No action is required by the City of Modesto for Stanislaus County to analyze or improve Poust Road or the drainage basin on the east side of Poust Road. No impact to Poust Road or the drainage basin is anticipated to result from construction of the Juvenile Commitment Center project.

- #4 The minimal additional traffic impact resulting from the Stanislaus County Juvenile Commitment Center project will not require further analysis of traffic impacts at: a) Briggsmore Avenue and Prescott Road; b) Briggsmore Avenue at Sisk Road/Carpenter Road/W. Orangeburg Avenue; c) Carpenter Road at State Highway 99 Northbound Ramps; nor d) Carpenter Road at State Highway 99 Southbound Ramps. Stanislaus County agrees to partner with Yosemite Community College District and the City of Modesto to collectively find traffic solutions to address the challenges posed by the continued growth and expansion of the campus area.

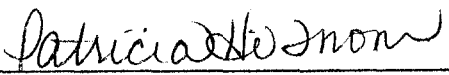
- #5 The Stanislaus County Juvenile Commitment Center project will not generate any significant impact to any State highway facility and, therefore, will not require further Caltrans review of the project.

Item #3 is accurate, and Stanislaus County will retain "Second Street" as a private roadway. Stanislaus County will work with the users of the roadway, including Yosemite Community College District/MJC West Campus and the Peterson Alternative Center for Education (SCOE), the U. S. Post Office and the City of Modesto to find another name for the existing Second Street. Improvements to the private Second Street roadway will be made, at a minimum, to County standards within the County property prior to occupancy of the Juvenile Commitment Center.

I greatly appreciate the thorough consideration and thoughtfulness of the review by Mr. Barnes and yourself on behalf of the City of Modesto. The proposed Juvenile Commitment Center will provide a tremendous opportunity for youth in our City and County to receive local in-custody services with a much greater chance for successful rehabilitation and re-introduction to the community.


Please acknowledge your receipt and confirmation of this Memorandum modifying the comments and requirements of the City of Modesto pursuant to development of the Juvenile Commitment Center project by Stanislaus County. If you have any questions, please do not hesitate to contact me at (209) 525-6333.

Yours truly,



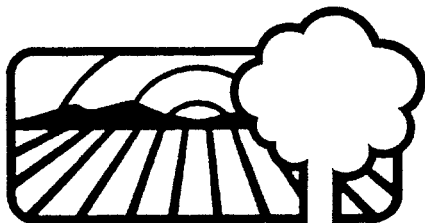
Patricia Hill Thomas
Chief Operations Officer/Project Manager
Stanislaus County Chief Executive Office

Acknowledged and Agreed,



Brent Sinclair, Director
Community and Economic Development
City of Modesto

11-18-10
Date



CITY of MODESTO

COMMUNITY AND ECONOMIC DEVELOPMENT DEPT
Traffic Engineering & Operations Division

MEMORANDUM

DATE: June 10, 2010

TO: Patrick Kelly, Planning Manager

FROM: Jeffrey L. Barnes, Traffic Engineer *JLB*
Traffic Engineering & Operations Division

SUBJECT: Traffic Impact Analysis for Stanislaus County Juvenile Hall Commitment Center Comments

The subject traffic analysis has been reviewed and my comments are as follows:

1. The project developer, Stanislaus County, must dedicate right-of-way and construct complete street improvements to provide the minor arterial roadway improvements on the Blue Gum Avenue frontage of the project per the City of Modesto General Plan. The improvements must include curb, gutter, sidewalk, drainage, and street lights. The right-of-way should follow City of Modesto Standard Specifications Detail No. 379 and in addition should provide a ten foot wide public utility easement.
2. The project normally should also dedicate right-of-way and construct street improvements along the Poust Road frontage of the Stanislaus County property. Because there is an existing drainage basin on the east side of Poust Road, the traffic study should address the Poust Road collector street designation in the General Plan and the current limited traffic volume and then recommend the appropriate requirements and any adjustments to the standard requirements. This review and recommendation could also result in adjustments to the Detail No. 379 requirements for the Blue Gum Avenue improvements.
3. The report should be revised to make it clear that the indicated 2nd Street and 4th Street north of Blue Gum Avenue are private roadways. The road names are duplicates of existing City of Modesto roadways near Modesto High School and downtown Modesto. The descriptions of 2nd Street starts on page 6 of the report and the 4th Street description is on page 7. On page 10 it is indicated that 2nd Street should be improved to City of Modesto Standard Detail No. 309. While that would be helpful, since 2nd Street north of Blue Gum Avenue is a private road Detail No. 309 might not apply.
4. The analysis should have included studies of the following intersections:
 - a. Briggsmore Avenue at Prescott Road
 - b. Briggsmore Avenue at Sisk Road/Carpenter Road/W. Orangeburg Avenue
 - c. Carpenter Road at State Highway 99 Northbound Ramps
 - d. Carpenter Road at State Highway 99 Southbound Ramps
5. Was Caltrans included in the review of this project?

Please contact me if you have questions. Thank you.

JLB:th
Traffic/Jeff/Miscell Ltr & Memo/2010

cc: Kirk Ford, Stanislaus County Planning Director
Bill Carlson, Stanislaus County Planning ✓
Helen Wang, Senior Transportation Planner
Mark Mumby, Traffic Operations Engineer

RECEIVED

JUN 10 2010

STANISLAUS COUNTY PLANNING DEPARTMENT

LETTER OF TRANSMITTAL

| | | |
|---|----------------------|----------------------------|
| TO: Stanislaus Capital Projects 825 12 th Street Modesto, CA 95354 | DATE: 5/20/10 | ATTN: Don Phemister |
| RE: Stanislaus County Juvenile Hall Commitment Center | | |

WE ARE SENDING YOU THE FOLLOWING:

| COPIES | JOB NO. | DESCRIPTION |
|--------|---------|--|
| 3 | 7000-11 | Traffic Impact Analysis dated May 20, 2010 |
| | | RECEIVED |
| | | AW 2.1.2(233) |
| | | MAY 21 2010 |
| | | AW 5.16.10 |
| | | STANISLAUS COUNTY CAPITAL PROJECTS Don. Darrell. |

THESE ARE TRANSMITTED as checked below:

- | | | |
|---|--|---------------------------------------|
| <input type="checkbox"/> For approval | <input checked="" type="checkbox"/> For your use | <input type="checkbox"/> As requested |
| <input type="checkbox"/> For review and comment | <input type="checkbox"/> For your signature | |

| REMARKS: |
|---|
| Report revised to include a Phase 2 (additional 120 beds) analysis. |

Signed _____ *Mike Becker*

KD Anderson & Associates, Inc.

3853 Taylor Road, Suite G ♦ Loomis, CA 95650 ♦ (916) 660-1555 ♦ FAX (916) 660-1535

ATTACHMENT 4

TRAFFIC IMPACT ANALYSIS

FOR

STANISLAUS COUNTY JUVENILE HALL COMMITMENT CENTER
Stanislaus County

Prepared For:

Stanislaus County Capital Projects
825 12th Street
Modesto, CA 95354

Prepared By:

KD Anderson & Associates, Inc.
3853 Taylor Road, Suite G
Loomis, CA 95650
(916) 660-1555

May 20, 2010

7000-11

Stanislaus County Juvenile Commitment Center (180).rpt

KD Anderson & Associates, Inc.
Transportation Engineers

**TRAFFIC IMPACT ANALYSIS FOR
STANISLAUS COUNTY JUVENILE HALL COMMITMENT CENTER**
Stanislaus County

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May 20, 2010

KDA

**TRAFFIC IMPACT ANALYSIS FOR
STANISLAUS COUNTY JUVENILE HALL COMMITMENT CENTER**
Stanislaus County

INTRODUCTION

This report summarizes **KD Anderson & Associates** analysis of the traffic impacts associated with development of the Stanislaus County Juvenile Hall Commitment Center. The report analyzes two development phases. Phase 1 is proposed for a 3.75 acre site on the west side of 2nd Street just north of Blue Gum Avenue in the City of Modesto. The site is adjacent to the existing Juvenile Justice Center and the Modesto Junior College West campus. The facility will include a 38,800 sq. ft. building and a 60 space parking lot and will provide for 60 new beds. Access to the site will be from 2nd Street. Phase 2 would consist of development of an additional 120 beds and would be located immediately adjacent to the north side of Phase 1. An additional 50 public parking spaces would be provided with the second phase, also accessed via 2nd Street. Figure 1 displays the project location.

Study Methodology

The methodology used to prepare this Traffic Impact Study follows an approach that is recognized by members of the traffic engineering profession, is consistent with CEQA guidelines and conforms to Stanislaus County guidelines for traffic impact studies.

The first phase of the study included the collection of traffic data and the analysis of that data to determine existing operating conditions. Manual traffic counts were taken during the weekday morning and afternoon peak hours at three (3) study intersections in the immediate area of the project site. Daily traffic counts were also conducted on area roads. This data was used to calculate current operating Levels of Service using procedures accepted by Stanislaus County.

The second phase of the analysis involved estimating the number of trips expected to be generated by the planned project. Traffic counts were conducted at the existing Juvenile Justice Center immediately adjacent to the project site. Operations at this existing facility are projected to be very similar to the planned Commitment Center. These traffic counts, together with information on existing and proposed employee numbers and bed numbers have been used to estimate trip generation rates associated with development of the new facility.

The third phase of the study determined the distribution of trips into and out of the project and onto the adjacent streets. Current traffic patterns at the existing Juvenile Justice Center and at the adjacent study intersections, the location of population centers within the County and least time travel routes to the regional street and highway system have been considered in estimating the directional distribution of project traffic.

The fourth phase was to assign the project trips to the street network and to add new trips to the

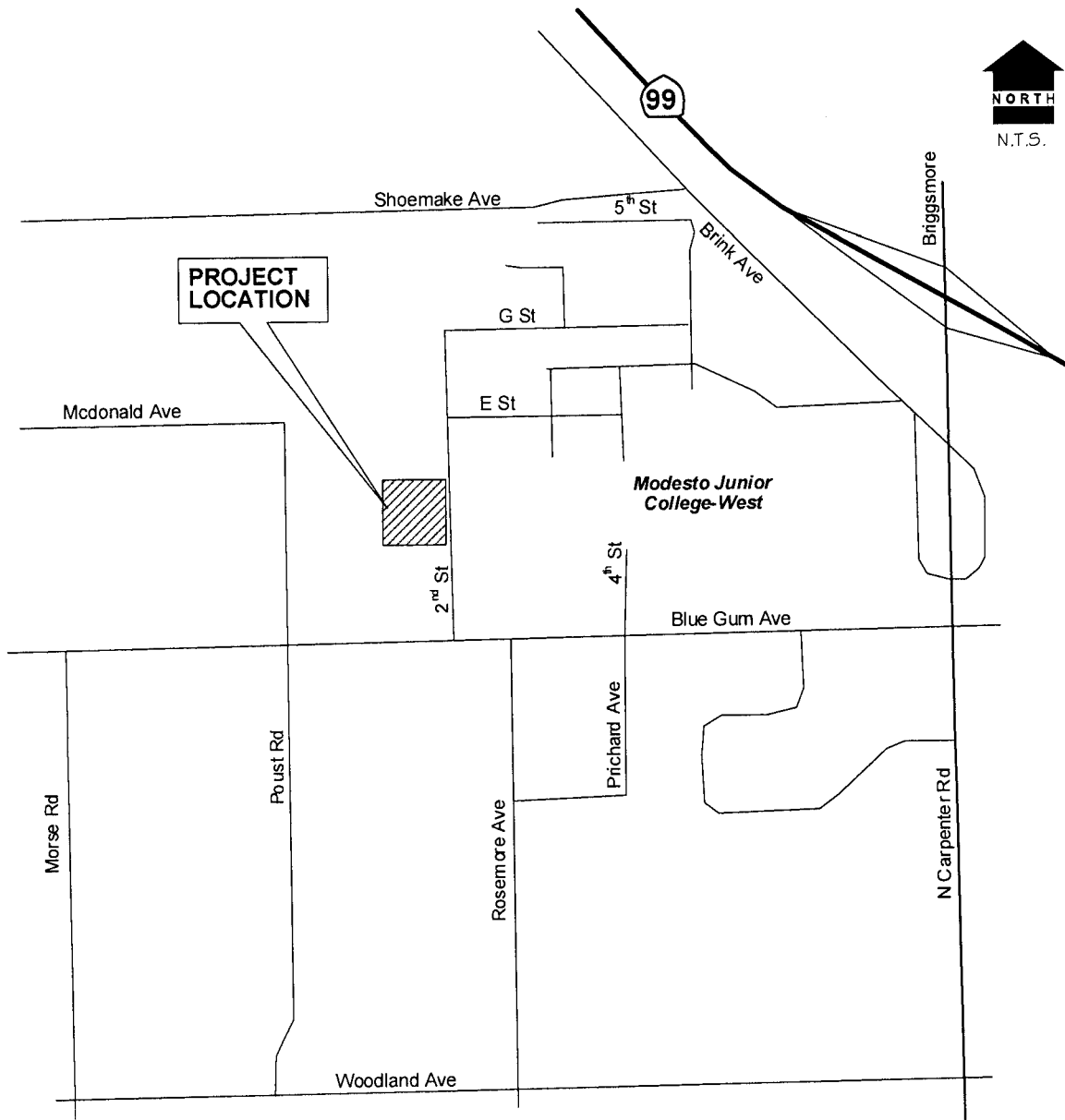
current traffic volume background base condition. The project trip assignment reflects the location and configuration of access driveways proposed as part of each phase of the project. Resulting operating Levels of Service at area study intersections were calculated and reviewed to determine the extent of any roadway improvements needed to provide satisfactory Levels of Service with development of the project. Driveway operations and on-site circulation have also been evaluated as part of this task.

Project Description

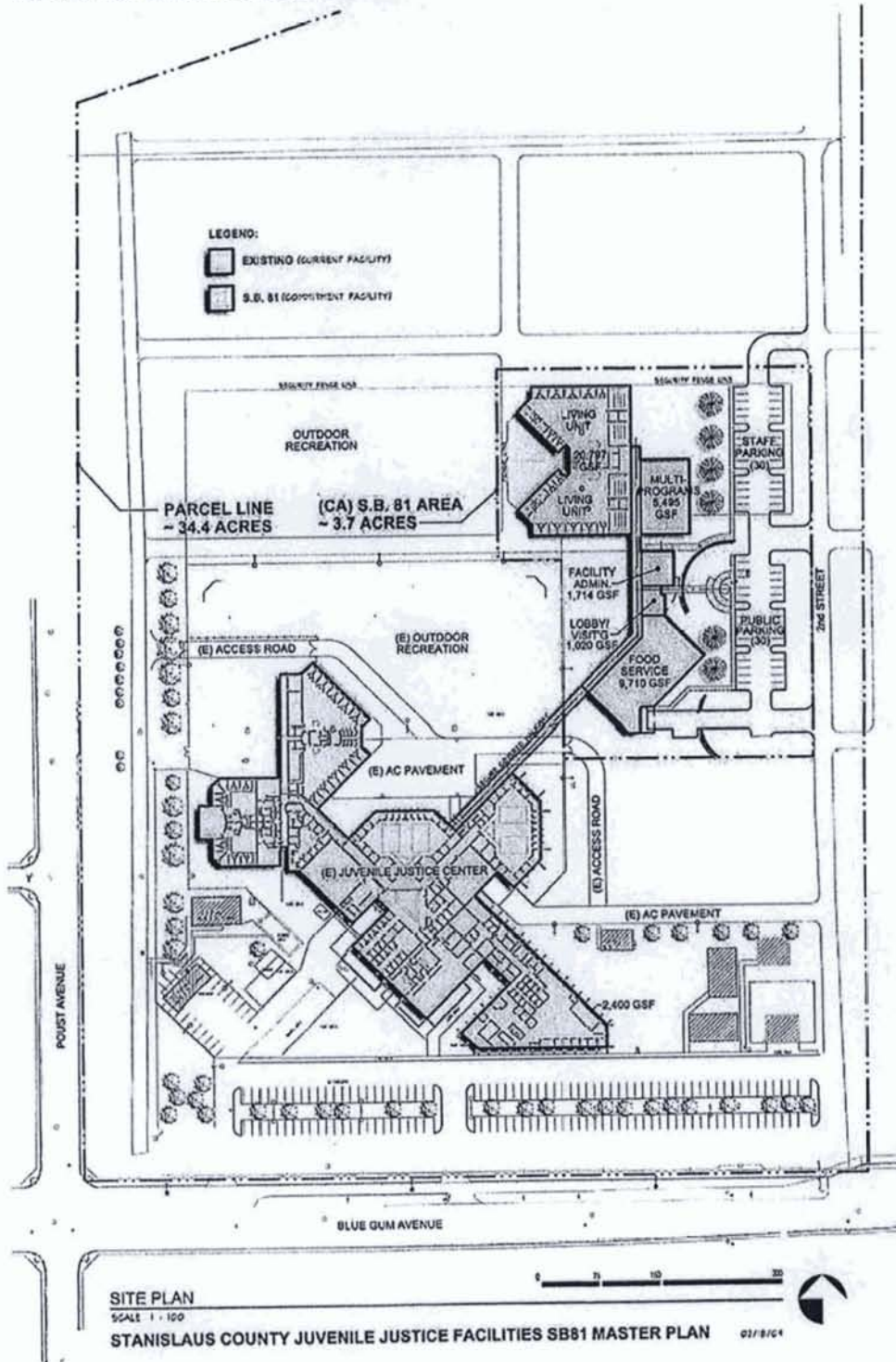
The Juvenile Hall Commitment Center is proposed on the west side of 2nd Street just north of Blue Gum Avenue in the City of Modesto. The site is adjacent to the Modesto Junior College West campus and would be developed at the existing Juvenile Justice Center site on County owned vacant land.

Phase 1 Development. This phase is referred to as SB81 Phase 1A in the Juvenile Justice Facilities Master Plan. Development will be accommodated on a 3.75 acre site and will include a 38,800 sq. ft. building and a 60 space parking lot. The building area will house a 60 bed treatment facility. The 60 bed treatment facility will be comprised of two 30 bed living units and common support area; a kitchen sized to serve the new facility as well as the existing Juvenile Hall; multi-purpose space and administrative area. The new facility will share some services with the existing Juvenile Hall and will be linked to the existing facility via a covered and secure walkway. The new facility is projected to result in a net employee increase of 38 persons at the Juvenile Justice Center site. Access to the site will be from 2nd Street. Figure 2A displays the site plan.

Phase 2 Development. This phase is referenced as Phases 2A, 2B and 3 in the Juvenile Justice Facilities Master Plan and would consist of build out of the site. Development would consist of additional living area to provide an additional 120 beds. Living area would similarly be divided into 30 bed units and would be located on the north side of Phase 1. An additional 50 public parking spaces would also be provided with this phase and accessed via 2nd Street. Figure 2B displays the site plan.

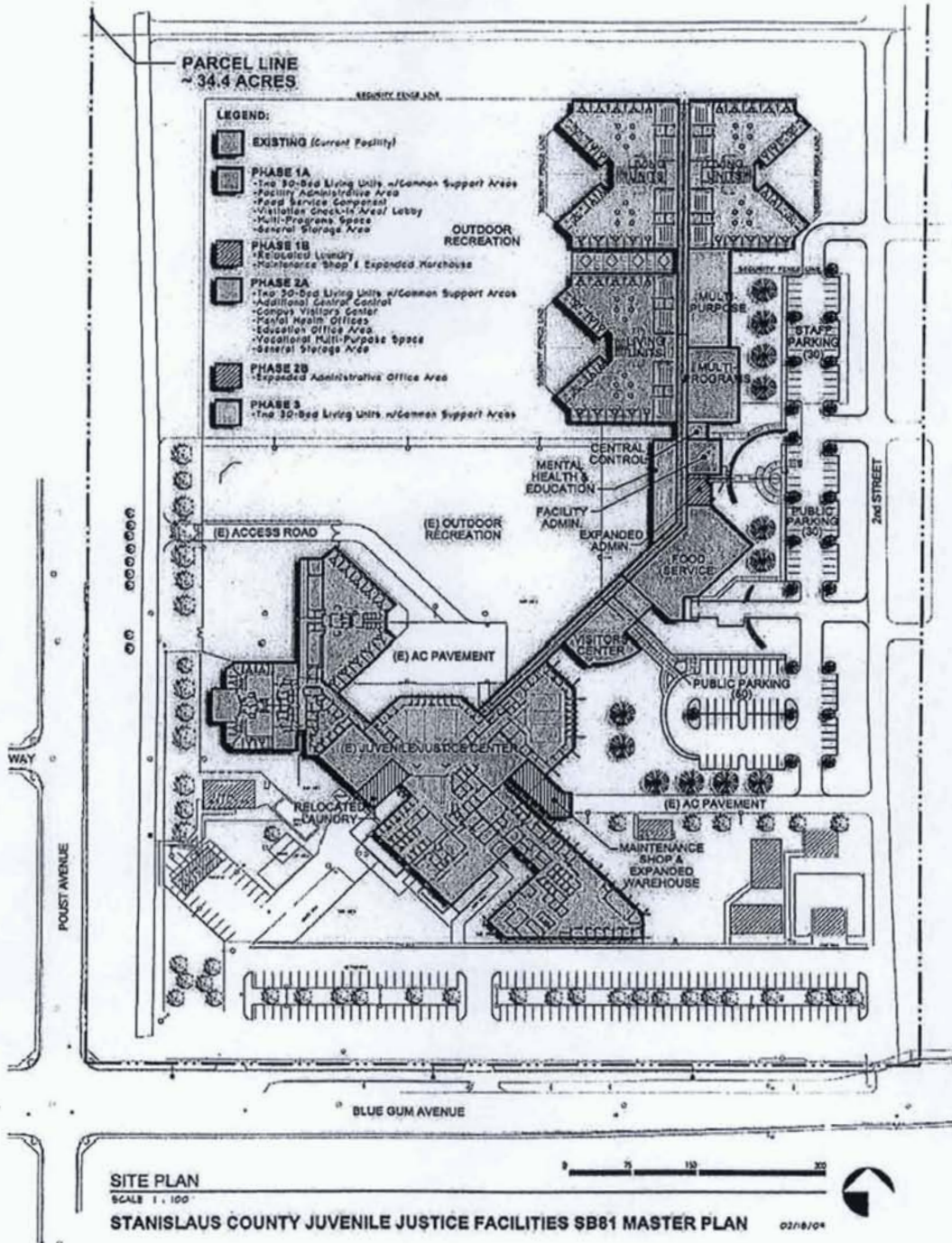


SB 81/Phase 1A Site Development Plan



Stanislaus County, California
 JUVENILE JUSTICE FACILITIES MASTER PLAN

Long-Range Phased Development Conceptual Site Plan



EXISTING SETTING

Study Area

The limits of this analysis were identified in consultation with Stanislaus County staff and include intersections and roadway segments in the vicinity of the project site as well as access to the site. The traffic impact analysis investigates the operational characteristics of the following intersections and roadway segments, all of which are located within the Modesto City Limits:

1. Blue Gum Avenue / 2nd Street (stop sign controlled)
2. Blue Gum Avenue / Prichard Avenue / 4th Street (stop sign controlled)
3. Blue Gum Avenue / Carpenter Road (signalized)
4. Blue Gum Avenue east of 2nd Street
5. 2nd Street north of Blue Gum Avenue

The locations of these intersections along with the existing road network are shown on Figure 3. The text that follows describes the characteristics of each facility.

Blue Gum Avenue extends from Dunn Road in the west to just east of Carpenter Road in the east. The roadway provides access to the Modesto Junior College West campus and is a 4-lane facility from Carpenter Road to Rosemore Avenue. West of Rosemore Avenue, the roadway transitions to a 2-lane facility adjacent to the Juvenile Justice Center site as the roadway has not been improved to the ultimate width along the site frontage. West of the Juvenile Justice Center site, the roadway has been improved to the ultimate width from Poust Road to Morse Road within the city limits, but is currently striped as a 2-lane facility. West of Morse Road, the street section transitions to a 2-lane rural road in the County. The 4-lane roadway segment provides designated bike lanes as well as on-street parking. The Stanislaus County General Plan designates the roadway as a collector facility from Dakota Avenue to Carpenter Road, while the City of Modesto General Plan designates the roadway as a 4-lane minor arterial within the City sphere of influence.

Blue Gum Avenue currently carries 10,100 daily vehicles east of 2nd Street, with volumes increasing to 19,000 daily vehicles west of Carpenter Road. The posted speed limit is 35 mph through the study area. Intersections along Blue Gum Avenue are controlled by side street stop signs, with the exception of the Carpenter Road intersection which is signalized.

Carpenter Road is a principal north-south arterial extending through Modesto and provides access to State Route 99. Within the study area, the roadway is primarily a 4-lane facility and widens to a five and six lane facility at SR 99. Bike lanes are provided on Carpenter Road south of Blue Gum Avenue. Carpenter Road currently carries approximately 30,000 daily vehicles south of Blue Gum Avenue, with volumes increasing to 44,000 daily vehicles to the north of Blue Gum Avenue.

2nd Street is a local 2-lane roadway providing access to the west side of the Modesto Junior College, the Peterson Alternative Education Center and to the Juvenile Justice Center. The roadway currently carries approximately 1,150 daily vehicles north of Blue Gum Avenue. The roadway is generally

unimproved, with no curb, gutter or sidewalk. The majority of the roadway is 21 feet in width, with the pavement width increasing to 36 feet at Blue Gum Avenue. The roadway has been resurfaced from Blue Gum Avenue to just past the southerly junior college parking lot access. Beyond this point, the pavement is in very poor condition and in need of resurfacing. No centerline striping is provided along 2nd Street.

4th Street and Prichard Avenue are 2-lane local roads and intersect Blue Gum Avenue at a 4-way intersection, with 4th Street providing access to the Modesto Junior College campus.

Alternative Transportation Modes

Pedestrian Circulation. Sidewalks are provided throughout the study area with the exception of 2nd Street and along the north side of Blue Gum Avenue adjacent to the Juvenile Justice Center.

Transit. Bus service is provided in the study area along Blue Gum Avenue and Carpenter Road. Modesto Area Express (MAX) Route 33 provides service seven days a week, with a bus stop on Blue Gum Avenue at the Modesto Junior College to the east of the project site.

Standards of Significance: Capacity / Level of Service Analysis

Level of Service. The quality of traffic flow through intersections and on individual roadway segments is described in terms of operating Level of Service. "Level of Service (LOS)" is a qualitative measure of traffic operating conditions whereby a letter grade "A" through "F", corresponding to progressively worsening operating conditions, is assigned to an intersection or roadway segment. Tables 1 through 3 present the characteristics associated with each LOS grade.

The *2000 Highway Capacity Manual* presents methodologies for calculating practical capacity and Level of Service on roadways and at intersections. At signalized intersections and intersections controlled by all-way stop signs, traffic conditions are described in terms of the average length of the delays experienced by all motorists. Intersection configuration, traffic volumes and traffic signal timing are all factors that enter into determination of the length of average delay and the resulting Level of Service. Intersection operations have been quantified based upon Highway Capacity Manual procedures, consistent with Stanislaus County and City of Modesto requirements.

**TABLE 1
LEVEL OF SERVICE DEFINITION**

| Level of Service | Signalized Intersection | Unsignalized Intersection | Roadway (Daily) |
|-------------------------|---|--|---|
| "A" | Uncongested operations, all queues clear in a single-signal cycle. Delay ≤ 10.0 sec | Little or no delay. Delay ≤ 10 sec/veh | Completely free flow. |
| "B" | Uncongested operations, all queues clear in a single cycle. Delay > 10.0 sec and ≤ 20.0 sec | Short traffic delays. Delay > 10 sec/veh and ≤ 15 sec/veh | Free flow, presence of other vehicles noticeable. |
| "C" | Light congestion, occasional backups on critical approaches. Delay > 20.0 sec and ≤ 35.0 sec | Average traffic delays. Delay > 15 sec/veh and ≤ 25 sec/veh | Ability to maneuver and select operating speed affected. |
| "D" | Significant congestions of critical approaches but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed. Delay > 35.0 sec and ≤ 55.0 sec | Long traffic delays. Delay > 25 sec/veh and ≤ 35 sec/veh | Unstable flow, speeds and ability to maneuver restricted. |
| "E" | Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). Delay > 55.0 sec and ≤ 80.0 sec | Very long traffic delays, failure, extreme congestion. Delay > 35 sec/veh and ≤ 50 sec/veh | At or near capacity, flow quite unstable. |
| "F" | Total breakdown, stop-and-go operation. Delay > 80.0 sec | Intersection blocked by external causes. Delay > 50 sec/veh | Forced flow, breakdown. |

Sources: 2000 Highway Capacity Manual.

**TABLE 2
CAPACITY BY FACILITY TYPE AND LANES**

| Classification | Capacity (vehicles per lane) | | |
|-----------------------|-------------------------------------|----------------|----------------|
| | 2 Lanes | 4 Lanes | 6 Lanes |
| Class C Expressway | - | 1000 | 1000 |
| Majors | 1000 | 900 | 900 |
| Collectors | 500 | 500 | - |

Source: Traffic Analysis of Stanislaus County's Circulation Element

**TABLE 3
V/C CRITERIA FOR LOS STANDARDS
BY CLASSIFICATION AND LANES**

| LOS | Expressways | Majors | | Collectors | |
|-----|-------------|---------|----------|------------|----------|
| | | 2 Lanes | 4+ Lanes | 2 Lanes | 4+ Lanes |
| A | 0.30 | 0.07 | 0.28 | 0.07 | 0.28 |
| B | 0.50 | 0.19 | 0.47 | 0.19 | 0.47 |
| C | 0.70 | 0.34 | 0.66 | 0.34 | 0.66 |
| D | 0.84 | 0.59 | 0.79 | 0.59 | 0.79 |
| E | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

Source: Traffic Analysis of Stanislaus County's Circulation Element

The delays experienced at intersection controlled by side street stop signs are different. Motorists waiting to turn must yield the right of way to through traffic, and the length of delays can vary on each approach to the intersection. For this analysis the length of delays experienced by motorists on each approach has been calculated.

Tables 2 and 3 present roadway segment capacity thresholds and Volume to Capacity (v/c) ratios as presented in the Traffic Analysis of Stanislaus County's Circulation Element. These thresholds have been used to identify roadway segment operating levels of service.

Significance Thresholds. A traffic impact is considered significant if it renders an unacceptable Level of Service on a street segment, at a signalized intersection, or multi-way stop sign controlled intersection, or if it worsens already unacceptable conditions. Local jurisdictions and Caltrans adopt minimum Level of Service standards for use in traffic studies and environmental impact reports.

The Stanislaus County General Plan indicates that the County shall maintain LOS "C" or better for all County roadways and intersections, except within the sphere of influence of a city that has adopted a lower level of service standard, the City standard shall apply. This latter case is applicable to the study area, as all study locations are within the City of Modesto where LOS "D" is the adopted operating standard. As such, LOS "D" has been used for this analysis to quantify the significance of traffic impacts.

At intersections controlled by side street stop signs, a supplemental signal warrant analysis is also typically used in determining the adequacy of operations and/or the need for improvements. As minor street traffic can experience significant delays when accessing a major street, side street delays at any single approach are typically not considered significant unless side street volumes are large enough to meet peak hour warrants for installation of a traffic signal. Peak hour traffic signal warrants as presented in the California Manual of Uniform Traffic Control Devices (MUTCD) have been used for this analysis.

Existing Levels of Service. To determine existing traffic volumes and obtain more information

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about traffic conditions in the study area, information regarding a.m. and p.m. peak hour traffic volumes were assembled. New weekday intersection counts were conducted in March 2010 from 7:00 - 9:00 a.m. and 4:00 - 6:00 p.m. at the study intersections. Daily 24 hour roadway counts were also conducted on Blue Gum Road. These peak hour volumes and daily volumes are shown on Figure 3. Existing intersection and roadway Levels of Service are summarized in Tables 4 and 5.

As shown in Table 4, study area intersections currently operate within acceptable standards. Satisfactory level of service "A" to "C" operations are currently experienced at each of the study intersections in the a.m. and p.m. peak hours. Existing volumes at the stop sign controlled study intersections do not warrant installation of a traffic signal. No improvement needs have been identified.

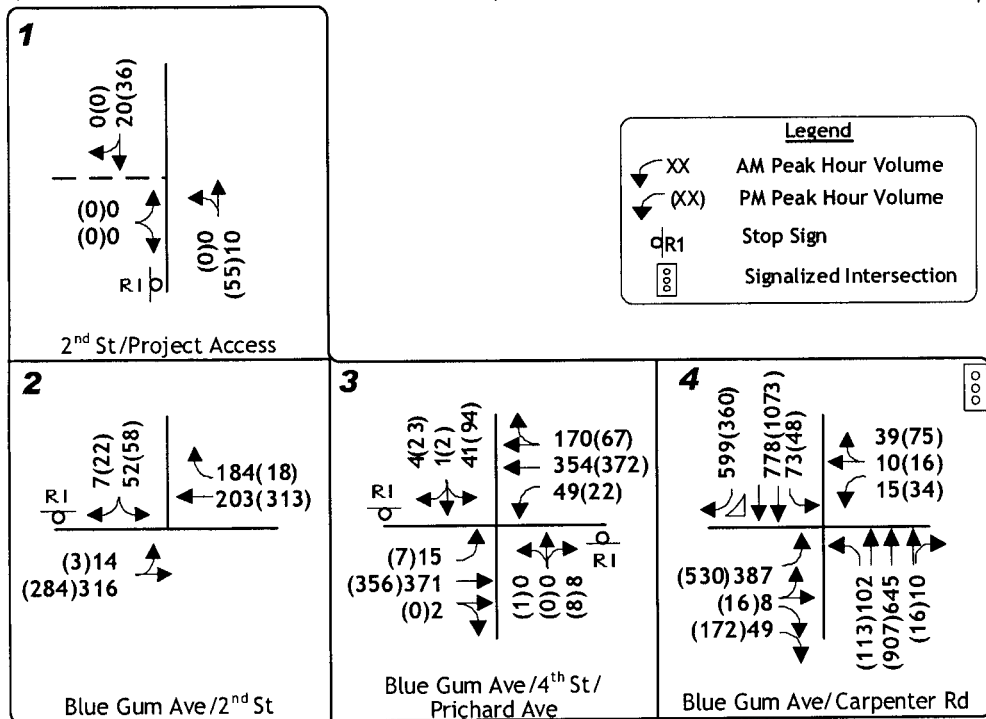
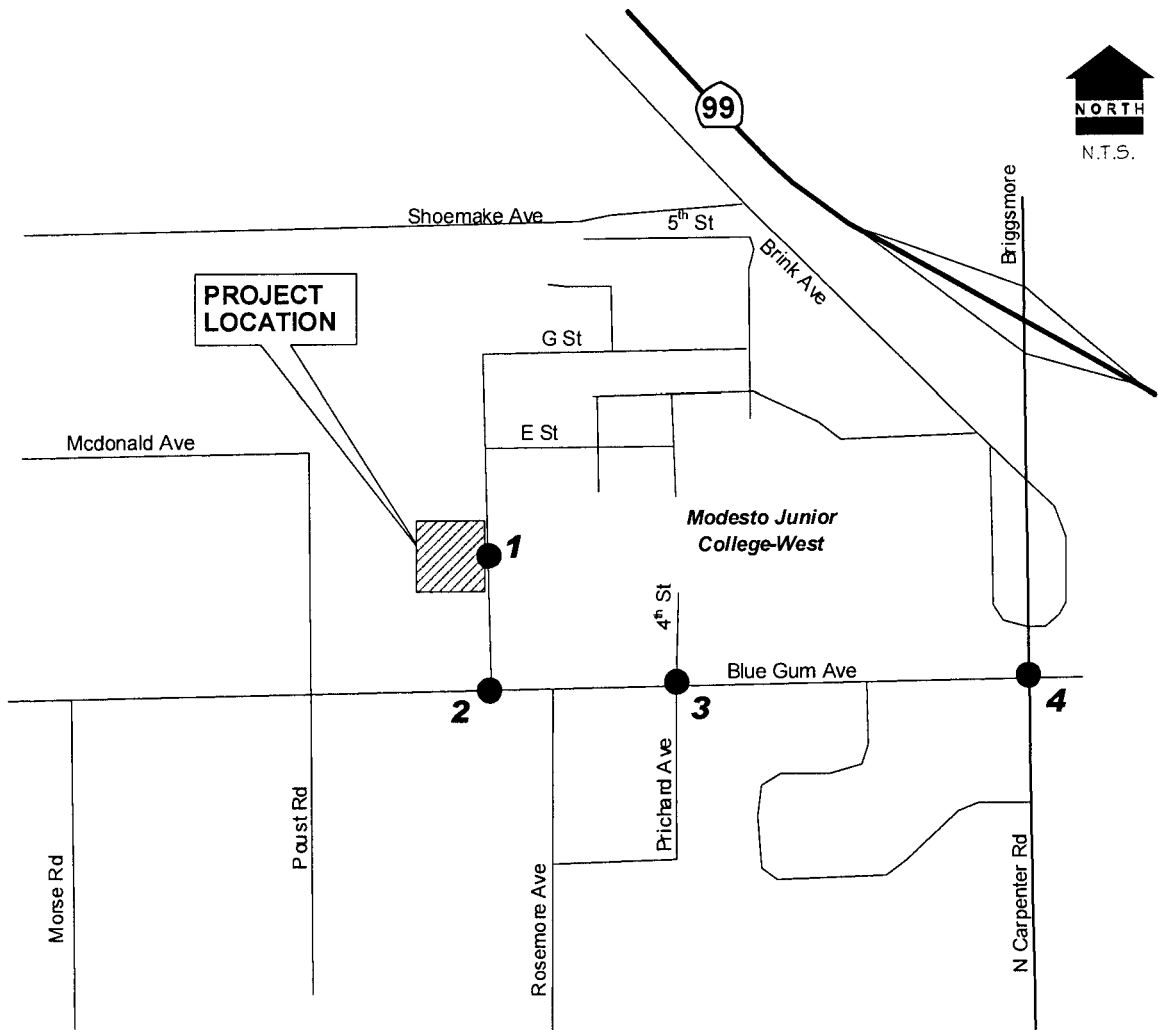
Table 5 summarizes existing roadway volumes and corresponding operating levels of service. As shown in Table 5, satisfactory LOS "B" roadway operations are also currently provided in the study area. As 2nd street volumes are relatively low, and speeds on 2nd Street are also low, the existing 21 foot pavement section provides satisfactory operating levels of service. However, the majority of the street is not constructed to current City standards. City Standards for Local Streets (standard detail #309) identifies a 36 foot pavement section.

**TABLE 4
EXISTING INTERSECTION LEVELS OF SERVICE**

| Location | Control | AM Peak Hour | | PM Peak Hour | |
|--|-------------|--------------|---------------|--------------|---------------|
| | | LOS | Average Delay | LOS | Average Delay |
| 2 nd Street / Blue Gum Avenue SB Approach EB Left Turn | SB Stop | B | 13.6 | B | 14.3 |
| | | A | 8.2 | A | 8.0 |
| | | | | | |
| 4 th Street / Prichard Ave / Blue Gum Ave WB Left Turn EB Left Turn SB Approach NB Approach | NB, SB Stop | A | 8.3 | A | 8.2 |
| | | A | 8.7 | A | 8.4 |
| | | C | 22.1 | C | 21.4 |
| | | A | 9.5 | B | 10.2 |
| | | | | | |
| Blue Gum Avenue / Carpenter Road | Signal | C | 26.6 | C | 29.6 |

**TABLE 5
EXISTING ROADWAY LEVELS OF SERVICE**

| Location | Number of Lanes | Peak Hour Volume | V/C | LOS |
|--|-----------------|------------------|------|-----|
| Blue Gum Avenue West of 4 th Street | 4 | 900 | 0.45 | B |
| 2 nd Street North of Blue Gum Avenue | 2 | 151 | 0.15 | B |



KD Anderson & Associates, Inc.
 Transportation Engineers

**EXISTING TRAFFIC VOLUMES
 AND LANE CONFIGURATIONS**

PROJECT IMPACTS

To evaluate the impacts of the proposed project on traffic conditions in the study area it is necessary to identify the volume of traffic expected to be generated by the proposed facility and to superimpose this traffic onto current background traffic conditions.

Project Characteristics

Trip Generation. The Juvenile Hall Commitment Center will have operations similar in nature to the existing juvenile hall and will share some support services. Therefore, peak hour traffic counts were conducted at the driveways serving the existing facility to quantify current trip generation characteristics. Resulting trip rates were then applied to the proposed new facility. This methodology assumes that employee shifts and visitor hours at the new facility will be similar to current operations at the existing facility.

Information regarding the number of employees and the number of beds associated with both the existing facility and the planned new facilities has been provided by County staff and is summarized in Table 6. Both employee and bed number data can be used in conjunction with driveway counts to establish corresponding trip rates. However, information regarding the number of beds is judged to represent a more conservatively high trip generation estimate and has been used for purposes of this analysis. As an example, for Phase 1, the sharing of services is projected to result in an increase of 38 full-time equivalent positions, an increase of 26%. The addition of 60 beds to the current 158 bed facility represents a 38% increase in bed capacity. This latter "per bed" equivalent is estimated to more accurately define the trip generation characteristics, as it accounts for proportional increases in traffic associated with both employees and visitors to the new facility.

Table 7 presents traffic data collected at the existing Juvenile Justice Center site. Using this information, the number of peak hour trips projected to be generated by the proposed facility was estimated and is summarized in Table 8. It should also be noted that a bed count of 151 beds has been used in calculating the trip rates, as this represents the number of occupied beds at the existing facility at the time the driveway counts were conducted. As shown in Table 8, an additional 60 beds associated with development of Phase 1 is projected to generate 40 a.m. and 34 p.m. peak hour weekday trips. Build out of Phase 2 (120 additional beds) is projected to generate an additional 80 a.m. peak hour and 68 p.m. peak hour trips.

**TABLE 6
STAFFING PLAN AND RELATED STAFF TO BED RATIOS**

| | Existing | Phase 1 | Phase 2 |
|---|---------------|---------------|---------|
| Facility-wide Bed Capacity | 158 | 218 | 338 |
| Total FTE's – Detention Programs | 135.48 | 172.88 | - |
| Net Increase | | 37.41 | - |
| Total FTE's per Bed (excludes AOD staff) | 0.86 | 0.79 | - |
| Alternative Programs Staff | 9.00 | 10.00 | - |
| Total FTE's Detention and AP Staff | 144.48 | 182.88 | - |
| Net Increase FTE's | | 38.41 | 40* |

Source: Stanislaus County

* Estimated employee increase, detailed staffing level requirements not yet developed for Phase 2.

**TABLE 7
TRAFFIC COUNTS
AT EXISTING JUVENILE JUSTICE CENTER, MARCH 2010**

| | AM (7:00 – 9:00) | | PM (4:00 – 6:00) | |
|----------------------------|------------------|-----|------------------|-----|
| | In | Out | In | Out |
| Average Highest Hour Count | 97 | 5 | 15 | 71 |

Source: KD Anderson & Associates, Inc.

**TABLE 8
PROJECT TRIP GENERATION**

| Juvenile Hall | Quantity | AM Peak Hour | | | PM Peak Hour | | |
|----------------|----------|--------------|------|-------|--------------|------|-------|
| | | In | Out | Total | In | Out | Total |
| Trip Rate | Per Bed | 0.64 | 0.03 | 0.67 | 0.10 | 0.47 | 0.57 |
| Trips, Phase 1 | 60 Beds | 38 | 2 | 40 | 6 | 28 | 34 |
| Trips, Phase 2 | 120 Beds | 76 | 4 | 80 | 12 | 56 | 68 |
| Total Trips | 180 Beds | 114 | 6 | 120 | 18 | 84 | 102 |

Trip Distribution and Assignment. The next task in the evaluation is to determine the distribution of project trips to and from the site together with likely travel routes and driveway utilization. Driveway counts conducted at the existing Juvenile Hall facility have also been used to identify the directional distribution to and from Blue Gum Avenue. Review of this information indicates that 90% of traffic volumes are oriented east on Blue Gum Avenue, with the 10% balance oriented to the west. Beyond the site, the regional directional distribution of project trips has been estimated based

upon existing traffic patterns at study area intersections, the location of population centers within the County and least time travel routes to the regional street and highway system serving the area. Table 9 summarizes the distribution assumptions used for this analysis in assigning new trips to the study area street system. Figures 4 and 5 identify the resulting quantity of “project” traffic at each of the study intersections for Phases 1 and 2. Please note that the project driveway access intersection at 2nd Street has been represented as one intersection for purposes of the Figure 4 and 5 exhibits, but in fact is proposed as three separate driveways to 2nd Street.

**TABLE 9
TRIP DISTRIBUTION**

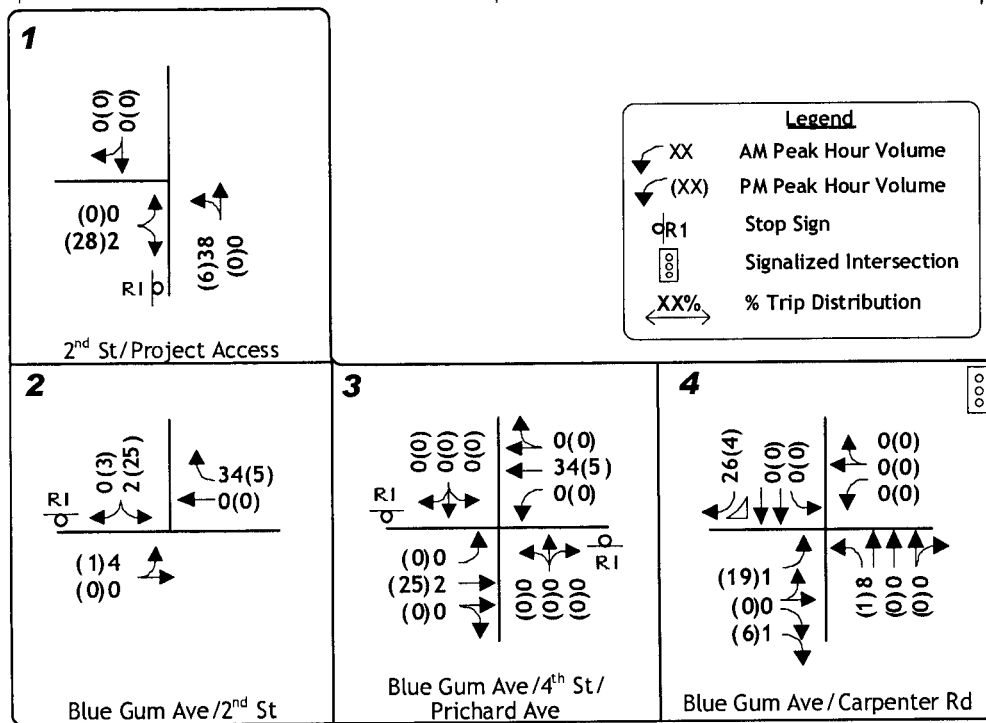
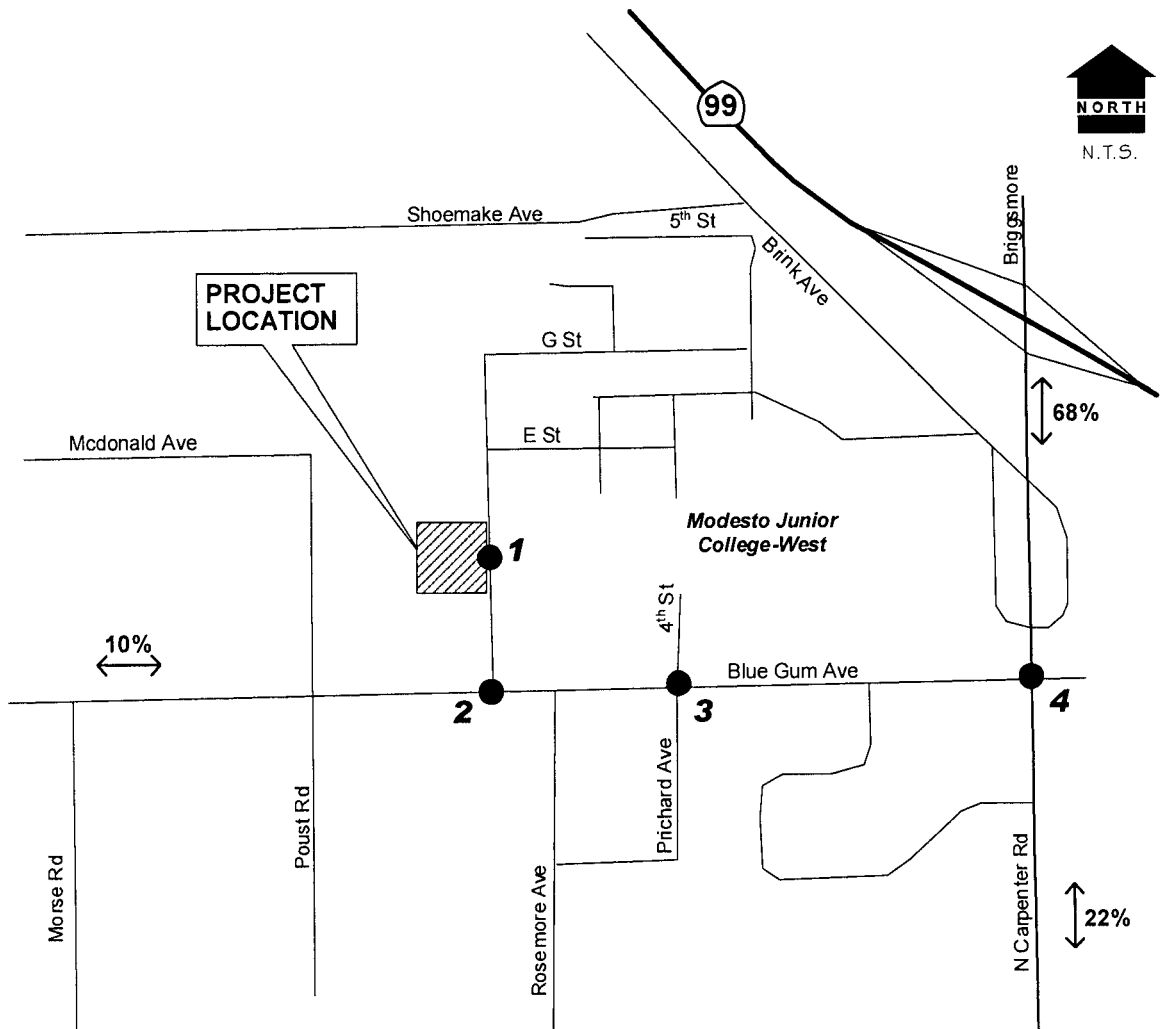
| | |
|-------------------------|-----|
| East on Blue Gum Avenue | 90% |
| West on Blue Gum Avenue | 10% |
| To Carpenter Road North | 68% |
| To Carpenter Road South | 22% |

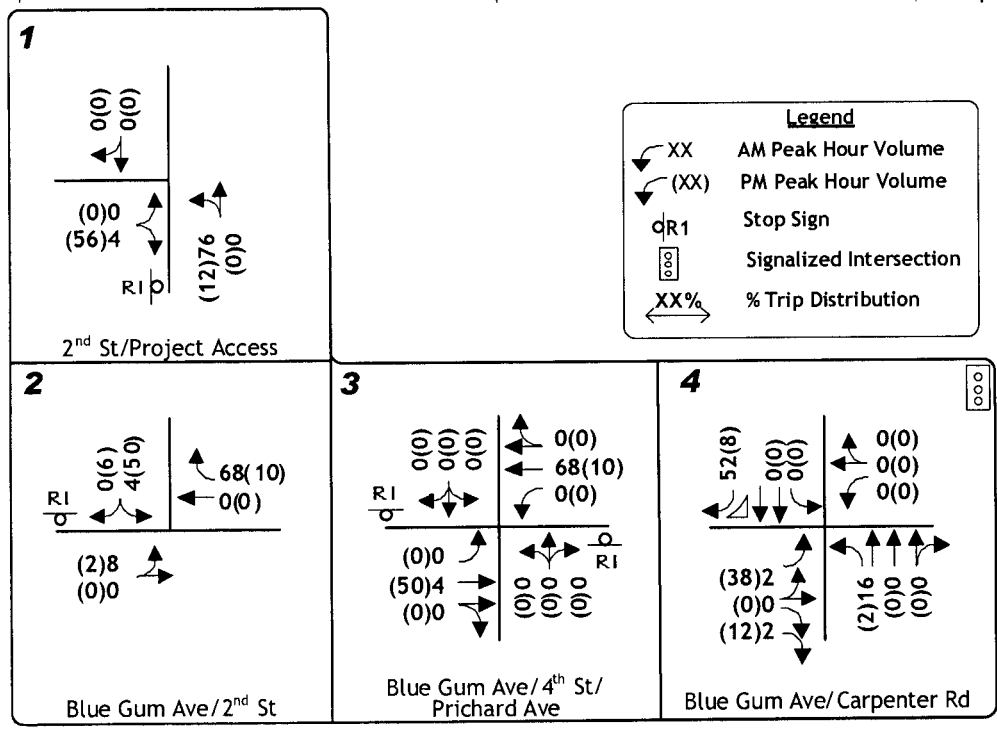
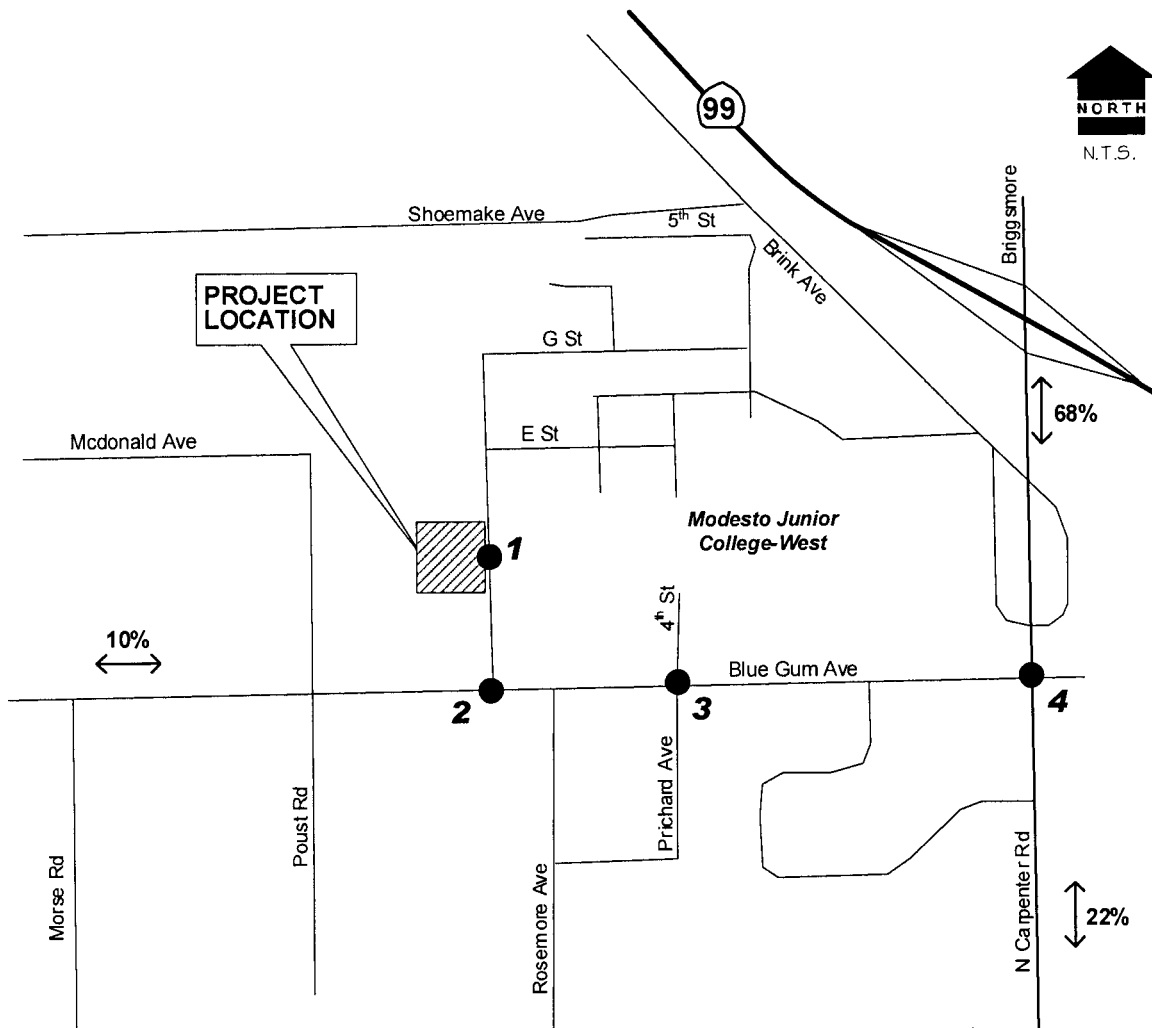
Phase 1 - Existing Plus Project Traffic Volumes and Levels of Service

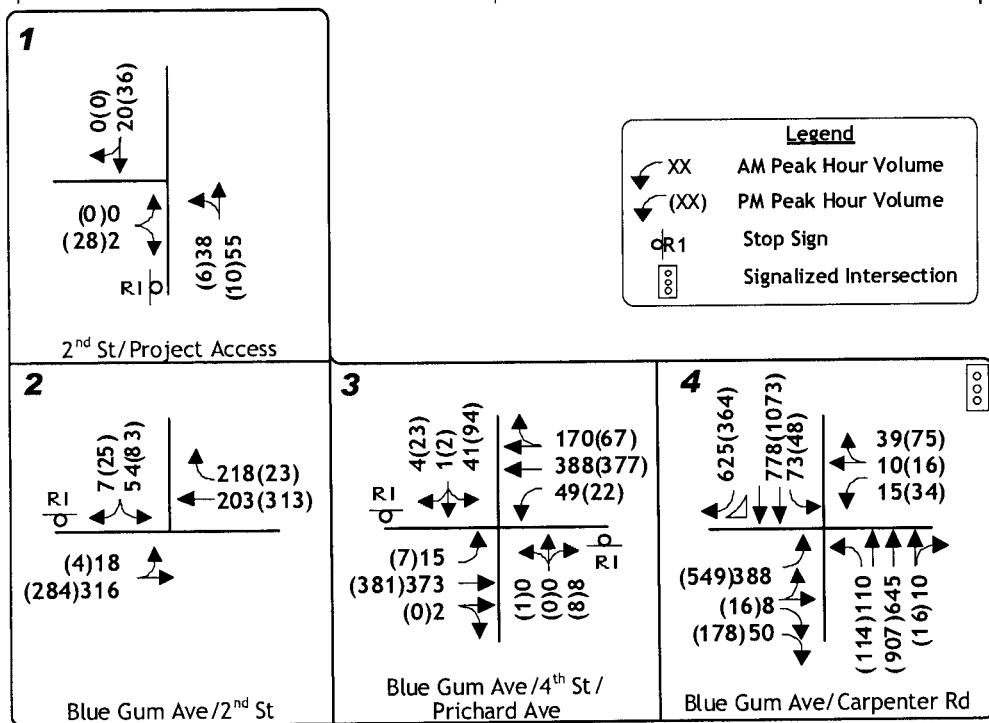
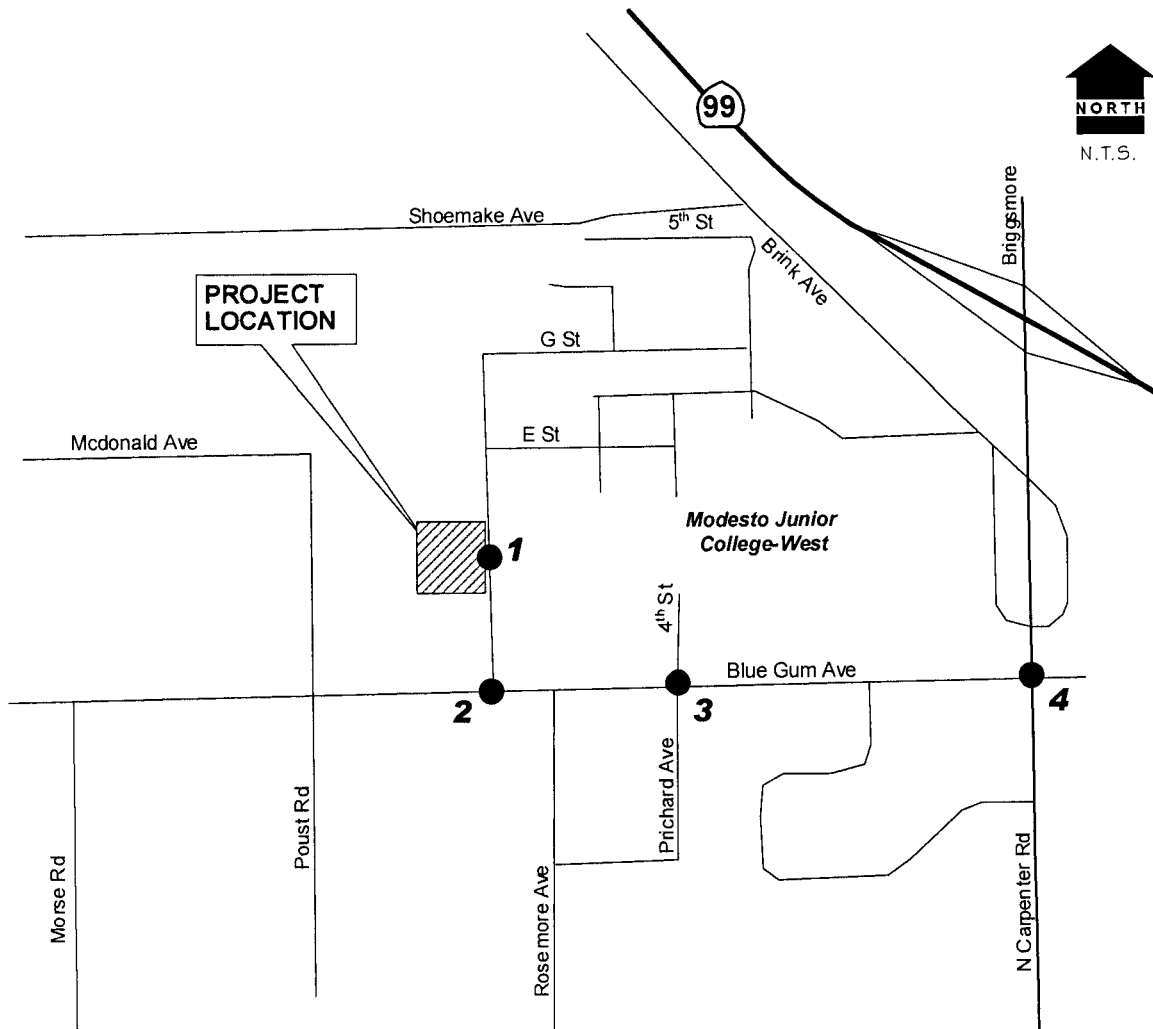
Figure 6 displays resulting “Existing Plus Project” traffic volumes with Phase 1 project traffic added to existing background traffic volumes. Projected intersection and roadway Levels of Service are presented in Tables 10 and 11.

As shown in Table 10, traffic generated by Phase 1 development of the Juvenile Hall Commitment Center is projected to have a minor impact at each of the study intersections. Satisfactory LOS “C” or better operations are projected to continue at each location. Table 10 also summarizes the net increase in delays at each of the study intersections with the addition of project generated traffic. As shown, increases in delay are projected to be minor, consisting of about a one (1) second or less increase at any individual intersection approach. The stop sign controlled study intersections are projected to continue to operate satisfactorily, and signalization of the intersections is not projected to be warranted. No intersection improvement needs have been identified.

Table 11 summarizes projected roadway operations. As shown, impacts to area roadway operations are also projected to be minor. Level of Service “B” roadway operations are projected to continue along each of the study roadway segments. Although traffic volumes on 2nd Street are projected to remain relatively low, it is recommended that 2nd Street be improved to the City standard width of 36 feet for local streets from Blue Gum Avenue north to the northerly driveway access. A pavement overlay will also be required north of the college access driveway as existing pavement condition is very poor.







**EXISTING PLUS PHASE 1
TRAFFIC VOLUMES
AND LANE CONFIGURATIONS**

KD Anderson & Associates, Inc.
Transportation Engineers

**TABLE 10
INTERSECTION LEVELS OF SERVICE
EXISTING PLUS PHASE 1**

| Intersection | | Existing | | | | Existing Plus Phase 1 | | | | Net Changes/Increase | | | |
|--|-------------|--------------|-------|--------------|-------|-----------------------|-------|--------------|-------|----------------------|-------|--------------|-------|
| | | AM Peak Hour | | PM Peak Hour | | AM Peak Hour | | PM Peak Hour | | AM Peak Hour | | PM Peak Hour | |
| Location | Control | LOS | Delay | LOS | Delay | LOS | Delay | LOS | Delay | LOS | Delay | LOS | Delay |
| 2 nd Street/Blue Gum Avenue | SB Stop | B | 13.6 | B | 14.3 | B | 13.8 | C | 15.4 | - | 0.2 | B-C | 1.1 |
| | | A | 8.2 | A | 8.0 | A | 8.4 | A | 8.1 | - | 0.2 | - | 0.1 |
| | | | | | | | | | | | | | |
| 4 th Street/Prichard Ave/Blue Gum Ave | NB, SB Stop | A | 8.3 | A | 8.2 | A | 8.3 | A | 8.3 | - | 0.0 | - | 0.1 |
| | | A | 8.7 | A | 8.4 | A | 8.9 | A | 8.4 | - | 0.2 | - | 0.0 |
| | | C | 22.1 | C | 21.4 | C | 23.5 | C | 22.2 | - | 1.4 | - | 0.8 |
| | | A | 9.5 | B | 10.2 | A | 9.5 | B | 10.4 | - | 0.0 | - | 0.2 |
| Blue Gum Ave/Carpenter Road | Signal | C | 26.6 | C | 29.6 | C | 26.8 | C | 30.0 | - | 0.2 | - | 0.4 |
| 2 nd Street / Project Access | EB Stop | - | - | - | - | A | 8.4 | A | 8.6 | - | - | - | - |

LOS = Level of Service
Delay = Average Delay in seconds

**TABLE 11
ROADWAY LEVELS OF SERVICE
EXISTING PLUS PHASE 1**

| Location | Number of Lanes | Existing | | | Existing Plus Phase 1 | | |
|--|-----------------|------------------|------|-----|-----------------------|------|-----|
| | | Peak Hour Volume | V/C | LOS | Peak Hour Volume | V/C | LOS |
| Blue Gum Avenue West of 4 th Street | 4 | 900 | 0.45 | B | 936 | 0.47 | B |
| 2 nd Street North of Blue Gum Avenue | 2 | 151 | 0.15 | B | 191 | 0.19 | B |

Phase 1 Access and Parking

Access to the site will be provided via 2nd Street. Three driveway connections are proposed and will serve a 60 space parking lot, with the northerly 30 spaces designated for staff parking and the southerly 30 spaces available for visitor parking. The southerly driveway will be located approximately 500 feet north of Blue Gum Avenue, with each of the other driveways spaced at approximately 250 foot intervals. The northerly most driveway will align with the northerly access to the Modesto Junior College parking lot on the east side of 2nd Street. As traffic will be oriented to the south on 2nd Street, it is estimated that the southerly driveway and middle driveway will be used by the majority of motorists accessing the site.

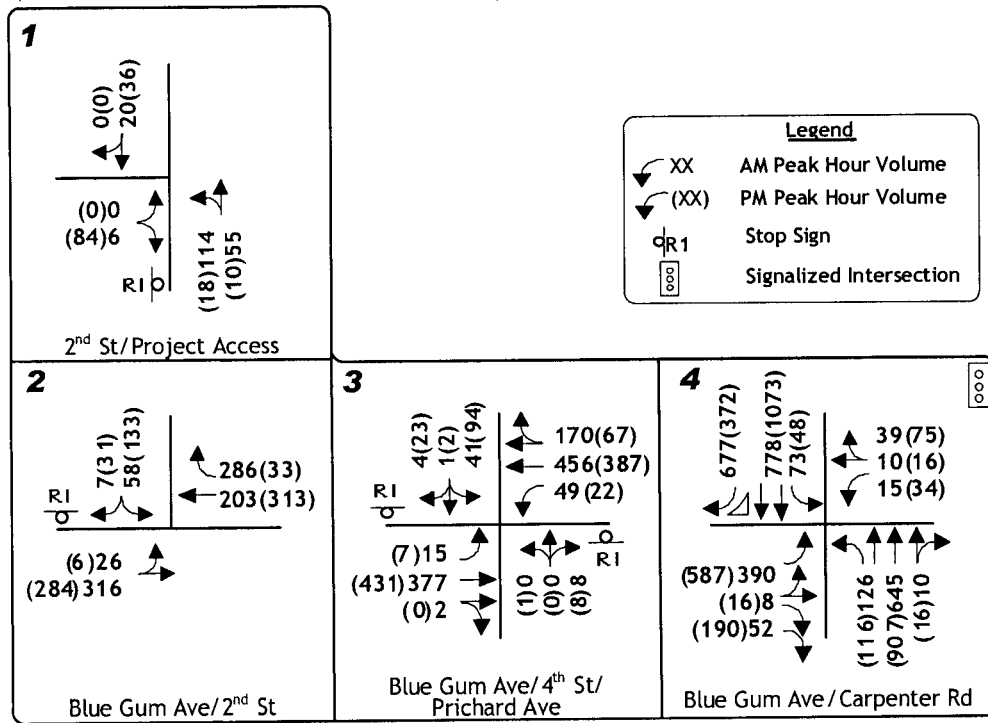
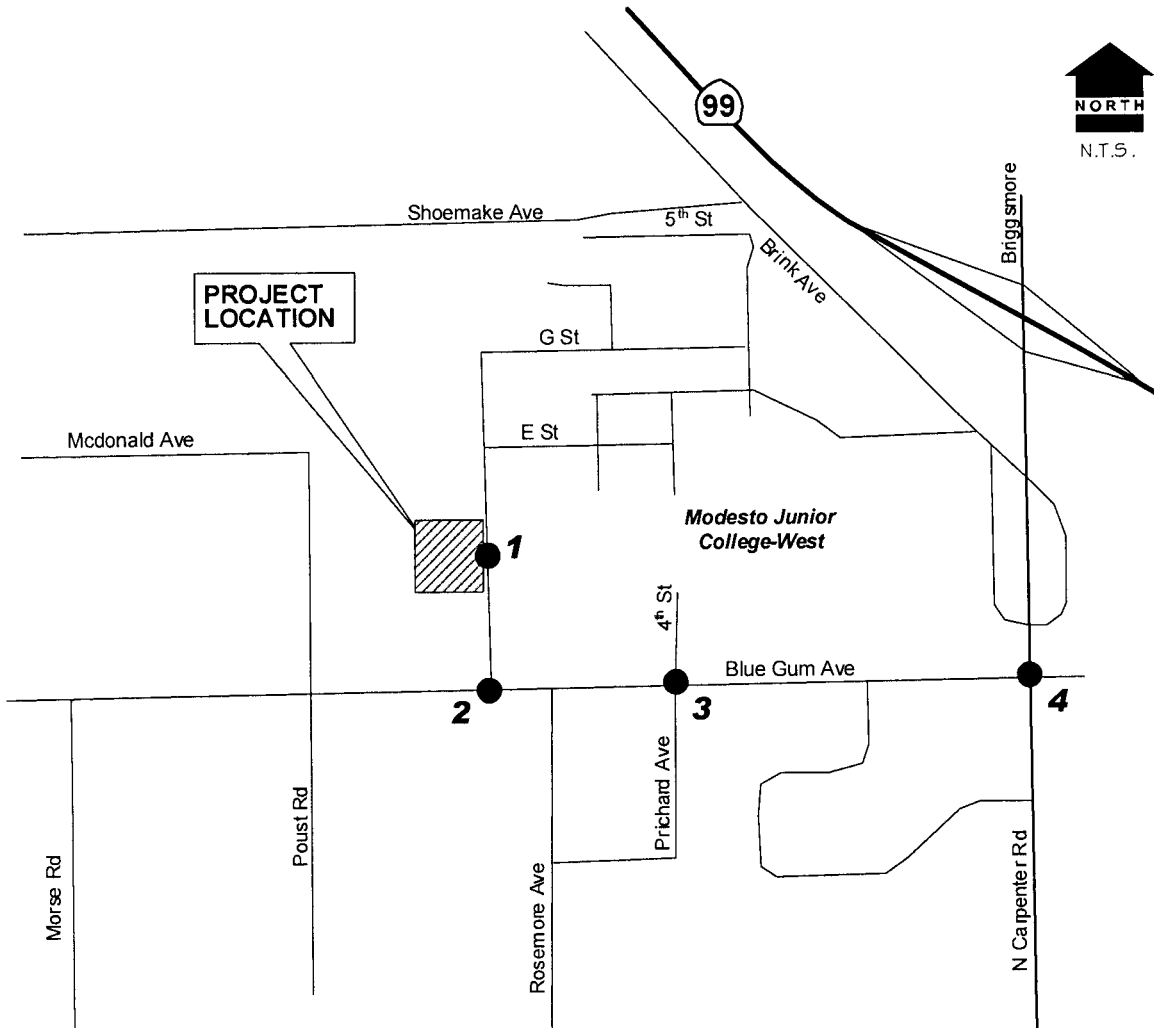
Satisfactory LOS "A" operations are projected at each of the driveways. The volume of traffic on 2nd Street and at each of the driveways is not projected to warrant left turn channelization on 2nd Street. The southerly driveway will also serve deliveries, such as to the food service facility, and will need to accommodate truck access. Truck access will also require a turnaround area off of the southerly driveway, or design of the parking lot and at least one of the other driveways to serve truck circulation in and out of the site. Widening of 2nd Street to current City standards for Local Streets as previously discussed will also facilitate truck access to the site.

Phase 2 - Existing Plus Project Traffic Volumes and Levels of Service

Figure 7 displays resulting “Existing Plus Project” traffic volumes with Phase 2 project traffic added to existing background and Phase 1 traffic volumes. Projected intersection and roadway Levels of Service are presented in Tables 12 and 13.

As shown in Table 12, with the additional traffic generated by Phase 2 of the Juvenile Hall Commitment Center, satisfactory intersection operations are also projected to continue. LOS “C” or better operations are projected to continue at the majority of locations, with one approach at the Blue Gum Avenue / 4th Street intersection degrading from LOS “C” to LOS “D” in the a.m. peak hour. However, this is also within identified acceptable standards. The stop sign controlled study intersections are projected to continue to operate satisfactorily, and signalization of the intersections is not projected to be warranted. No intersection improvement needs have been identified.

Table 13 summarizes projected roadway operations. As shown, area roadway operations are also projected to remain within acceptable standards with the addition of Phase 2 traffic. Satisfactory level of Service “C” roadway operations are projected along each of the study roadway segments. However, as identified for Phase 1 development, it is recommended that 2nd Street be improved to the City standard width of 36 feet for local streets from Blue Gum Avenue north to the northerly driveway access.



**EXISTING PLUS PHASE 2
TRAFFIC VOLUMES
AND LANE CONFIGURATIONS**

**TABLE 12
INTERSECTION LEVELS OF SERVICE
EXISTING PLUS PHASE 2**

| Intersection | | Existing | | | | Existing Plus Phase 2 | | | | Net Changes/Increase | | | |
|--|----------------|-----------------|-------|-----------------|-------|-----------------------|-------|-----------------|-------|----------------------|-------|-----------------|-------|
| | | AM Peak Hour | | PM Peak Hour | | AM Peak Hour | | PM Peak Hour | | AM Peak Hour | | PM Peak Hour | |
| Location | Control | LOS | Delay | LOS | Delay | LOS | Delay | LOS | Delay | LOS | Delay | LOS | Delay |
| 2 nd Street/Blue Gum Avenue | SB Stop | B | 13.6 | B | 14.3 | B | 14.3 | C | 18.2 | - | 0.7 | B-C | 3.9 |
| | | A | 8.2 | A | 8.0 | A | 8.6 | A | 8.1 | - | 0.4 | - | 0.1 |
| | | | | | | | | | | | | | |
| 4 th Street/Prichard Ave/Blue Gum Ave | NB, SB Stop | A | 8.3 | A | 8.2 | A | 8.4 | A | 8.4 | - | 0.1 | - | 0.2 |
| | | A | 8.7 | A | 8.4 | A | 9.1 | A | 8.5 | - | 0.4 | - | 0.1 |
| | | C | 22.1 | C | 21.4 | D | 26.8 | C | 24.0 | C - D | 4.7 | - | 2.6 |
| | | A | 9.5 | B | 10.2 | A | 9.5 | B | 10.7 | - | 0.0 | - | 0.5 |
| Blue Gum Ave/Carpenter Road | Signal | C | 26.6 | C | 29.6 | C | 27.3 | C | 30.7 | - | 0.7 | - | 1.1 |
| 2 nd Street / Project Access | EB Stop | - | - | - | - | A | 8.4 | A | 8.8 | - | - | - | - |

LOS = Level of Service
Delay = Average Delay in seconds

**TABLE 13
ROADWAY LEVELS OF SERVICE
EXISTING PLUS PHASE 2**

| Location | Number of Lanes | Existing | | | Existing Plus Phase 2 | | |
|--|-----------------|------------------|------|-----|-----------------------|------|-----|
| | | Peak Hour Volume | V/C | LOS | Peak Hour Volume | V/C | LOS |
| Blue Gum Avenue West of 4 th Street | 4 | 900 | 0.45 | B | 1,008 | 0.50 | C |
| 2 nd Street North of Blue Gum Avenue | 2 | 151 | 0.15 | B | 271 | 0.27 | C |

Phase 2 Access and Parking

An additional 50 space public parking lot will be developed in conjunction with Phase 2. This lot will be accessed via an existing driveway serving the existing juvenile hall and the southerly driveway developed as part of Phase 1. As traffic will be oriented to the south on 2nd Street, it is estimated that these driveways will experience the highest use. Additionally, some traffic may be diverted from the existing parking area fronting Blue Gum Avenue as the additional parking areas are developed. Satisfactory LOS "A" operations are projected to continue at each of the driveways with development of Phase 2. The volume of traffic on 2nd Street and at each of the driveways is not projected to warrant left turn channelization on 2nd Street. However, widening of 2nd Street to current City standards for Local Streets is recommended as previously discussed.

SUMMARY AND RECOMMENDATIONS

The Juvenile Hall Commitment Center is proposed on the west side of 2nd Street just north of Blue Gum Avenue in the City of Modesto. The site is adjacent to the Modesto Junior College West campus and would be developed at the existing Juvenile Justice Center site on county owned vacant land adjacent to the existing Juvenile Hall facility. The new facilities will share some services with the existing Juvenile Hall and will be linked to the existing facility via a covered and secure walkway. Development of Phase 1 will add 60 beds to the existing 158 bed facility, with Phase 2 adding an additional 120 beds. Access to the site will be from 2nd Street. This report includes analysis of intersection and roadway operations in the vicinity of the site with and without development of the proposed project to quantify resulting traffic impacts. Development of both Phase 1 and Phase 2 of the project has been analyzed relative to current background traffic conditions.

Phase 1 of the Juvenile Hall Commitment Center is projected to generate approximately 40 and 34 trips in the a.m. and p.m. peak traffic hours, respectively. This is based upon observations at the existing Juvenile Hall facility and linear interpolation of traffic volumes in relation to the existing and proposed number of beds. Development of Phase 2 is projected to generate an additional 80 a.m. peak hour and 68 p.m. peak hour trips.

Satisfactory intersection and roadway operations are currently experienced in the study area. With the addition of project generated traffic (Phase 1 and Phase 2) added to current background traffic, satisfactory intersection and roadway operations are projected to continue. The stop sign controlled study intersections are projected to continue to operate satisfactorily and will not warrant signalization.

Although traffic volumes on 2nd Street are projected to remain relatively low with development of the site, it is recommended that 2nd Street be improved to the City standard width of 36 feet for Local Streets from Blue Gum Avenue north to the northerly driveway access. This will also facilitate truck access to the site. A pavement overlay will also be required north of the college access driveway, as existing pavement condition is very poor.

APPENDIX

KDA

**EXISTING
LEVEL OF SERVICE**

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Future Volume Alternative)

 Intersection #1 blue gum & 2nd st (ex am)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: B[13.6]

| Street Name: | 2nd st | | | | | | blue gum | | | | | |
|--------------|-------------|---|---|-------------|---|---|--------------|---|---|--------------|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 |

Volume Module:

| | | | | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol: | 0 | 0 | 0 | 52 | 0 | 7 | 14 | 316 | 0 | 0 | 203 | 184 |
| Growth 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 |
| Initial Bse: | 0 | 0 | 0 | 52 | 0 | 7 | 14 | 316 | 0 | 0 | 203 | 184 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 52 | 0 | 7 | 14 | 316 | 0 | 0 | 203 | 184 |
| User 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 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 0 | 0 | 0 | 58 | 0 | 8 | 16 | 351 | 0 | 0 | 226 | 204 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FinalVolume: | 0 | 0 | 0 | 58 | 0 | 8 | 16 | 351 | 0 | 0 | 226 | 204 |

Critical Gap Module:

| | | | | | | | | | | | | |
|--------------|-------|------|-------|-----|-----|-----|-----|------|--------|--------|------|--------|
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | 6.5 | 6.2 | 4.1 | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | 2.2 | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx |

Capacity Module:

| | | | | | | | | | | | | |
|--------------|------|------|--------|------|------|------|------|------|--------|------|------|--------|
| Cnflct Vol: | xxxx | xxxx | xxxxxx | 608 | 608 | 226 | 430 | xxxx | xxxxxx | xxxx | xxxx | xxxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxxx | 462 | 413 | 819 | 1124 | xxxx | xxxxxx | xxxx | xxxx | xxxxxx |
| Move Cap.: | xxxx | xxxx | xxxxxx | 457 | 407 | 819 | 1124 | xxxx | xxxxxx | xxxx | xxxx | xxxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.13 | 0.00 | 0.01 | 0.01 | xxxx | xxxx | xxxx | xxxx | xxxx |

Level Of Service Module:

| | | | | | | | | | | | | |
|--------------|---------|------|--------|--------|------|--------|---------|------|--------|---------|------|--------|
| 2Way95thQ: | xxxx | xxxx | xxxxxx | xxxx | xxxx | xxxxxx | 0.0 | xxxx | xxxxxx | xxxx | xxxx | xxxxxx |
| Control Del: | xxxxxx | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx | 8.2 | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx |
| LOS by Move: | * | * | * | * | * | * | A | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxxx | xxxx | 483 | xxxxxx | xxxx | xxxx | xxxxxx | xxxx | xxxx | xxxxxx |
| SharedQueue: | xxxxxx | xxxx | xxxxxx | xxxxxx | 0.5 | xxxxxx | 0.0 | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx |
| Shrd ConDel: | xxxxxx | xxxx | xxxxxx | xxxxxx | 13.6 | xxxxxx | 8.2 | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx |
| Shared LOS: | * | * | * | * | B | * | A | * | * | * | * | * |
| ApproachDel: | xxxxxxx | | | 13.6 | | | xxxxxxx | | | xxxxxxx | | |
| ApproachLOS: | * | | | B | | | * | | | * | | |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 blue gum & 4th st (ex am)

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: C[22.1]

Table with columns for Street Name, Approach, Movement, Control, Rights, and Lanes. Rows include North Bound, South Bound, East Bound, and West Bound movements.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and FinalVolume for each approach.

Critical Gap Module table showing Critical Gp and FollowUpTim for each approach.

Capacity Module table showing Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap for each approach.

Level Of Service Module table showing 2Way95thQ, Control Del, LOS by Move, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS for each approach.

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #3 carpenter & blue gum [ex am]

Cycle (sec): 100 Critical Vol./Cap.(X): 0.537
 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): 26.6
 Optimal Cycle: 80 Level Of Service: C

Street Name: carpenter rd blue gum ave
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Split Phase Split Phase
 Rights: Include Ignore Include Include
 Min. Green: 8 8 8 8 8 8 8 8 8 8 8 8
 Lanes: 1 0 2 1 0 1 0 2 0 1 1 1 0 0 2 1 0 0 1 0

Volume Module:
 Base Vol: 102 645 10 73 778 599 387 8 49 15 10 39
 Growth 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
 Initial Bse: 102 645 10 73 778 599 387 8 49 15 10 39
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 102 645 10 73 778 599 387 8 49 15 10 39
 User Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 0.90 0.90 0.90 0.90 0.90 0.00 0.90 0.90 0.90 0.90 0.90 0.90
 PHF Volume: 113 717 11 81 864 0 430 9 54 17 11 43
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 113 717 11 81 864 0 430 9 54 17 11 43
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 113 717 11 81 864 0 430 9 54 17 11 43

Saturation Flow Module:
 Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
 Adjustment: 0.91 0.87 0.87 0.91 0.91 1.00 0.93 0.93 0.73 0.92 0.86 0.86
 Lanes: 1.00 2.95 0.05 1.00 2.00 1.00 1.96 0.04 2.00 1.00 0.20 0.80
 Final Sat.: 1736 4904 76 1736 3473 1900 3445 71 2760 1753 332 1294

Capacity Analysis Module:
 Vol/Sat: 0.07 0.15 0.15 0.05 0.25 0.00 0.12 0.12 0.02 0.01 0.03 0.03
 Crit Moves: **** * 0.23 0.23 0.23 0.08 0.08 0.08
 Green/Cycle: 0.12 0.37 0.37 0.20 0.45 0.00 0.23 0.23 0.23 0.08 0.08 0.08
 Volume/Cap: 0.55 0.39 0.39 0.23 0.55 0.00 0.55 0.55 0.09 0.12 0.42 0.42
 Uniform Del: 41.5 23.2 23.2 33.4 19.9 0.0 34.1 34.1 30.4 42.7 43.8 43.8
 IncremntDel: 3.1 0.1 0.1 0.3 0.4 0.0 0.8 0.8 0.1 0.4 2.2 2.2
 InitQueuDel: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00
 Delay/Veh: 44.6 23.4 23.4 33.7 20.3 0.0 34.9 34.9 30.5 43.1 46.0 46.0
 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 44.6 23.4 23.4 33.7 20.3 0.0 34.9 34.9 30.5 43.1 46.0 46.0
 LOS by Move: D C C C C A C C C D D D
 HCM2kAvgQ: 4 6 6 2 10 0 7 7 1 1 2 2

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Future Volume Alternative)

 Intersection #1 blue gum & 2nd st [ex pm]

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: B[14.3]

| Street Name: | 2nd st | | | | | | blue gum | | | | | |
|--------------|-------------|---|---|-------------|---|---|--------------|---|---|--------------|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 |

| Volume Module: | | | | | | | | | | | | |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol: | 0 | 0 | 0 | 58 | 0 | 22 | 3 | 284 | 0 | 0 | 313 | 18 |
| Growth 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 |
| Initial Bse: | 0 | 0 | 0 | 58 | 0 | 22 | 3 | 284 | 0 | 0 | 313 | 18 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 58 | 0 | 22 | 3 | 284 | 0 | 0 | 313 | 18 |
| User 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 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 0 | 0 | 0 | 64 | 0 | 24 | 3 | 316 | 0 | 0 | 348 | 20 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FinalVolume: | 0 | 0 | 0 | 64 | 0 | 24 | 3 | 316 | 0 | 0 | 348 | 20 |

| Critical Gap Module: | | | | | | | | | | | | |
|----------------------|-------|------|-------|-----|-----|-----|-----|------|-------|-------|------|-------|
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | 6.5 | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |

| Capacity Module: | | | | | | | | | | | | |
|------------------|------|------|-------|------|------|------|------|------|-------|------|------|-------|
| Cnflct Vol: | xxxx | xxxx | xxxxx | 670 | 670 | 348 | 368 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 425 | 381 | 700 | 1185 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 424 | 380 | 700 | 1185 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.15 | 0.00 | 0.03 | 0.00 | xxxx | xxxx | xxxx | xxxx | xxxx |

| Level Of Service Module: | | | | | | | | | | | | |
|--------------------------|--------|------|-------|-------|------|-------|--------|------|-------|--------|------|-------|
| 2Way95thQ: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 0.0 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Control Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | * | A | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | 476 | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | 0.7 | xxxxx | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd ConDel: | xxxxx | xxxx | xxxxx | xxxxx | 14.3 | xxxxx | 8.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | B | * | A | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 14.3 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | B | | | * | | | * | | |

 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 blue gum & 4th st [ex pm]

Average Delay (sec/veh): 3.0 Worst Case Level Of Service: C[21.4]

Table with columns for Street Name (4th st, blue gum ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign, Uncontrolled), Rights (Include), and Lanes (0, 1).

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and FinalVolume across various movements.

Critical Gap Module table with columns for Critical Gp and FollowUpTim across movements.

Capacity Module table with columns for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap across movements.

Level Of Service Module table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS across movements.

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 carpenter & blue gum [ex pm]

Cycle (sec): 100 Critical Vol./Cap.(X): 0.739
 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): 29.6
 Optimal Cycle: 80 Level Of Service: C

| Street Name: | carpenter rd | | | | | | blue gum ave | | | | | | | | | | | | | |
|--------------|--------------|---|---|-------------|---|---|--------------|---|---|-------------|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | | | | | | | | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R | | | | | | | | |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | | | | | | | | | |
| Rights: | Include | | | Ignore | | | Include | | | Include | | | | | | | | | | |
| Min. Green: | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | | | | | | |
| Lanes: | 1 | 0 | 2 | 1 | 0 | 1 | 0 | 2 | 0 | 1 | 1 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 1 | 0 |

Volume Module:

| | | | | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol: | 113 | 907 | 16 | 48 | 1073 | 360 | 530 | 16 | 172 | 34 | 16 | 75 |
| Growth 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 |
| Initial Bse: | 113 | 907 | 16 | 48 | 1073 | 360 | 530 | 16 | 172 | 34 | 16 | 75 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 113 | 907 | 16 | 48 | 1073 | 360 | 530 | 16 | 172 | 34 | 16 | 75 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.00 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 126 | 1008 | 18 | 53 | 1192 | 0 | 589 | 18 | 191 | 38 | 18 | 83 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 126 | 1008 | 18 | 53 | 1192 | 0 | 589 | 18 | 191 | 38 | 18 | 83 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 126 | 1008 | 18 | 53 | 1192 | 0 | 589 | 18 | 191 | 38 | 18 | 83 |

Saturation Flow Module:

| | | | | | | | | | | | | |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.87 | 0.87 | 0.91 | 0.91 | 1.00 | 0.93 | 0.93 | 0.73 | 0.92 | 0.85 | 0.85 |
| Lanes: | 1.00 | 2.95 | 0.05 | 1.00 | 2.00 | 1.00 | 1.94 | 0.06 | 2.00 | 1.00 | 0.18 | 0.82 |
| Final Sat.: | 1736 | 4889 | 86 | 1736 | 3473 | 1900 | 3417 | 103 | 2760 | 1753 | 284 | 1332 |

Capacity Analysis Module:

| | | | | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat: | 0.07 | 0.21 | 0.21 | 0.03 | 0.34 | 0.00 | 0.17 | 0.17 | 0.07 | 0.02 | 0.06 | 0.06 |
| Crit Moves: | **** | | | **** | | | **** | | | **** | | |
| Green/Cycle: | 0.10 | 0.41 | 0.41 | 0.16 | 0.46 | 0.00 | 0.23 | 0.23 | 0.23 | 0.08 | 0.08 | 0.08 |
| Volume/Cap: | 0.74 | 0.51 | 0.51 | 0.20 | 0.74 | 0.00 | 0.74 | 0.74 | 0.30 | 0.25 | 0.74 | 0.74 |
| Uniform Del: | 43.9 | 22.3 | 22.3 | 36.6 | 21.8 | 0.0 | 35.5 | 35.5 | 31.6 | 42.8 | 44.7 | 44.7 |
| IncrcmntDel: | 15.8 | 0.2 | 0.2 | 0.4 | 1.9 | 0.0 | 3.6 | 3.6 | 0.3 | 0.9 | 19.1 | 19.1 |
| InitQueuDel: | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Delay/Veh: | 59.6 | 22.5 | 22.5 | 37.0 | 23.7 | 0.0 | 39.1 | 39.1 | 31.9 | 43.7 | 63.8 | 63.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 59.6 | 22.5 | 22.5 | 37.0 | 23.7 | 0.0 | 39.1 | 39.1 | 31.9 | 43.7 | 63.8 | 63.8 |
| LOS by Move: | E | C | C | D | C | A | D | D | C | D | E | E |
| HCM2kAvgQ: | 5 | 9 | 9 | 2 | 17 | 0 | 10 | 10 | 3 | 1 | 5 | 5 |

**EXISTING PLUS PROJECT
LEVELS OF SERVICE**

KDA

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Future Volume Alternative)

 Intersection #1 blue gum & 2nd st [ex am plus project]

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: B[13.8]

| Street Name: | 2nd st | | | | | | blue gum | | | | | |
|--------------|-------------|---|---|-------------|---|---|--------------|---|---|--------------|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 |

| Volume Module: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|----------------|-------------|------|------|-------------|------|------|------------|------|------|------------|------|------|
| Base Vol: | 0 | 0 | 0 | 54 | 0 | 7 | 18 | 316 | 0 | 0 | 203 | 218 |
| Growth 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 |
| Initial Bse: | 0 | 0 | 0 | 54 | 0 | 7 | 18 | 316 | 0 | 0 | 203 | 218 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 54 | 0 | 7 | 18 | 316 | 0 | 0 | 203 | 218 |
| User 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 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 0 | 0 | 0 | 60 | 0 | 8 | 20 | 351 | 0 | 0 | 226 | 242 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FinalVolume: | 0 | 0 | 0 | 60 | 0 | 8 | 20 | 351 | 0 | 0 | 226 | 242 |

| Critical Gap Module: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|----------------------|-------------|------|-------|-------------|-----|-----|------------|------|-------|------------|------|-------|
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | 6.5 | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |

| Capacity Module: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|------------------|-------------|------|-------|-------------|------|------|------------|------|-------|------------|------|-------|
| Cnflct Vol: | xxxx | xxxx | xxxxx | 617 | 617 | 226 | 468 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 457 | 408 | 819 | 1089 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 450 | 401 | 819 | 1089 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.13 | 0.00 | 0.01 | 0.02 | xxxx | xxxx | xxxx | xxxx | xxxx |

| Level Of Service Module: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|--------------------------|-------------|------|-------|-------------|------|-------|------------|------|-------|------------|------|-------|
| 2Way95thQ: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 0.1 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Control Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.4 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | * | A | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | 475 | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | 0.5 | xxxxx | 0.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd ConDel: | xxxxx | xxxx | xxxxx | xxxxx | 13.8 | xxxxx | 8.4 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | B | * | A | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 13.8 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | B | | | * | | | * | | |

 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

 Intersection #2 blue gum & 4th st [ex am plus project]

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: C [23.5]

| Street Name: | 4th st | | | | | | blue gum ave | | | | | | | | | |
|--------------|-------------|---|---|-------------|---|---|--------------|---|---|--------------|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | | | | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R | | | | |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | | | | | |
| Rights: | Include | | | Include | | | Include | | | Include | | | | | | |
| Lanes: | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |

Volume Module:

| | | | | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol: | 0 | 0 | 8 | 41 | 1 | 4 | 15 | 373 | 2 | 49 | 388 | 170 |
| Growth 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 |
| Initial Bse: | 0 | 0 | 8 | 41 | 1 | 4 | 15 | 373 | 2 | 49 | 388 | 170 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 8 | 41 | 1 | 4 | 15 | 373 | 2 | 49 | 388 | 170 |
| User 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 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 0 | 0 | 9 | 46 | 1 | 4 | 17 | 414 | 2 | 54 | 431 | 189 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FinalVolume: | 0 | 0 | 9 | 46 | 1 | 4 | 17 | 414 | 2 | 54 | 431 | 189 |

Critical Gap Module:

| | | | | | | | | | | | | |
|--------------|-------|------|-----|-----|-----|-----|-----|------|-------|-----|------|-------|
| Critical Gp: | xxxxx | xxxx | 6.9 | 7.5 | 6.5 | 6.9 | 4.2 | xxxx | xxxxx | 4.2 | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | 3.3 | 3.5 | 4.0 | 3.3 | 2.2 | xxxx | xxxxx | 2.2 | xxxx | xxxxx |

Capacity Module:

| | | | | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|-------|------|------|-------|
| Cnflct Vol: | xxxx | xxxx | 208 | 875 | 1084 | 310 | 620 | xxxx | xxxxx | 417 | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | 804 | 247 | 219 | 692 | 950 | xxxx | xxxxx | 1132 | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | 804 | 232 | 204 | 692 | 950 | xxxx | xxxxx | 1132 | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | 0.01 | 0.20 | 0.01 | 0.01 | 0.02 | xxxx | xxxx | 0.05 | xxxx | xxxx |

Level Of Service Module:

| | | | | | | | | | | | | | | | |
|--------------|-------|------|-------|-------|------|-------|--------|------|-------|--------|------|-------|-----|---|----|
| 2Way95thQ: | xxxx | xxxx | 0.0 | xxxx | xxxx | xxxxx | 0.1 | xxxx | xxxxx | 0.2 | xxxx | xxxxx | | | |
| Control Del: | xxxxx | xxxx | 9.5 | xxxxx | xxxx | xxxxx | 8.9 | xxxx | xxxxx | 8.3 | xxxx | xxxxx | | | |
| LOS by Move: | * | * | A | * | * | * | A | * | * | A | * | * | | | |
| Movement: | LT | - | LTR | - | RT | LT | - | LTR | - | RT | LT | - | LTR | - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | 245 | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | | | |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | 0.8 | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | | | |
| Shrd ConDel: | xxxxx | xxxx | xxxxx | xxxxx | 23.5 | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | | | |
| Shared LOS: | * | * | * | * | C | * | * | * | * | * | * | * | | | |
| ApproachDel: | 9.5 | | | 23.5 | | | xxxxxx | | | xxxxxx | | | | | |
| ApproachLOS: | A | | | C | | | * | | | * | | | | | |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #3 carpenter & blue gum [ex am plus project]

Cycle (sec): 100 Critical Vol./Cap.(X): 0.543
 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): 26.8
 Optimal Cycle: 80 Level Of Service: C

| Street Name: | carpenter rd | | | | | | blue gum ave | | | | | |
|--------------|--------------|---|---|-------------|---|---|--------------|---|---|-------------|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Ignore | | | Include | | | Include | | |
| Min. Green: | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Lanes: | 1 | 0 | 2 | 1 | 0 | 2 | 1 | 1 | 0 | 0 | 1 | 0 |

Volume Module:

| | | | | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol: | 110 | 645 | 10 | 73 | 778 | 625 | 388 | 8 | 50 | 15 | 10 | 39 |
| Growth 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 |
| Initial Bse: | 110 | 645 | 10 | 73 | 778 | 625 | 388 | 8 | 50 | 15 | 10 | 39 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 110 | 645 | 10 | 73 | 778 | 625 | 388 | 8 | 50 | 15 | 10 | 39 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.00 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 122 | 717 | 11 | 81 | 864 | 0 | 431 | 9 | 56 | 17 | 11 | 43 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 122 | 717 | 11 | 81 | 864 | 0 | 431 | 9 | 56 | 17 | 11 | 43 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 122 | 717 | 11 | 81 | 864 | 0 | 431 | 9 | 56 | 17 | 11 | 43 |

Saturation Flow Module:

| | | | | | | | | | | | | |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.87 | 0.87 | 0.91 | 0.91 | 1.00 | 0.93 | 0.93 | 0.73 | 0.92 | 0.86 | 0.86 |
| Lanes: | 1.00 | 2.95 | 0.05 | 1.00 | 2.00 | 1.00 | 1.96 | 0.04 | 2.00 | 1.00 | 0.20 | 0.80 |
| Final Sat.: | 1736 | 4904 | 76 | 1736 | 3473 | 1900 | 3445 | 71 | 2760 | 1753 | 332 | 1294 |

Capacity Analysis Module:

| | | | | | | | | | | | | |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat: | 0.07 | 0.15 | 0.15 | 0.05 | 0.25 | 0.00 | 0.13 | 0.13 | 0.02 | 0.01 | 0.03 | 0.03 |
| Crit Moves: | **** | | | **** | | | **** | | | **** | | |
| Green/Cycle: | 0.13 | 0.37 | 0.37 | 0.20 | 0.45 | 0.00 | 0.23 | 0.23 | 0.23 | 0.08 | 0.08 | 0.08 |
| Volume/Cap: | 0.56 | 0.39 | 0.39 | 0.23 | 0.56 | 0.00 | 0.56 | 0.56 | 0.09 | 0.12 | 0.42 | 0.42 |
| Uniform Del: | 41.0 | 23.1 | 23.1 | 33.3 | 20.3 | 0.0 | 34.3 | 34.3 | 30.6 | 42.7 | 43.8 | 43.8 |
| IncrementDel: | 3.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.0 | 0.9 | 0.9 | 0.1 | 0.4 | 2.2 | 2.2 |
| InitQueueDel: | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Delay/Veh: | 44.1 | 23.3 | 23.3 | 33.6 | 20.7 | 0.0 | 35.2 | 35.2 | 30.7 | 43.1 | 46.0 | 46.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 44.1 | 23.3 | 23.3 | 33.6 | 20.7 | 0.0 | 35.2 | 35.2 | 30.7 | 43.1 | 46.0 | 46.0 |
| LOS by Move: | D | C | C | C | C | A | D | D | C | D | D | D |
| HCM2kAvgQ: | 4 | 6 | 6 | 2 | 11 | 0 | 7 | 7 | 1 | 1 | 2 | 2 |

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

 Intersection #4 2nd & project access [ex am plus project]

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: A[8.4]

| Street Name: | 2nd st | | | | access | | | | | | | |
|--------------|--------------|---|--------------|---|------------|---|------------|---|---|---|---|---|
| Approach: | North Bound | | South Bound | | East Bound | | West Bound | | | | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Uncontrolled | | Uncontrolled | | Stop Sign | | Stop Sign | | | | | |
| Rights: | Include | | Include | | Include | | Include | | | | | |
| Lanes: | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |

Volume Module:

| | | | | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol: | 38 | 55 | 0 | 0 | 20 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| Growth 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 |
| Initial Bse: | 38 | 55 | 0 | 0 | 20 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 38 | 55 | 0 | 0 | 20 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| User 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 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 42 | 61 | 0 | 0 | 22 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FinalVolume: | 42 | 61 | 0 | 0 | 22 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |

Critical Gap Module:

| | | | | | | | | | | | | |
|--------------|-----|------|-------|-------|------|-------|-------|------|-----|-------|------|-------|
| Critical Gp: | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 6.2 | xxxxx | xxxx | xxxxx |
| FollowUpTim: | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 3.3 | xxxxx | xxxx | xxxxx |

Capacity Module:

| | | | | | | | | | | | | |
|--------------|------|------|-------|-------|------|-------|------|------|------|------|------|-------|
| Cnflct Vol: | 22 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxx | xxxx | 22 | xxxx | xxxx | xxxxx |
| Potent Cap.: | 1606 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxx | xxxx | 1061 | xxxx | xxxx | xxxxx |
| Move Cap.: | 1606 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxx | xxxx | 1061 | xxxx | xxxx | xxxxx |
| Volume/Cap: | 0.03 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 0.00 | xxxx | xxxx | xxxx |

Level of Service Module:

| | | | | | | | | | | | | | | | |
|--------------|--------|------|-------|--------|------|-------|-------|------|-------|--------|------|-------|-----|---|----|
| 2Way95thQ: | 0.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxx | xxxx | 0.0 | xxxx | xxxx | xxxxx | | | |
| Control Del: | 7.3 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 8.4 | xxxxx | xxxx | xxxxx | | | |
| LOS by Move: | A | * | * | * | * | * | * | * | A | * | * | * | | | |
| Movement: | LT | - | LTR | - | RT | LT | - | LTR | - | RT | LT | - | LTR | - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | | | |
| SharedQueue: | 0.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | | | |
| Shrd ConDel: | 7.3 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | | | |
| Shared LOS: | A | * | * | * | * | * | * | * | * | * | * | * | | | |
| ApproachDel: | xxxxxx | | | xxxxxx | | | 8.4 | | | xxxxxx | | | | | |
| ApproachLOS: | * | | | * | | | A | | | * | | | | | |

 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Future Volume Alternative)

 Intersection #1 blue gum & 2nd st [ex pm plus project]

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: C [15.4]

| Street Name: | 2nd st | | | | | | blue gum | | | | | |
|--------------|-------------|---|---|-------------|---|---|--------------|---|---|--------------|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 |

| Volume Module: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|----------------|-------------|------|------|-------------|------|------|------------|------|------|------------|------|------|
| Base Vol: | 0 | 0 | 0 | 83 | 0 | 25 | 4 | 284 | 0 | 0 | 313 | 23 |
| Growth 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 |
| Initial Bse: | 0 | 0 | 0 | 83 | 0 | 25 | 4 | 284 | 0 | 0 | 313 | 23 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 83 | 0 | 25 | 4 | 284 | 0 | 0 | 313 | 23 |
| User 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 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 0 | 0 | 0 | 92 | 0 | 28 | 4 | 316 | 0 | 0 | 348 | 26 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FinalVolume: | 0 | 0 | 0 | 92 | 0 | 28 | 4 | 316 | 0 | 0 | 348 | 26 |

| Critical Gap Module: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|----------------------|-------------|-------|-------|-------------|-----|-----|------------|-------|-------|------------|-------|-------|
| Critical Gp: | xxxxx | xxxxx | xxxxx | 6.4 | 6.5 | 6.2 | 4.1 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxxx | xxxxx | 3.5 | 4.0 | 3.3 | 2.2 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |

| Capacity Module: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|------------------|-------------|-------|-------|-------------|------|------|------------|-------|-------|------------|-------|-------|
| Cnflct Vol: | xxxxx | xxxxx | xxxxx | 672 | 672 | 348 | 373 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| Potent Cap.: | xxxxx | xxxxx | xxxxx | 424 | 380 | 700 | 1180 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| Move Cap.: | xxxxx | xxxxx | xxxxx | 423 | 378 | 700 | 1180 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| Volume/Cap: | xxxxx | xxxxx | xxxxx | 0.22 | 0.00 | 0.04 | 0.00 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |

| Level Of Service Module: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|--------------------------|-------------|-------|-------|-------------|-------|-------|------------|-------|-------|------------|-------|-------|
| 2Way95thQ: | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | 0.0 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| Control Del: | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | 8.1 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | * | A | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxxx | xxxxx | xxxxx | xxxxx | 466 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| SharedQueue: | xxxxx | xxxxx | xxxxx | xxxxx | 1.0 | xxxxx | 0.0 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| Shrd ConDel: | xxxxx | xxxxx | xxxxx | xxxxx | 15.4 | xxxxx | 8.1 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| Shared LOS: | * | * | * | * | C | * | A | * | * | * | * | * |
| ApproachDel: | xxxxxxx | | | 15.4 | | | xxxxxxx | | | xxxxxxx | | |
| ApproachLOS: | * | | | C | | | * | | | * | | |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

 Intersection #2 blue gum & 4th st [ex pm plus project]

Average Delay (sec/veh): 3.0 Worst Case Level Of Service: C[22.2]

| Street Name: | 4th st | | | | | | blue gum ave | | | | | | | | |
|--------------|-------------|---|-----|-------------|---|-----|--------------|---|-----|--------------|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | | | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R | | | |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | | | | |
| Rights: | Include | | | Include | | | Include | | | Include | | | | | |
| Lanes: | 0 | 0 | 1 0 | 0 | 0 | 1 0 | 0 | 0 | 1 1 | 0 | 1 | 0 | 1 | 1 | 0 |

Volume Module:

| | | | | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol: | 1 | 0 | 8 | 94 | 2 | 23 | 7 | 381 | 0 | 22 | 377 | 67 |
| Growth 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 |
| Initial Bse: | 1 | 0 | 8 | 94 | 2 | 23 | 7 | 381 | 0 | 22 | 377 | 67 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 1 | 0 | 8 | 94 | 2 | 23 | 7 | 381 | 0 | 22 | 377 | 67 |
| User 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 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 1 | 0 | 9 | 104 | 2 | 26 | 8 | 423 | 0 | 24 | 419 | 74 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FinalVolume: | 1 | 0 | 9 | 104 | 2 | 26 | 8 | 423 | 0 | 24 | 419 | 74 |

Critical Gap Module:

| | | | | | | | | | | | | |
|--------------|-----|-----|-----|-----|-----|-----|-----|------|--------|-----|------|--------|
| Critical Gp: | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.2 | xxxx | xxxxxx | 4.2 | xxxx | xxxxxx |
| FollowUpTim: | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 | 2.2 | xxxx | xxxxxx | 2.2 | xxxx | xxxxxx |

Capacity Module:

| | | | | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|--------|------|------|--------|
| Cnflct Vol: | 698 | 981 | 212 | 732 | 944 | 247 | 493 | xxxx | xxxxxx | 423 | xxxx | xxxxxx |
| Potent Cap.: | 331 | 251 | 800 | 313 | 264 | 760 | 1059 | xxxx | xxxxxx | 1125 | xxxx | xxxxxx |
| Move Cap.: | 311 | 244 | 800 | 302 | 257 | 760 | 1059 | xxxx | xxxxxx | 1125 | xxxx | xxxxxx |
| Volume/Cap: | 0.00 | 0.00 | 0.01 | 0.35 | 0.01 | 0.03 | 0.01 | xxxx | xxxx | 0.02 | xxxx | xxxx |

Level Of Service Module:

| | | | | | | | | | | | | |
|--------------|--------|------|--------|--------|------|--------|---------|------|--------|---------|------|--------|
| 2Way95thQ: | xxxx | xxxx | xxxxxx | xxxx | xxxx | xxxxxx | 0.0 | xxxx | xxxxxx | 0.1 | xxxx | xxxxxx |
| Control Del: | xxxxxx | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx | 8.4 | xxxx | xxxxxx | 8.3 | xxxx | xxxxxx |
| LOS by Move: | * | * | * | * | * | * | A | * | * | A | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | 681 | xxxxxx | xxxx | 341 | xxxxxx | xxxx | xxxx | xxxxxx | xxxx | xxxx | xxxxxx |
| SharedQueue: | xxxxxx | 0.0 | xxxxxx | xxxxxx | 1.9 | xxxxxx | xxxxxx | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx |
| Shrd ConDel: | xxxxxx | 10.4 | xxxxxx | xxxxxx | 22.2 | xxxxxx | xxxxxx | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx |
| Shared LOS: | * | B | * | * | C | * | * | * | * | * | * | * |
| ApproachDel: | 10.4 | | | 22.2 | | | xxxxxxx | | | xxxxxxx | | |
| ApproachLOS: | B | | | C | | | * | | | * | | |

 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #3 carpenter & blue gum [ex pm plus project]

Cycle (sec): 100 Critical Vol./Cap.(X): 0.747
 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): 30.0
 Optimal Cycle: 80 Level Of Service: C

| Street Name: | carpenter rd | | | | | | blue gum ave | | | | | |
|--------------|--------------|---|---|-------------|---|---|--------------|---|---|-------------|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Ignore | | | Include | | | Include | | |
| Min. Green: | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Lanes: | 1 | 0 | 2 | 1 | 0 | 2 | 0 | 1 | 0 | 0 | 1 | 0 |

Volume Module:

| | | | | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol: | 114 | 907 | 16 | 48 | 1073 | 364 | 549 | 16 | 178 | 34 | 16 | 75 |
| Growth 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 |
| Initial Bse: | 114 | 907 | 16 | 48 | 1073 | 364 | 549 | 16 | 178 | 34 | 16 | 75 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 114 | 907 | 16 | 48 | 1073 | 364 | 549 | 16 | 178 | 34 | 16 | 75 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.00 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 127 | 1008 | 18 | 53 | 1192 | 0 | 610 | 18 | 198 | 38 | 18 | 83 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 127 | 1008 | 18 | 53 | 1192 | 0 | 610 | 18 | 198 | 38 | 18 | 83 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 127 | 1008 | 18 | 53 | 1192 | 0 | 610 | 18 | 198 | 38 | 18 | 83 |

Saturation Flow Module:

| | | | | | | | | | | | | |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.87 | 0.87 | 0.91 | 0.91 | 1.00 | 0.93 | 0.93 | 0.73 | 0.92 | 0.85 | 0.85 |
| Lanes: | 1.00 | 2.95 | 0.05 | 1.00 | 2.00 | 1.00 | 1.94 | 0.06 | 2.00 | 1.00 | 0.18 | 0.82 |
| Final Sat.: | 1736 | 4889 | 86 | 1736 | 3473 | 1900 | 3420 | 100 | 2760 | 1753 | 284 | 1332 |

Capacity Analysis Module:

| | | | | | | | | | | | | |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat: | 0.07 | 0.21 | 0.21 | 0.03 | 0.34 | 0.00 | 0.18 | 0.18 | 0.07 | 0.02 | 0.06 | 0.06 |
| Crit Moves: | **** | | | **** | | | **** | | | **** | | |
| Green/Cycle: | 0.10 | 0.40 | 0.40 | 0.16 | 0.46 | 0.00 | 0.24 | 0.24 | 0.24 | 0.08 | 0.08 | 0.08 |
| Volume/Cap: | 0.75 | 0.51 | 0.51 | 0.20 | 0.75 | 0.00 | 0.75 | 0.75 | 0.30 | 0.26 | 0.75 | 0.75 |
| Uniform Del: | 43.9 | 22.6 | 22.6 | 36.8 | 22.2 | 0.0 | 35.3 | 35.3 | 31.2 | 42.9 | 44.8 | 44.8 |
| IncrementDel: | 16.5 | 0.2 | 0.2 | 0.4 | 2.0 | 0.0 | 3.7 | 3.7 | 0.3 | 0.9 | 20.2 | 20.2 |
| InitQueueDel: | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Delay/Veh: | 60.5 | 22.8 | 22.8 | 37.1 | 24.2 | 0.0 | 39.0 | 39.0 | 31.5 | 43.8 | 64.9 | 64.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 60.5 | 22.8 | 22.8 | 37.1 | 24.2 | 0.0 | 39.0 | 39.0 | 31.5 | 43.8 | 64.9 | 64.9 |
| LOS by Move: | E | C | C | D | C | A | D | D | C | D | E | E |
| HCM2kAvgQ: | 6 | 9 | 9 | 2 | 17 | 0 | 11 | 11 | 3 | 1 | 5 | 5 |

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 2nd & project access [ex pm plus project]

Average Delay (sec/veh): 3.5 Worst Case Level Of Service: A[8.6]

Table with columns: Street Name, Approach, Movement, Control, Rights, Lanes. Rows include North Bound, South Bound, East Bound, West Bound.

Volume Module table with columns: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Critical Gap Module table with columns: Critical Gp, FollowUpTim.

Capacity Module table with columns: Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Level Of Service Module table with columns: 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

Note: Queue reported is the number of cars per lane.

**EXISTING PLUS PHASE 2
LEVELS OF SERVICE**

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

 Intersection #1 blue gum & 2nd st [ex am plus phase 2]

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: B[14.3]

| Street Name: | 2nd st | | | | | | blue gum | | | | | |
|--------------|-------------|---|---|-------------|---|---|--------------|---|---|--------------|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 |

| Volume Module: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|----------------|-------------|------|------|-------------|------|------|------------|------|------|------------|------|------|
| Base Vol: | 0 | 0 | 0 | 58 | 0 | 7 | 26 | 316 | 0 | 0 | 203 | 286 |
| Growth 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 |
| Initial Bse: | 0 | 0 | 0 | 58 | 0 | 7 | 26 | 316 | 0 | 0 | 203 | 286 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 58 | 0 | 7 | 26 | 316 | 0 | 0 | 203 | 286 |
| User 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 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 0 | 0 | 0 | 64 | 0 | 8 | 29 | 351 | 0 | 0 | 226 | 318 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FinalVolume: | 0 | 0 | 0 | 64 | 0 | 8 | 29 | 351 | 0 | 0 | 226 | 318 |

| Critical Gap Module: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|----------------------|-------------|-------|-------|-------------|-----|-----|------------|-------|-------|------------|-------|-------|
| Critical Gap: | xxxxx | xxxxx | xxxxx | 6.4 | 6.5 | 6.2 | 4.1 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxxx | xxxxx | 3.5 | 4.0 | 3.3 | 2.2 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |

| Capacity Module: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|------------------|-------------|-------|-------|-------------|------|------|------------|-------|-------|------------|-------|-------|
| Cnflct Vol: | xxxxx | xxxxx | xxxxx | 634 | 634 | 226 | 543 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| Potent Cap.: | xxxxx | xxxxx | xxxxx | 446 | 399 | 819 | 1021 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| Move Cap.: | xxxxx | xxxxx | xxxxx | 436 | 387 | 819 | 1021 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| Volume/Cap: | xxxxx | xxxxx | xxxxx | 0.15 | 0.00 | 0.01 | 0.03 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |

| Level Of Service Module: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------|
| 2Way95thQ: | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | 0.1 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| Control Del: | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | 8.6 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | * | A | * | * | * | * | * |
| Movement: | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | |
| Shared Cap.: | xxxxx | xxxxx | xxxxx | xxxxx | 459 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| SharedQueue: | xxxxx | xxxxx | xxxxx | xxxxx | 0.6 | xxxxx | 0.1 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| Shrd ConDel: | xxxxx | xxxxx | xxxxx | xxxxx | 14.3 | xxxxx | 8.6 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| Shared LOS: | * | * | * | * | B | * | A | * | * | * | * | * |
| ApproachDel: | xxxxxxx | | | 14.3 | | | xxxxxxx | | | xxxxxxx | | |
| ApproachLOS: | * | | | B | | | * | | | * | | |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

 Intersection #2 blue gum & 4th st (ex am plus phase 2)

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: D[26.8]

| Street Name: | 4th st | | | | blue gum ave | | | | | | | | | | | | | |
|--------------|-------------|---|-------------|---|--------------|---|--------------|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | South Bound | | East Bound | | West Bound | | | | | | | | | | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R | | | | | | |
| Control: | Stop Sign | | Stop Sign | | Uncontrolled | | Uncontrolled | | | | | | | | | | | |
| Rights: | Include | | Include | | Include | | Include | | | | | | | | | | | |
| Lanes: | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |

| Volume Module: | | | | | | | | | | | | |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol: | 0 | 0 | 8 | 41 | 1 | 4 | 15 | 377 | 2 | 49 | 456 | 170 |
| Growth 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 |
| Initial Bse: | 0 | 0 | 8 | 41 | 1 | 4 | 15 | 377 | 2 | 49 | 456 | 170 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 8 | 41 | 1 | 4 | 15 | 377 | 2 | 49 | 456 | 170 |
| User 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 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 0 | 0 | 9 | 46 | 1 | 4 | 17 | 419 | 2 | 54 | 507 | 189 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FinalVolume: | 0 | 0 | 9 | 46 | 1 | 4 | 17 | 419 | 2 | 54 | 507 | 189 |

| Critical Gap Module: | | | | | | | | | | | | |
|----------------------|-------|------|-----|-----|-----|-----|-----|------|--------|-----|------|--------|
| Critical Gp: | xxxxx | xxxx | 6.9 | 7.5 | 6.5 | 6.9 | 4.2 | xxxx | xxxxxx | 4.2 | xxxx | xxxxxx |
| FollowUpTim: | xxxxx | xxxx | 3.3 | 3.5 | 4.0 | 3.3 | 2.2 | xxxx | xxxxxx | 2.2 | xxxx | xxxxxx |

| Capacity Module: | | | | | | | | | | | | |
|------------------|------|------|------|------|------|------|------|------|--------|------|------|--------|
| Cnflct Vol: | xxxx | xxxx | 211 | 953 | 1164 | 348 | 696 | xxxx | xxxxxx | 421 | xxxx | xxxxxx |
| Potent Cap.: | xxxx | xxxx | 801 | 217 | 196 | 654 | 889 | xxxx | xxxxxx | 1127 | xxxx | xxxxxx |
| Move Cap.: | xxxx | xxxx | 801 | 203 | 183 | 654 | 889 | xxxx | xxxxxx | 1127 | xxxx | xxxxxx |
| Volume/Cap: | xxxx | xxxx | 0.01 | 0.22 | 0.01 | 0.01 | 0.02 | xxxx | xxxx | 0.05 | xxxx | xxxx |

| Level Of Service Module: | | | | | | | | | | | | | | | |
|--------------------------|--------|------|--------|--------|------|--------|---------|------|--------|---------|------|--------|-----|---|----|
| 2Way95thQ: | xxxx | xxxx | 0.0 | xxxx | xxxx | xxxxxx | 0.1 | xxxx | xxxxxx | 0.2 | xxxx | xxxxxx | | | |
| Control Del: | xxxxx | xxxx | 9.5 | xxxxx | xxxx | xxxxxx | 9.1 | xxxx | xxxxxx | 8.4 | xxxx | xxxxxx | | | |
| LOS by Move: | * | * | A | * | * | * | A | * | * | A | * | * | | | |
| Movement: | LT | - | LTR | - | RT | LT | - | LTR | - | RT | LT | - | LTR | - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxxx | xxxx | 216 | xxxxxx | xxxx | xxxx | xxxxxx | xxxx | xxxx | xxxxxx | | | |
| SharedQueue: | xxxxxx | xxxx | xxxxxx | xxxxxx | 0.9 | xxxxxx | xxxxxx | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx | | | |
| Shrd ConDel: | xxxxxx | xxxx | xxxxxx | xxxxxx | 26.8 | xxxxxx | xxxxxx | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx | | | |
| Shared LOS: | * | * | * | * | D | * | * | * | * | * | * | * | | | |
| ApproachDel: | 9.5 | | | 26.8 | | | xxxxxxx | | | xxxxxxx | | | | | |
| ApproachLOS: | A | | | D | | | * | | | * | | | | | |

Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #3 carpenter & blue gum [ex am plus phase 2]

Cycle (sec): 100 Critical Vol./Cap.(X): 0.555
 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): 27.3
 Optimal Cycle: 80 Level Of Service: C

| Street Name: | carpenter rd | | | | | | blue gum ave | | | | | | | | | |
|--------------|--------------|---|---|-------------|---|---|--------------|---|---|-------------|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | | | | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R | | | | |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | | | | | |
| Rights: | Include | | | Ignore | | | Include | | | Include | | | | | | |
| Min. Green: | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | | |
| Lanes: | 1 | 0 | 2 | 1 | 0 | 2 | 1 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 1 | 0 |

Volume Module:

| | | | | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol: | 126 | 645 | 10 | 73 | 778 | 677 | 390 | 8 | 52 | 15 | 10 | 39 |
| Growth 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 |
| Initial Bse: | 126 | 645 | 10 | 73 | 778 | 677 | 390 | 8 | 52 | 15 | 10 | 39 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 126 | 645 | 10 | 73 | 778 | 677 | 390 | 8 | 52 | 15 | 10 | 39 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.00 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 140 | 717 | 11 | 81 | 864 | 0 | 433 | 9 | 58 | 17 | 11 | 43 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 140 | 717 | 11 | 81 | 864 | 0 | 433 | 9 | 58 | 17 | 11 | 43 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 140 | 717 | 11 | 81 | 864 | 0 | 433 | 9 | 58 | 17 | 11 | 43 |

Saturation Flow Module:

| | | | | | | | | | | | | |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.87 | 0.87 | 0.91 | 0.91 | 1.00 | 0.93 | 0.93 | 0.73 | 0.92 | 0.86 | 0.86 |
| Lanes: | 1.00 | 2.95 | 0.05 | 1.00 | 2.00 | 1.00 | 1.96 | 0.04 | 2.00 | 1.00 | 0.20 | 0.80 |
| Final Sat.: | 1736 | 4904 | 76 | 1736 | 3473 | 1900 | 3446 | 71 | 2760 | 1753 | 332 | 1294 |

Capacity Analysis Module:

| | | | | | | | | | | | | |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat: | 0.08 | 0.15 | 0.15 | 0.05 | 0.25 | 0.00 | 0.13 | 0.13 | 0.02 | 0.01 | 0.03 | 0.03 |
| Crit Moves: | **** | | | **** | | | **** | | | **** | | |
| Green/Cycle: | 0.14 | 0.37 | 0.37 | 0.20 | 0.44 | 0.00 | 0.22 | 0.22 | 0.22 | 0.08 | 0.08 | 0.08 |
| Volume/Cap: | 0.57 | 0.39 | 0.39 | 0.23 | 0.57 | 0.00 | 0.57 | 0.57 | 0.09 | 0.12 | 0.42 | 0.42 |
| Uniform Del: | 40.1 | 22.9 | 22.9 | 33.2 | 21.1 | 0.0 | 34.7 | 34.7 | 31.0 | 42.7 | 43.8 | 43.8 |
| IncramntDel: | 3.1 | 0.1 | 0.1 | 0.3 | 0.5 | 0.0 | 1.0 | 1.0 | 0.1 | 0.4 | 2.2 | 2.2 |
| InitQueueDel: | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Delay/Veh: | 43.2 | 23.1 | 23.1 | 33.5 | 21.6 | 0.0 | 35.7 | 35.7 | 31.1 | 43.1 | 46.0 | 46.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 43.2 | 23.1 | 23.1 | 33.5 | 21.6 | 0.0 | 35.7 | 35.7 | 31.1 | 43.1 | 46.0 | 46.0 |
| LOS by Move: | D | C | C | C | C | A | D | D | C | D | D | D |
| HCM2kAvgQ: | 5 | 6 | 6 | 2 | 11 | 0 | 7 | 7 | 1 | 1 | 2 | 2 |

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Future Volume Alternative)

 Intersection #4 2nd & project access [ex am plus phase 2]

Average Delay (sec/veh): 4.6 Worst Case Level Of Service: A[8.4]

| Street Name: | 2nd st | | | | | | access | | | | | |
|--------------|--------------|---|---|--------------|---|---|------------|---|---|------------|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Uncontrolled | | | Uncontrolled | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |

Volume Module:

| | | | | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol: | 114 | 55 | 0 | 0 | 20 | 0 | 0 | 0 | 6 | 0 | 0 | 0 |
| Growth 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 |
| Initial Bse: | 114 | 55 | 0 | 0 | 20 | 0 | 0 | 0 | 6 | 0 | 0 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 114 | 55 | 0 | 0 | 20 | 0 | 0 | 0 | 6 | 0 | 0 | 0 |
| User 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 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 127 | 61 | 0 | 0 | 22 | 0 | 0 | 0 | 7 | 0 | 0 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FinalVolume: | 127 | 61 | 0 | 0 | 22 | 0 | 0 | 0 | 7 | 0 | 0 | 0 |

Critical Gap Module:

| | | | | | | | | | | | | |
|--------------|-----|------|--------|--------|------|--------|--------|------|-----|--------|------|--------|
| Critical Gp: | 4.1 | xxxx | xxxxxx | xxxxx | xxxx | xxxxxx | xxxxxx | xxxx | 6.2 | xxxxxx | xxxx | xxxxxx |
| FollowUpTim: | 2.2 | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx | xxxxxx | xxxx | 3.3 | xxxxxx | xxxx | xxxxxx |

Capacity Module:

| | | | | | | | | | | | | |
|--------------|------|------|--------|-------|------|--------|------|------|------|------|------|--------|
| Cnflct Vol: | 22 | xxxx | xxxxxx | xxxxx | xxxx | xxxxxx | xxxx | xxxx | 22 | xxxx | xxxx | xxxxxx |
| Potent Cap.: | 1606 | xxxx | xxxxxx | xxxxx | xxxx | xxxxxx | xxxx | xxxx | 1061 | xxxx | xxxx | xxxxxx |
| Move Cap.: | 1606 | xxxx | xxxxxx | xxxxx | xxxx | xxxxxx | xxxx | xxxx | 1061 | xxxx | xxxx | xxxxxx |
| Volume/Cap: | 0.08 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxx | xxxx | 0.01 | xxxx | xxxx | xxxx |

Level Of Service Module:

| | | | | | | | | | | | | |
|--------------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|
| 2Way95thQ: | 0.3 | xxxx | xxxxxx | xxxxx | xxxx | xxxxxx | xxxx | xxxx | 0.0 | xxxx | xxxx | xxxxxx |
| Control Del: | 7.4 | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx | xxxxxx | xxxx | 8.4 | xxxxxx | xxxx | xxxxxx |
| LOS by Move: | A | * | * | * | * | * | * | * | A | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxxx | xxxxx | xxxx | xxxxxx | xxxx | xxxx | xxxxxx | xxxx | xxxx | xxxxxx |
| SharedQueue: | 0.3 | xxxx | xxxxxx | xxxxx | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx |
| Shrd ConDel: | 7.4 | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx |
| Shared LOS: | A | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | xxxxxx | | | 8.4 | | | xxxxxx | | |
| ApproachLOS: | * | | | * | | | A | | | * | | |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

 Intersection #1 blue gum & 2nd st [ex pm plus phase 2]

Average Delay (sec/veh): 3.8 Worst Case Level Of Service: C{ 18.2}

| Street Name: | 2nd st | | | | | | blue gum | | | | | |
|--------------|-------------|---|---|-------------|---|---|--------------|---|---|--------------|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 |

Volume Module:

| | | | | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol: | 0 | 0 | 0 | 133 | 0 | 31 | 6 | 284 | 0 | 0 | 313 | 33 |
| Growth 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 |
| Initial Bse: | 0 | 0 | 0 | 133 | 0 | 31 | 6 | 284 | 0 | 0 | 313 | 33 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 133 | 0 | 31 | 6 | 284 | 0 | 0 | 313 | 33 |
| User 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 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 0 | 0 | 0 | 148 | 0 | 34 | 7 | 316 | 0 | 0 | 348 | 37 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FinalVolume: | 0 | 0 | 0 | 148 | 0 | 34 | 7 | 316 | 0 | 0 | 348 | 37 |

Critical Gap Module:

| | | | | | | | | | | | | |
|--------------|-------|-------|-------|-----|-----|-----|-----|-------|-------|-------|-------|-------|
| Critical Gp: | xxxxx | xxxxx | xxxxx | 6.4 | 6.5 | 6.2 | 4.1 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxxx | xxxxx | 3.5 | 4.0 | 3.3 | 2.2 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |

Capacity Module:

| | | | | | | | | | | | | |
|--------------|-------|-------|-------|------|------|------|------|-------|-------|-------|-------|-------|
| Cnflct Vol: | xxxxx | xxxxx | xxxxx | 677 | 677 | 348 | 384 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| Potent Cap.: | xxxxx | xxxxx | xxxxx | 422 | 377 | 700 | 1169 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| Move Cap.: | xxxxx | xxxxx | xxxxx | 420 | 375 | 700 | 1169 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| Volume/Cap: | xxxxx | xxxxx | xxxxx | 0.35 | 0.00 | 0.05 | 0.01 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |

Level Of Service Module:

| | | | | | | | | | | | | |
|--------------|---------|-------|--------|--------|-------|--------|---------|-------|--------|---------|-------|--------|
| 2Way95thQ: | xxxxx | xxxxx | xxxxxx | xxxxx | xxxxx | xxxxxx | 0.0 | xxxxx | xxxxxx | xxxxx | xxxxx | xxxxxx |
| Control Del: | xxxxxx | xxxxx | xxxxxx | xxxxxx | xxxxx | xxxxxx | 8.1 | xxxxx | xxxxxx | xxxxxx | xxxxx | xxxxxx |
| LOS by Move: | * | * | * | * | * | * | A | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxxx | xxxxx | xxxxxx | xxxxx | 454 | xxxxxx | xxxxx | xxxxx | xxxxxx | xxxxx | xxxxx | xxxxxx |
| SharedQueue: | xxxxxx | xxxxx | xxxxxx | xxxxxx | 2.0 | xxxxxx | 0.0 | xxxxx | xxxxxx | xxxxxx | xxxxx | xxxxxx |
| Shrd ConDel: | xxxxxx | xxxxx | xxxxxx | xxxxxx | 18.2 | xxxxxx | 8.1 | xxxxx | xxxxxx | xxxxxx | xxxxx | xxxxxx |
| Shared LOS: | * | * | * | * | C | * | A | * | * | * | * | * |
| ApproachDel: | xxxxxxx | | | 18.2 | | | xxxxxxx | | | xxxxxxx | | |
| ApproachLOS: | * | | | C | | | * | | | * | | |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

 Intersection #2 blue gum & 4th st [ex pm plus phase 2]

Average Delay (sec/veh): 3.1 Worst Case Level of Service: C[24.0]

| Street Name: | 4th st | | | | | | blue gum ave | | | | | | | | | |
|--------------|-------------|---|---|-------------|---|---|--------------|---|---|--------------|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | | | | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R | | | | |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | | | | | |
| Rights: | Include | | | Include | | | Include | | | Include | | | | | | |
| Lanes: | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |

| Volume Module: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|----------------|-------------|------|------|-------------|------|------|------------|------|------|------------|------|------|
| Base Vol: | 1 | 0 | 8 | 94 | 2 | 23 | 7 | 431 | 0 | 22 | 387 | 67 |
| Growth 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 |
| Initial Bse: | 1 | 0 | 8 | 94 | 2 | 23 | 7 | 431 | 0 | 22 | 387 | 67 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 1 | 0 | 8 | 94 | 2 | 23 | 7 | 431 | 0 | 22 | 387 | 67 |
| User 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 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 1 | 0 | 9 | 104 | 2 | 26 | 8 | 479 | 0 | 24 | 430 | 74 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FinalVolume: | 1 | 0 | 9 | 104 | 2 | 26 | 8 | 479 | 0 | 24 | 430 | 74 |

| Critical Gap Module: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|----------------------|-------------|-----|-----|-------------|-----|-----|------------|------|--------|------------|------|--------|
| Critical Gp: | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.2 | xxxx | xxxxxx | 4.2 | xxxx | xxxxxx |
| FollowUpTim: | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 | 2.2 | xxxx | xxxxxx | 2.2 | xxxx | xxxxxx |

| Capacity Module: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|------------------|-------------|------|------|-------------|------|------|------------|------|--------|------------|------|--------|
| Cnflct Vol: | 759 | 1048 | 239 | 771 | 1011 | 252 | 504 | xxxx | xxxxxx | 479 | xxxx | xxxxxx |
| Potent Cap.: | 299 | 230 | 768 | 293 | 242 | 753 | 1049 | xxxx | xxxxxx | 1073 | xxxx | xxxxxx |
| Move Cap.: | 280 | 223 | 768 | 283 | 234 | 753 | 1049 | xxxx | xxxxxx | 1073 | xxxx | xxxxxx |
| Volume/Cap: | 0.00 | 0.00 | 0.01 | 0.37 | 0.01 | 0.03 | 0.01 | xxxx | xxxxxx | 0.02 | xxxx | xxxxxx |

| Level Of Service Module: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|--------------------------|-------------|------|--------|-------------|------|--------|------------|------|--------|------------|------|--------|
| 2Way95thQ: | xxxx | xxxx | xxxxxx | xxxx | xxxx | xxxxxx | 0.0 | xxxx | xxxxxx | 0.1 | xxxx | xxxxxx |
| Control Del: | xxxxx | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx | 8.5 | xxxx | xxxxxx | 8.4 | xxxx | xxxxxx |
| LOS by Move: | * | * | * | * | * | * | A | * | * | A | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | 643 | xxxxxx | xxxx | 321 | xxxxxx | xxxx | xxxx | xxxxxx | xxxx | xxxx | xxxxxx |
| SharedQueue: | xxxxxx | 0.0 | xxxxxx | xxxxxx | 2.1 | xxxxxx | xxxxxx | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx |
| Shrd ConDel: | xxxxxx | 10.7 | xxxxxx | xxxxxx | 24.0 | xxxxxx | xxxxxx | xxxx | xxxxxx | xxxxxx | xxxx | xxxxxx |
| Shared LOS: | * | B | * | * | C | * | * | * | * | * | * | * |
| ApproachDel: | | 10.7 | | | 24.0 | | xxxxxxx | | | xxxxxxx | | |
| ApproachLOS: | | B | | | C | | * | | | * | | |

 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #3 carpenter & blue gum [ex pm plus phase 2]

Cycle (sec): 100 Critical Vol./Cap.(X): 0.762
 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): 30.7
 Optimal Cycle: 80 Level Of Service: C

| Street Name: | carpenter rd | | | | | | blue gum ave | | | | | | | | | |
|--------------|--------------|---|---|-------------|---|---|--------------|---|---|-------------|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | | | | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R | | | | |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | | | | | |
| Rights: | Include | | | Ignore | | | Include | | | Include | | | | | | |
| Min. Green: | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | | |
| Lanes: | 1 | 0 | 2 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 1 | 0 |

Volume Module:

| | | | | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol: | 116 | 907 | 16 | 48 | 1073 | 372 | 587 | 16 | 190 | 34 | 16 | 75 |
| Growth 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 |
| Initial Bse: | 116 | 907 | 16 | 48 | 1073 | 372 | 587 | 16 | 190 | 34 | 16 | 75 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 116 | 907 | 16 | 48 | 1073 | 372 | 587 | 16 | 190 | 34 | 16 | 75 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.00 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 129 | 1008 | 18 | 53 | 1192 | 0 | 652 | 18 | 211 | 38 | 18 | 83 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 129 | 1008 | 18 | 53 | 1192 | 0 | 652 | 18 | 211 | 38 | 18 | 83 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 129 | 1008 | 18 | 53 | 1192 | 0 | 652 | 18 | 211 | 38 | 18 | 83 |

Saturation Flow Module:

| | | | | | | | | | | | | |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.87 | 0.87 | 0.91 | 0.91 | 1.00 | 0.93 | 0.93 | 0.73 | 0.92 | 0.85 | 0.85 |
| Lanes: | 1.00 | 2.95 | 0.05 | 1.00 | 2.00 | 1.00 | 1.95 | 0.05 | 2.00 | 1.00 | 0.18 | 0.82 |
| Final Sat.: | 1736 | 4889 | 86 | 1736 | 3473 | 1900 | 3427 | 93 | 2760 | 1753 | 284 | 1332 |

Capacity Analysis Module:

| | | | | | | | | | | | | |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat: | 0.07 | 0.21 | 0.21 | 0.03 | 0.34 | 0.00 | 0.19 | 0.19 | 0.08 | 0.02 | 0.06 | 0.06 |
| Crit Moves: | **** | | | **** | | | **** | | | **** | | |
| Green/Cycle: | 0.10 | 0.39 | 0.39 | 0.15 | 0.45 | 0.00 | 0.25 | 0.25 | 0.25 | 0.08 | 0.08 | 0.08 |
| Volume/Cap: | 0.76 | 0.52 | 0.52 | 0.20 | 0.76 | 0.00 | 0.76 | 0.76 | 0.31 | 0.26 | 0.76 | 0.76 |
| Uniform Del: | 44.0 | 23.1 | 23.1 | 37.0 | 23.0 | 0.0 | 34.8 | 34.8 | 30.5 | 43.1 | 44.9 | 44.9 |
| IncrcmntDel: | 18.2 | 0.3 | 0.3 | 0.4 | 2.3 | 0.0 | 4.0 | 4.0 | 0.3 | 1.0 | 22.5 | 22.5 |
| InitQueueDel: | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Delay/Veh: | 62.2 | 23.3 | 23.3 | 37.4 | 25.2 | 0.0 | 38.7 | 38.7 | 30.7 | 44.0 | 67.4 | 67.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 62.2 | 23.3 | 23.3 | 37.4 | 25.2 | 0.0 | 38.7 | 38.7 | 30.7 | 44.0 | 67.4 | 67.4 |
| LOS by Move: | E | C | C | D | C | A | D | D | C | D | E | E |
| HCM2kAvgQ: | 6 | 9 | 9 | 2 | 17 | 0 | 11 | 11 | 3 | 1 | 5 | 5 |

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

 Intersection #4 2nd & project access [ex pm plus phase 2]

Average Delay (sec/veh): 5.9 Worst Case Level Of Service: A[8.8]

| Street Name: | 2nd st | | | | | | access | | | | | |
|--------------|--------------|---|---|--------------|---|---|------------|---|---|------------|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Uncontrolled | | | Uncontrolled | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Volume Module:

| | | | | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol: | 18 | 10 | 0 | 0 | 36 | 0 | 0 | 0 | 84 | 0 | 0 | 0 |
| Growth 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 |
| Initial Bse: | 18 | 10 | 0 | 0 | 36 | 0 | 0 | 0 | 84 | 0 | 0 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 18 | 10 | 0 | 0 | 36 | 0 | 0 | 0 | 84 | 0 | 0 | 0 |
| User 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 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 20 | 11 | 0 | 0 | 40 | 0 | 0 | 0 | 93 | 0 | 0 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FinalVolume: | 20 | 11 | 0 | 0 | 40 | 0 | 0 | 0 | 93 | 0 | 0 | 0 |

Critical Gap Module:

| | | | | | | | | | | | | |
|--------------|-----|------|-------|-------|------|-------|-------|------|-----|-------|------|-------|
| Critical Gp: | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 6.2 | xxxxx | xxxx | xxxxx |
| FollowUpTim: | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 3.3 | xxxxx | xxxx | xxxxx |

Capacity Module:

| | | | | | | | | | | | | |
|--------------|------|------|-------|-------|------|-------|-------|------|------|-------|------|-------|
| Cnflct Vol: | 40 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 40 | xxxxx | xxxx | xxxxx |
| Potent Cap.: | 1583 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 1037 | xxxxx | xxxx | xxxxx |
| Move Cap.: | 1583 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 1037 | xxxxx | xxxx | xxxxx |
| Volume/Cap: | 0.01 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 0.09 | xxxxx | xxxx | xxxxx |

Level Of Service Module:

| | | | | | | | | | | | | |
|--------------|--------|------|-------|--------|------|-------|-------|------|-------|--------|------|-------|
| 2Way95thQ: | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 0.3 | xxxxx | xxxx | xxxxx |
| Control Del: | 7.3 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 8.8 | xxxxx | xxxx | xxxxx |
| LOS by Move: | A | * | * | * | * | * | * | * | A | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| SharedQueue: | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd ConDel: | 7.3 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | A | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | xxxxxx | | | | | 8.8 | xxxxxx | | |
| ApproachLOS: | * | | | * | | | | | A | * | | |

 Note: Queue reported is the number of cars per lane.

FILED

10 DEC 23 AM 8:05

STANISLAUS CO. CLERK-RECORDER

BY Linda Jackson
DEPUTY

STANISLAUS COUNTY
DEPARTMENT OF PLANNING AND COMMUNITY
DEVELOPMENT
1010 10th Street, Suite 3400
Modesto, California 95354

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

The Stanislaus County Board of Supervisors will consider the adoption of a Mitigated Negative Declaration for the project description below on **JANUARY 25, 2011** beginning at 9:00 A.M. at a public meeting to be held at the Tenth Street Place, Joint Chambers, Basement Floor, 1010 10th Street, Modesto, California.

Project Title:

Juvenile Hall Commitment Center

Project Location:

2215 Blue Gum, in the City of Modesto. (APN: 081-012-006)

Description of Project:

This is a request to construct a new 60-bed, 38,800 square foot "Juvenile Commitment Facility" on a 34.4± acre County-owned property located directly adjacent to the County's existing Juvenile Justice Center at 2215 Blue Gum Avenue, in the City of Modesto.

Lead Agency:

Stanislaus County, Capital Projects

Address Where Copy of Proposed Mitigated Negative Declaration is Available:

Stanislaus County, Department of Planning and Community Development
1010 10th Street, Suite 3400
Modesto, California 95354-2380
www.stanco-planning.org

Review Period:

December 23, 2010 to January 24, 2011

Do not remove from posting until: **January 26, 2011**

Contact Person:

Bill Carlson, Senior Planner



CHIEF EXECUTIVE OFFICE
Richard W. Robinson
Chief Executive Officer

Patricia Hill Thomas
Chief Operations Officer/
Assistant Executive Officer

Monica Nino-Reid
Assistant Executive Officer

Stan Risen
Assistant Executive Officer

1010 10th Street, Suite 6800, Modesto, CA 95354
P.O. Box 3404, Modesto, CA 95353-3404
Phone: 209.525.6333 Fax 209.544.6226

STANISLAUS COUNTY ENVIRONMENTAL REVIEW COMMITTEE

January 18, 2011

Bill Carlson, Senior Planner
Stanislaus County Planning Department
1010 10th Street, Suite 3400
Modesto, CA 95354

SUBJECT: ENVIRONMENTAL REFERRAL – JUVENILE HALL
COMMITMENT CENTER

Mr. Carlson

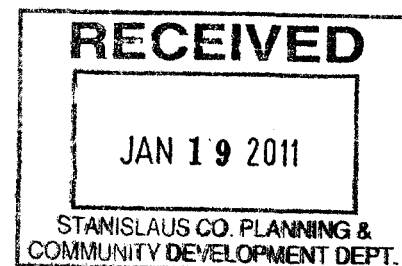
The Stanislaus County Environmental Review Committee (ERC) has reviewed the subject project and has no comments at this time.

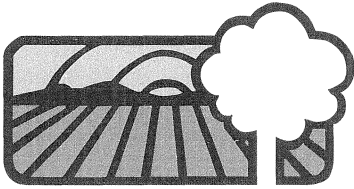
The ERC appreciates the opportunity to comment on this project.

Sincerely,

Christine Almen, Senior Management Consultant
Environmental Review Committee

cc: ERC Members





CITY of MODESTO

*Community and
Economic
Development*

*Planning
Division*

*P.O. Box 642
1010 Tenth Street
Third Floor
Modesto, CA 95353
209/577-5267
209/491-5798 Fax*

www.modestogov.com

*Hearing and Speech
Impaired Only
TDD 209/526-9211*

January 21, 2011

**BILL CARLSON, PLANNING MANAGER
PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT
STANISLAUS COUNTY
1010 10TH STREET, SUITE 3400
MODESTO, CA 95354**

Re: Juvenile Hall Commitment Center

Dear Mr. Carlson:

The subject project has been referred out to the various City departments. The inter-departmental comments have been organized below by department or division, with the point of contact for each department or division listed above the comments.

Fire: Paul Easter
Deputy Fire Marshall
(209) 551-5516
peaster@modestogov.com

1. Fire hydrant spacing and distribution for this project is 300 feet. Onsite fire hydrants will be needed.
2. A hydrant shall be within 90 feet of a fire department connection (FDC) for the automatic fire sprinkler system.
3. Water-flow from these hydrants shall not less than 1500 GSM at 20 psi residual pressure.
4. The installation of the hydrants and fire mains shall be according to the City of Modesto Standards.
5. Changes in direction of access roads shall afford turning radii of 25' inside and 45' outside.
6. Dead end fire department access roads exceeding 150' shall be provided with an approved fire apparatus turn-around.

Capital Planning: Eva Danka-Kelly
Associate Engineer
(209) 571-5120
edkelly@modestogov.com

Water-Sewer

7. There is an existing water main and sewer main available in Blue Gum Avenue for any new utility service connections to the property. For new connections, current water and sewer connection fees will be applicable prior to building permit issuance.

Storm Drain

8. This property is not within a positive storm drain system that will provide direct connection at this time. Since the proposed addition is part of the entire 18.44 acres parcel and part of the entire on site storm drain system, provide an ultimate storm drain concept plan for the whole parcel for review by the city prior to Planning Commission approval. Storm water generated from the proposed development, shall be designed to current City storm drainage standards, refer to chapter 5 of the City standards for design criteria.

Stormwater Quality: Dhyan Gilton
Plans Examiner
(209) 577-5264
dgilton@modestogov.com

9. Prior to the issuance of a Grading or Building Permit, County shall obtain coverage for the construction project under the General Construction Activity Permit (General Permit) issued by the State Water Resources Control Board (SWRCB). To obtain coverage under the General Permit, a Notice of Intent (NOI) must be electronically filed with the SWRCB.

Upon receipt of electronic NOI, the SWRCB will issue a Waste Discharge Identification Number (WDID Number) to the construction project. Submit one copy of the WDID Number to Land Development Engineering, Stormwater.

The General Construction Permit requires the County to prepare and Implement Stormwater Pollution Prevention Plan (SWPPP) for the construction project. Submit one copy of the SWPPP to Land Development Engineering, Stormwater for review.

10. Prior to the issuance of a Grading or Building Permit, County shall provide plans for trash enclosure(s) to be sufficiently elevated to prevent stormwater run-on from parking lot, and graded to drain to adjacent landscape area(s).

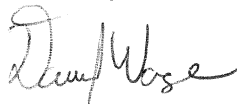
11. Prior to the issuance of a Grading or Building Permit, County shall submit a plan to retain and infiltrate stormwater runoff on site, incorporating pervious landscape features into the project design wherever possible.
12. Prior to the issuance of a Grading or Building Permit, County shall submit a plan to provide permanent, post-construction treatment (grass swale, vegetative strip, or other approved proprietary device) to remove pollutants from the first 1/2" of stormwater run-off from site.
13. Prior to the issuance of a Grading or Building Permit, County shall provide a signed and notarized Stormwater Treatment Device Access and Maintenance Agreement to Land Development Engineering, Stormwater for recording.

Traffic: Jeff Barnes
Traffic Engineer
(209) 571-5190
jbarnes@modestogov.com

14. Please refer to the comments from Jeff Barnes, City Traffic Engineer, dated June 10, 2010 and the Memo dated November 18, 2010 from Patricia Hill Thomas, Chief Operations Officer, which addresses the comments (attached).

Please contact me if you have any questions about this letter.

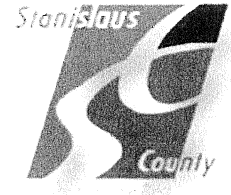
Sincerely,



David Wage
Associate Planner

Attachments: Memorandum from Patricia Hill Thomas, November 18, 2010

MEMORANDUM



To: Brent Sinclair, Director
Community and Economic Development Department
City of Modesto
1010 10th Street, Suite 3300
Modesto, CA 95354

From: Patricia Hill Thomas (209) 525-6333
Chief Operations Officer Thomasp@stancounty.com
Stanislaus County Chief Executive Office
1010 10th Street, Suite 6800
Modesto, CA 95354

Date: November 18, 2010

Re: City Comments to Traffic Impact Analysis for Stanislaus County Juvenile
Commitment Center dated June 10, 2010

Dear Mr. Sinclair,

Thank you again for our earlier conversation regarding the comments to the traffic impact analysis for Stanislaus County's Juvenile Commitment Center project. I am afraid the original comments from Jeffrey Barnes, City of Modesto Traffic Engineer provided to Patrick Kelly in the City's Planning Department anticipated the full build-out plan for our Juvenile Justice Center complex at 2215 Blue Gum Avenue. As a result, Mr. Barnes comments reflect the need to consider larger potential traffic impacts that would result from the master planned future build-out of the site, rather than our much smaller immediate Juvenile Commitment Center project. Mr. Barnes' letter dated June 10, 2010 is attached.

During our brief discussion, you indicated that the City of Modesto would require dedication of the right-of-way along the Blue Gum Avenue frontage of the site, and that the additional conditions in Items 1, 2, 4 and 5 are not required as a condition by the City for development of the smaller Juvenile Commitment Center project. Specifically, the County suggests the following changes to the City's conditions:

- #1 Stanislaus County will dedicate the right-of-way to widen Blue Gum Avenue as required. Construction of the improvements related to impacts created by Stanislaus County to Blue Gum Avenue including curb, gutter, sidewalk, drainage and street lights will be deferred and set as a requirement for any future County development projects and/or traffic generating expansions at this site.

Memorandum to Brent Sinclair

November 18, 2010

- #2 No action is required by the City of Modesto for Stanislaus County to analyze or improve Poust Road or the drainage basin on the east side of Poust Road. No impact to Poust Road or the drainage basin is anticipated to result from construction of the Juvenile Commitment Center project.

- #4 The minimal additional traffic impact resulting from the Stanislaus County Juvenile Commitment Center project will not require further analysis of traffic impacts at: a) Briggsmore Avenue and Prescott Road; b) Briggsmore Avenue at Sisk Road/Carpenter Road/W. Orangeburg Avenue; c) Carpenter Road at State Highway 99 Northbound Ramps; nor d) Carpenter Road at State Highway 99 Southbound Ramps. Stanislaus County agrees to partner with Yosemite Community College District and the City of Modesto to collectively find traffic solutions to address the challenges posed by the continued growth and expansion of the campus area.

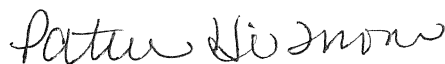
- #5 The Stanislaus County Juvenile Commitment Center project will not generate any significant impact to any State highway facility and, therefore, will not require further Caltrans review of the project.

Item #3 is accurate, and Stanislaus County will retain "Second Street" as a private roadway. Stanislaus County will work with the users of the roadway, including Yosemite Community College District/MJC West Campus and the Peterson Alternative Center for Education (SCOE), the U. S. Post Office and the City of Modesto to find another name for the existing Second Street. Improvements to the private Second Street roadway will be made, at a minimum, to County standards within the County property prior to occupancy of the Juvenile Commitment Center.

I greatly appreciate the thorough consideration and thoughtfulness of the review by Mr. Barnes and yourself on behalf of the City of Modesto. The proposed Juvenile Commitment Center will provide a tremendous opportunity for youth in our City and County to receive local in-custody services with a much greater chance for successful rehabilitation and re-introduction to the community.


Please acknowledge your receipt and confirmation of this Memorandum modifying the comments and requirements of the City of Modesto pursuant to development of the Juvenile Commitment Center project by Stanislaus County. If you have any questions, please do not hesitate to contact me at (209) 525-6333.

Yours truly,



Patricia Hill Thomas
Chief Operations Officer/Project Manager
Stanislaus County Chief Executive Office

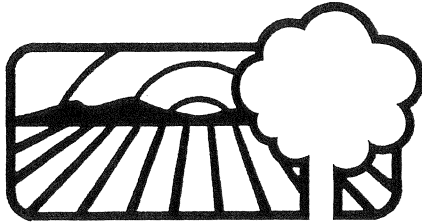
Acknowledged and Agreed,



Brent Sinclair, Director
Community and Economic Development
City of Modesto

11-18-10

Date



CITY of MODESTO

COMMUNITY AND ECONOMIC DEVELOPMENT DEPT
Traffic Engineering & Operations Division

MEMORANDUM

DATE: June 10, 2010

TO: Patrick Kelly, Planning Manager

FROM: Jeffrey L. Barnes, Traffic Engineer *JLB*
Traffic Engineering & Operations Division

SUBJECT: Traffic Impact Analysis for Stanislaus County Juvenile Hall Commitment Center Comments

The subject traffic analysis has been reviewed and my comments are as follows:

1. The project developer, Stanislaus County, must dedicate right-of-way and construct complete street improvements to provide the minor arterial roadway improvements on the Blue Gum Avenue frontage of the project per the City of Modesto General Plan. The improvements must include curb, gutter, sidewalk, drainage, and street lights. The right-of-way should follow City of Modesto Standard Specifications Detail No. 379 and in addition should provide a ten foot wide public utility easement.
2. The project normally should also dedicate right-of-way and construct street improvements along the Poust Road frontage of the Stanislaus County property. Because there is an existing drainage basin on the east side of Poust Road, the traffic study should address the Poust Road collector street designation in the General Plan and the current limited traffic volume and then recommend the appropriate requirements and any adjustments to the standard requirements. This review and recommendation could also result in adjustments to the Detail No. 379 requirements for the Blue Gum Avenue improvements.
3. The report should be revised to make it clear that the indicated 2nd Street and 4th Street north of Blue Gum Avenue are private roadways. The road names are duplicates of existing City of Modesto roadways near Modesto High School and downtown Modesto. The descriptions of 2nd Street starts on page 6 of the report and the 4th Street description is on page 7. On page 10 it is indicated that 2nd Street should be improved to City of Modesto Standard Detail No. 309. While that would be helpful, since 2nd Street north of Blue Gum Avenue is a private road Detail No. 309 might not apply.
4. The analysis should have included studies of the following intersections:
 - a. Briggsmore Avenue at Prescott Road
 - b. Briggsmore Avenue at Sisk Road/Carpenter Road/W. Orangeburg Avenue
 - c. Carpenter Road at State Highway 99 Northbound Ramps
 - d. Carpenter Road at State Highway 99 Southbound Ramps
5. Was Caltrans included in the review of this project?

Please contact me if you have questions. Thank you.

JLB:th
Traffic/Jeff/Miscell Ltr & Memo/2010

cc: Kirk Ford, Stanislaus County Planning Director
Bill Carlson, Stanislaus County Planning ✓
Helen Wang, Senior Transportation Planner
Mark Murnhv Traffic Operations Engineer

RECEIVED

JUN 14 2010 A.L.