

ATTACHMENT A: PROPOSED SCOPE OF WORK FOR EASTSHORE
HIGHWAY / BUCHANAN STREET SIGNAL FEASIBILITY STUDY

1. PROJECT OVERVIEW

In 2004, Korve Engineering, Inc. (KORVE) conducted traffic operations analysis to evaluate Level of Service and queuing for intersections on Buchanan from the I-80/I-580 ramps to Jackson Street under existing and projected future conditions. This information was used as part of an Encroachment Permit Application to install a traffic signal interconnect between a proposed traffic signal at Eastshore Highway/Buchanan Street and the existing Caltrans signal at the northbound off-ramp on State Highway 04-Ala-80, Post Mile 6.42, in the City of Albany. In particular the analysis demonstrated that a new traffic signal at the Eastshore Highway / Buchanan Street intersection could improve safety and operations if interconnected with the adjacent Caltrans ramp intersections and that the intersection would meet Caltrans signal warrants under existing and future conditions. This process involved meeting with Caltrans and submitting memos summarizing projected queuing and LOS at key intersections. As part of the final permit application Korve prepared a memo summarizing qualitatively the benefits of the proposed signal to the Buchanan Street interchange and the adjacent Gilman Street and Central Street interchanges.

On November 23, 2004 Bahman Zarechian of Caltrans responded to the Encroachment Permit Application by sending a letter to Randy Leptien, the City of Albany Engineer, denying the application. This letter indicated that the application would be reconsidered pending compliance with several requirements described in the letter. On June 7, 2005, representatives of the City, Gray Bowen and KORVE met with the engineering, planning and encroachment permit staff of Caltrans District 4 to discuss the outstanding requests. Caltrans indicated that they were open to the installation of the traffic signal provided that their previous questions could be satisfactorily answered. The primary concern to Caltrans expressed in the meeting was the operation of the I-80 Ramps/Buchanan intersections with the Buchanan/Eastshore intersection. KORVE will provide the data necessary to comply with the majority of these conditions. Specifically, KORVE will prepare a report and a Synchro analysis and simulation providing responses to the following Caltrans requests:

1. Comments on the attached sheets from Caltrans reviewers (not available);
2. Turning movements, traffic counts for Buchanan/Route 80 and Buchanan/Eastshore Highway (Although Caltrans has again asked for a Signal Plan, it is our understanding that the City does not intend to prepare a signal plan until the signal concept is tentatively approved by Caltrans);
3. Documentation of the quantitative information on which the prior traffic report was based; and
4. Caltrans asks why they would agree to the northbound left turn and signal now when they didn't agree with it in 1998. Korve will explain that the City separated the northbound left turn and signal project from the Eastshore Highway extension project in 1998 so that the later project could be completed as a first phase before funding expired. That project was specifically designed to temporarily operate as an unsignalized intersection and allow for future striping of a northbound left turn lane and installation of

a traffic signal following the lengthy study and approval process that is now occurring. This is evidenced by the original signing and striping plans for the Eastshore Highway connection, which include a temporarily cross-striped area of pavement that Caltrans should recognize as being the precise dimensions of the currently proposed northbound left turn lane.

2. DETAILED WORK PLAN

Study Location

The Eastshore Highway and Buchanan Street intersection is located in the City of Albany just east of the I-80/580 northbound on/off-ramps to Buchanan Street and is part of an elevated structure over the railroad tracks.

Task 1: Identification of Traffic Volumes

KORVE will document the peak hour intersection traffic volume counts collected by Korve and the Alameda County Congestion Management Agency (CMA) model projections which were used to arrive at the projected 2025 traffic volumes used in the traffic analysis. We will also clearly identify the relevant data from other studies, which was used to establish the future traffic flow volumes. Traffic volumes will be presented in tabular and graphic formats for the following intersections as requested by Caltrans:

- Buchanan/Route 80 (northbound ramps);
- Buchanan/Route 80 (southbound ramps); and
- Buchanan/Eastshore Highway

Task 2: Documentation of Data and Analysis

KORVE will prepare a letter report for submittal to Caltrans, providing background information and clearly documenting the data and analysis that was used to establish the finding referenced in the Encroachment permit application. This documentation will include details of the Synchro based subarea traffic model analysis and simulation. The operations of the study intersections will be reported in terms of Level of service (LOS) calculations based on *Highway Capacity Manual* (Transportation Research Board, HCM 2000) operations methods. Detailed level of service calculation sheets will be included in the documentation. Electronic copies of the Synchro files will also be provided to Caltrans for review. The level of service, average vehicular delay, and 95th percentile queue length analysis for peak hour conditions at each study intersection will be presented in a tabular format for comparison of alternatives with and without the proposed signal. The analysis will demonstrate the effectiveness of coordinating the signals, since the desire for interconnection and coordination with the Caltrans signals is the reason for the encroachment permit application.

Task 3: Conceptual Layout

Although it is our understanding that a formal signal plan will not be prepared until Caltrans has given tentative approval to the concept, Korve will provide include a conceptual layout diagram in the letter report. This figure will show the proposed intersection lane configuration with

addition of the proposed northbound left turn lane. This will illustrate any proposed striping or geometric changes and the general placement of any necessary features. However, it is not intended to be an engineering plan. The layout will also illustrate identify the ability of the existing geometry to meet sight distance standards.

Task 4: Meetings

This scope of services includes attendance at up to two (2) meetings. KORVE is prepared to attend meetings with the City and Caltrans to address any technical questions related to the analysis. KORVE will present and describe the results of the draft report and Synchro analysis/simulation to Caltrans at a follow up meeting to be held on the completion of the analysis. We have not included attendance at public hearings or planning commission meetings.

Additional Services

Any tasks not specifically delineated in the Scope of Services presented above -- for example signal plans, additional data collection, public meetings, site design, additional meetings, crosswalk studies, or additional analysis -- shall be considered additional services and require a contract amendment. Any additional services requested by the client will be carried out by KORVE upon receipt of a written request or signed contract amendment.

3. PROJECT SCHEDULE

The project will commence upon receipt of a signed contract or written authorization to proceed. Following the notice to proceed, Korve will submit the draft report for review within two to three weeks. Any necessary revisions to the report would be completed and a final report submitted within one week after the receipt of all comments. Overall, the project can be completed within three to four weeks from project initiation.

4. COST

We propose to conduct this analysis on a time-and-expenses basis using our standard hourly billing rates. The Scope of Services presented in Tasks 1 through 4 above can be completed for \$9,960 as detailed in the attached spreadsheet. This represents a maximum figure, which will not be exceeded without prior written authorization from the client. Any services authorized by the client and conducted as part of Additional Services, will be billed on a time-and-expenses basis in addition to the fee described above.