

CONSULTANT NAME: Quincy Engineering, Inc.

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CONTRACT TITLE: Quincy Engineering, Inc. – As-Needed Project Planning, Design, and Construction support engineering for projects associated with the El Dorado Hills Boulevard, US Highway 50 Interchange.

AGREEMENT NO.: 05-935

TASK ORDER NAME: Geometric Approval Drawings

TASK ORDER NO.: Task Order #2

SCOPE OF WORK

Deliverables to be submitted to the contract administrator unless otherwise noted, per the attached schedule. Adjustments to the schedule can be made with written approval of the contract administrator.

TASK A – GEOMETRIC APPROVAL DRAWINGS

Subtask A1.1 - Project Management

This task provides for day to day Project Management of this Task Order, updating the County Department of Transportation (DOT) on specific issues, managing and directing the work of designers, etc. Status reports will be submitted each month with invoices.

**Deliverables: Project Management
Project Status Reports**

Subtask A1.2 - Meetings

Meetings with the County DOT will be held to review issues and provide direction. Project Development Team Meetings and client meetings will be held as needed to discuss the project and to coordinate and obtain approvals from Caltrans on any potential design issues, ten meetings have been provided for in this scope.

**Deliverables: Project Development Team Meetings & Client Meetings (10)
Meeting Agendas & Minutes**

Subtask A1.3 – Geometric Approval Drawings (GADs) Ultimate Mainline and Interchange Improvements

Quincy Engineering, Inc. (QEI) will develop geometric plans for the ultimate Route 50 mainline improvements as outlined in the March 2006 Dowling Traffic Study as approved by the County DOT. The ultimate interchange configuration will be a Type L-8. Improvements along El Dorado Hills Blvd./Latrobe Road from the Raley's shopping center entrance to Town Center Blvd., and at ramp intersections will be based on traffic information developed by Dowling Associates, Inc. as approved by the County DOT. In addition, geometric plans will be developed to show up to three project phasing scenarios. Quincy Engineering, Inc. will develop:

- Horizontal alignments
- Vertical alignments
- Typical cross-sections
- Preliminary Intersection designs

The geometric plans will be submitted to the County DOT and Caltrans for approval of the project's geometric features.

This subtask will develop GADs for the US 50 mainline improvements between the future Empire Ranch Interchange (approximately 1-mile west of El Dorado Hills Interchange), and just east of the future Silva Valley Parkway Interchange (approximately 1.5-miles east of the El Dorado Hills Interchange). The GADs for the Ultimate Mainline Freeway Improvements will also consider ultimate geometric configurations of the El Dorado Hills Blvd./Latrobe Road Interchange. Preliminary intersection designs will include: lane assignments and storage lengths for turning movements

as provided by QEI's traffic consultant; conceptual signal and lighting as provided for in subtask A1.10; and a 30% level design of intersection geometry. The Ultimate GAD will consist of the HOV lane and additional through lanes constructed in the median; ramp to ramp auxiliary lanes connecting interchanges would be added by widening to the outside; reconstruction of all mainline structures (El Dorado Hills, Clarksville) and ramp structures (EB & WB El Dorado Hills ramps). Mainline US 50 ultimate lane configurations will consist of the following:

From Future Empire Ranch to El Dorado Hills Interchange –

- Westbound 4-lanes (HOV, 2-mixed, auxiliary lane)
- Eastbound 5-lanes (HOV, 2-mixed, truck climbing, auxiliary lane)

From El Dorado Hills Interchange to just east of future Silva Valley Parkway –

- Westbound 5-lanes (HOV, 3-mixed, auxiliary lane)
- Eastbound 5-lanes (HOV, 2-mixed, truck climbing, auxiliary lane)
- 4-lanes in each direction across the El Dorado Hills/Latrobe Road UC

El Dorado Hills Boulevard will consist of three through lanes in each direction, dual left turn lanes at each ramp intersection, and additional lanes as approved by the County DOT.

The draft geometric plans of alternatives will be submitted to the County DOT and Caltrans for review and comment. Comments will be incorporated and submitted to the County DOT and Caltrans for approval of the project's geometric features.

**Deliverable: Draft GADs for Ultimate Interchange and Mainline Improvements (50 Copies 11"x17")
Final GADs for Ultimate Interchange and Mainline Improvements (50 Copies 11"x17")
Provide a Single Sheet GAD Plot For Ultimate (20 Plots)**

Subtask A1.4 –GAD's Phasing Scenarios (3-scenarios)

This subtask would develop phasing scenarios based on the approved Ultimate GAD's from Subtask A1.3.

Scenario #1 – Scenario #1 is assumed to include eastbound Mainline improvements (HOV, truck climbing, and Auxiliary Lanes), and the ultimate eastbound loop off ramp, eastbound diagonal on ramp, and the pedestrian overcrossing.

Scenario #2 – Scenario #2 is assumed to include westbound Mainline improvements (HOV, mixed flow and Auxiliary Lanes), and the ultimate westbound loop off ramp, removal of the westbound diagonal off ramp, construction of the westbound diagonal on ramp, and the pedestrian overcrossing.

Scenario #3 – This scenario is assumed to be a combination of the two previous scenarios and will be determined by the County DOT prior to development.

Phasing scenarios will consider constructability constraints, but will not include the development of stage construction plans. For each scenario a conceptual construction staging plan will be developed, and a fatal flaw review performed. The draft geometric plans of the phasing scenarios will be submitted to the County DOT and Caltrans for review and comment. Comments will be incorporated and submitted to the County DOT and Caltrans for approval of each phasing scenario's geometric features.

**Deliverable: Draft GADs for Three Phasing Scenarios (50 Copies 11"x17")
Final GADs for Three Phasing Scenarios (50 Copies 11"x17")**

Subtask A1.5 - Supplemental Surveys

R.E.Y. Engineers, Inc. (REY) will provide additional surveying and mapping as needed to include drainage cross sections, potholing positive identifications, additional utility locations and supplemental topographic features needed per alignment and design requirements. These services will be performed on a time and materials basis not to exceed \$30,000.

Deliverables: Topographic Survey Data

Engineering Studies

The Quincy Engineering, Inc. team will prepare the following engineering studies (Subtasks A1.6 through A1.15). Additional engineering studies other than those included below may be required based on the impacts of the approved GAD's and would be prepared as part of a separate task order. The preparation of supplemental environmental documents other than the engineering studies included below would also be prepared as part of a separate task order.

Subtask A1.6 – Preliminary Drainage Report

A1.6.1 – Off-Site Hydrology

WRECO will perform off-site hydrologic and hydraulic analyses to support the Quincy Engineering Project Team's design efforts for the Project. WRECO's study will cover the following 4 major Reinforced Concrete Box structures and several smaller cross culverts within the project limits:

Approximate As-built Station	Facility Size and Type
39+50	6' x 7' RCB
67+00	Double 6' x 7' RCB
93+00	Double 6' x 7' RCB
110+50	Triple 10' x 10' RCB
368+00	48" CMP
375+00	24" CMP
26+00	48" CMP
EB Loop off ED Hills	Double 36" RCP

WRECO will review data provided by the County DOT and Quincy Engineering Incorporated.

WRECO will conduct field review of the studied cross culverts to identify existing conditions and design issues.

WRECO will perform hydrologic analyses for the studied watersheds and determine the design flows. We will apply at least 2 methods for each watershed. Typical hydrologic analysis methods include: the Rational Method, the Flood Frequency Analysis using Stream Gage Data, the USGS Regional Regression Equations, and the Unit Hydrograph Method. The design flows to be calculated will include Q_{100} , Q_{25} and Q_{10} .

WRECO will perform hydraulic analyses for the culverts to determine the flow capacities under the existing and proposed conditions. We will apply the FHWA's Culvert Charts (CD-5) and FHWA's HY-8 computer program for the task. The more detailed hydraulic modeling using the model such as HEC-RAS will be performed in a later phase of the project. Quincy Engineering will provide WRECO with culvert and roadway as-built plans and survey data.

WRECO will prepare a technical memorandum summarizing findings and recommendations. The content will follow the Caltrans North Region's typical format for preparing the Drainage Report. Quincy Engineering will incorporate the information to the proposed project Drainage Report.

A1.6.2 – Preliminary Drainage Report and On-Site Hydrology

Quincy Engineering, Inc. will perform analysis for on-site drainage within the state right of way, and prepare a draft Preliminary Drainage Report which will address the ultimate improvements. This study will include the off-site analysis performed by WRECO (A1.6.1) and follow the Caltrans North Region Design Directive #6, guidelines for the preparation of Drainage Reports. Quincy Engineering, Inc. will document the existing facilities and determine if upgrades or changes are needed to the existing drainage facilities. Caltrans culvert maintenance records and discussions with Caltrans and County DOT maintenance workers will provide insight as to the adequacy of the existing system. The draft Preliminary Drainage Report will be reviewed by the County DOT and Caltrans North Region Hydraulics Branch for concurrence. Quincy Engineering, Inc. will incorporate appropriate comments into the final Preliminary Drainage Report and will provide written response to all review comments.

Ten copies of the draft Preliminary Drainage Report will be submitted to the County DOT and Caltrans for review and comment. Comments will be incorporated and ten copies of the final Preliminary Drainage Report will be submitted to the County DOT and Caltrans.

Deliverables: **Draft Preliminary Drainage Report (10 Copies)**
 Final Preliminary Drainage Report (10 Copies)

Subtask A1.7 - Preliminary Geotechnical Studies

Blackburn Consulting Inc. (BCI), will provide a Preliminary Geotechnical Report for use in the development of the Geometric Approval Drawings by Quincy Engineering, Inc. BCI will base their work on "As-built" drawings and Log of Test Borings (LOTBs) prepared for existing structures within this section of US 50, and on existing geotechnical data developed by BCI staff at the existing El Dorado Hills Boulevard Interchange and Bass Lake Grade Truck Climbing Lane. In addition, BCI is presently developing preliminary geotechnical data for the proposed Silva Valley Interchange as part of another project, and will incorporate that data into this study. Detailed exploration and testing will be included in future design phases of the project under a separate task order.

Preliminary Geotechnical Report

The purpose of the preliminary geotechnical report is to provide information regarding the existing rock, soil and groundwater conditions that will affect the constructability and cost of the proposed project. Specifically, our information will present data for preliminary design of grading, excavating, embankment fill, pavements, and bridge foundations.

BCI will complete the following scope items for the preliminary geotechnical report, concluding with an estimate of what additional geotechnical investigation is required for final design.

Coordination, Document Review and Site Reconnaissance

- Meet with Quincy Engineering, Inc. (QEI) to discuss the project, issues and schedule.
- Review available project documents, as provided by QEI and obtained by BCI, including any Soils/Geology Reports, Foundation Reports, Materials Reports and "As-Built" and LOTBs for the existing El Dorado Hills Boulevard Interchange and nearby projects.
- Review published geologic and seismic mapping and literature pertaining to the site.
- Conduct site geologic reconnaissance of the project and immediately surrounding area.

Prepare Preliminary Geotechnical Report

BCI will prepare and submit a Preliminary Geotechnical Report for the project, including:

- Project Location and Vicinity Map
- Summary of Site Geology and Subsurface Conditions
- As-Built Log of Test Borings for the existing structures at the El Dorado Hills Boulevard Interchange, Clarksville UC and related work
- Preliminary Seismic Data and Evaluation (including ARS curve)
- Preliminary Liquefaction Evaluation
- Preliminary Corrosion Evaluation
- Preliminary Foundation Recommendations
- Preliminary Roadway Structural Section Recommendations for Widening (based on Caltrans As-Built Plans and Pavement Surveys)
- Preliminary Pavement Rehabilitation Recommendations for Existing Pavement
- Preliminary Recommendations for Cut/Fill Slopes and Excavation Conditions
- Grading Issues, including Storm Water Quality (Soil Erosion & Infiltration) and Naturally Occurring Asbestos
- Recommendations for Additional Field Work and Laboratory Testing

BCI's scope of services for the Preliminary Geotechnical Report does not include subsurface exploration or laboratory testing.

Ten copies of the draft Preliminary Geotechnical Report will be submitted for review and comment to the County DOT and Caltrans. Comments will be incorporated and ten copies of the final Preliminary Geotechnical Report will be submitted to the County DOT and Caltrans.

ISA Report

BCI will provide a Phase 1 Initial Site Assessment (ISA). The overall purpose of the ISA will be to attempt to identify significant soil/groundwater contamination issues that could affect the constructability, feasibility, and/or the cost of the

proposed project. BCI will complete the following scope items for the ISA. If we find the potential for significant contamination, additional investigation may be required.

Coordination, Site Review and Field Reconnaissance

Discuss project, coordinate work with QEI, and conduct a preliminary site review. Obtain from QEI copies of title documents and Assessor Parcel Numbers (APN) for parcels located within the project limits and subject to partial or complete acquisition.

BCI to review published literature regarding site geology and groundwater conditions.

BCI to conduct site reconnaissance to observe current land use and potential indications of contamination on or adjacent to project alignment. This will include documentation of areas showing evidence of surface staining; dumping; handling and mixing areas for hazardous materials such as pesticides, insecticides, and fuel products; apparent locations of fuel tanks and wells; and locations and conditions of transformers.

Historical Research

BCI to review historical aerial photographic coverage and topographic map coverage of the site and surrounding properties for indications of potential sources for contamination.

BCI to obtain and review a commercial database search of federal, state, and County DOT records for indications of the use, misuse, or storage of hazardous and/or potentially hazardous materials on or near the alignment.

BCI will attempt to identify past and present operations conducted on the properties to assess the potential for hazardous materials impacts to the site.

BCI to conduct interviews with any readily available persons knowledgeable about the history of the site to determine potential environmental liabilities.

Report Preparation

BCI will prepare a report summarizing the findings of our review, site reconnaissance, historical photograph evaluation, and regulatory records review. We will address identified potential hazardous materials impacts and recommend the need for further investigation and analysis, if necessary.

BCI to submit ten draft and final copies of the ISA's.

Deliverables: **Draft Preliminary Geotechnical Report (10 Copies)**
 Final Preliminary Geotechnical Report (10 Copies)
 Draft ISA Report (10 Copies)
 Final ISA Report (10 Copies)

Subtask A1.8 - Structure Advance Planning Studies Freeway and Ramp Structures

Quincy Engineering, Inc. will develop Advance Planning Studies for the following structures:

- Replacement of Latrobe Road Undercrossing, Br. Nos. 25-0071L/R/S.
- New westbound loop off ramp structure Latrobe Road Undercrossing, Br. No. 25-0071K
- Replacement of Clarksville Undercrossing, Br. Nos. 25-0072L/R.
- Up to three retaining walls.

The appropriate bridge widening or replacement structure types will be dictated by public safety, environmental concerns, clearance requirements, right-of-way, and economics. It is assumed that QEI will develop planning studies for one bridge type at each of the locations identified.

QEI will also evaluate the structural condition of the existing Clarksville Undercrossing bridge based on a review of the as-built plans and the Caltrans Maintenance Reports. QEI will conceptually evaluate the seismic vulnerability of the existing bridge and determine a reasonable seismic retrofit strategy. Note that this evaluation will be based on past experiences with the retrofit of similar bridges with minimal structural calculations. Feasibility for widening the Clarksville structures will be considered, taking into account their condition and seismic status.

Issues that will be considered during these studies include construction staging, traffic handling, foundation types, and

aesthetics. Quincy Engineering, Inc. will develop a plan view, profile view, typical section, and cost estimate for replacement of existing structures and a new pedestrian overcrossing.

Deliverables: Structure Advance Planning Studies (10-Copies)

Subtask A1.9 - Structure Advance Planning Studies Pedestrian OC

Quincy Engineering, Inc. will develop Advance Planning Studies for the following structures:

- New pedestrian overcrossing at El Dorado Hills/Latrobe Road.

The appropriate bridge widening or replacement structure types will be dictated by public safety, environmental concerns, clearance requirements, right-of-way, and economics. It is assumed that QEI will develop planning studies for one bridge type at each of the locations identified.

Issues that will be considered during these studies include construction staging, traffic handling, foundation types, and aesthetics. Quincy Engineering, Inc. will develop a plan view, profile view, typical section, and cost estimate for replacement of existing structures and a new pedestrian overcrossing.

Deliverables: Structure Advance Planning Studies (10-Copies)

Subtask A1.10 – Preliminary Signal and Lighting Plans & Estimate

Y&C Transportation Consultants Inc. (Y&C), will obtain as-built plans and base maps and field check existing conditions at the signalized ramp intersections at the El Dorado Hills Interchange. Y&C will develop a conceptual signal and lighting plan for the Ultimate improvements. Cost estimates will be developed for proposed signal and lighting (including bridge soffit lighting and Pedestrian OC lighting) modifications associated with the Ultimate improvements and up to three phasing options. Potential conflicts created by overhead/underground utilities, drainage facilities, etc., will be noted. The conceptual plan will include proposed phase diagrams, controller locations, and traffic signal pole locations, as well as vehicle and pedestrian signal locations for the ultimate improvements only.

**Deliverables: Preliminary Signal/Lighting Plans For Ultimate Improvement (10-Copies)
Cost Estimate For Ultimate Improvement and 3-Phasing Options (10-Copies)**

Subtask A1.11 - Utility Relocation Study

Quincy Engineering, Inc. will prepare mapping to show all anticipated utility conflicts, develop a cost estimate for relocation in the Right-of-Way Data sheet and recommend a schedule for utility relocation prior to construction. There may be some cases where relocation prior to construction is not feasible. In these cases, utilities will be relocated during construction by the contractor or through a coordination clause in the construction contract.

Deliverables: Utility Relocation Study (10 Copies)

Subtask A1.12 – Right of Way Data Sheets

Quincy Engineering, Inc. (QEI) will prepare preliminary layout plans for each phasing scenario (3 total) showing anticipated limits of right-of-way acquisition, temporary construction easements, and permanent easements, and showing utility relocation needs.

Bender Rosenthal, Inc. (BRI) will develop Right-of-Way (ROW) Data Sheets to estimate right of way and utility relocation costs and the anticipated ROW acquisition schedule for inclusion in the Supplemental Project Report. QEI will provide utility data and costs. This scope assumes up to three ROW Data Sheets will be prepared to cover all construction phases anticipated for the project.

RIGHT OF WAY PLANNING

BRI will work with the Client's staff to help refine the issues facing the ROW acquisition prior to the final design phase. Planning activities include a field review of project and developing a preliminary ROW capital cost estimate based on preliminary plans. This task will include developing a ROW scoping report that provides a detailed analysis of the project right of way that highlights the various risks and solutions to ensure the ROW acquisition does not become a critical path issue. BRI will facilitate ROW workshops that highlight the ROW process for the project. In addition, BRI will assist in identifying right of way solutions to environmental problems where appropriate, and attend public meetings to discuss the ROW process with concerned citizens. The ROW planning task will also require attendance at project development team meetings, schedule and progress updates, and coordination efforts with the PDT and ROW teams throughout the life of the project, and creating and providing ROW planning documents to Caltrans Standards.

- Make *up to 2 site visits*, including an inspection of proposed ROW for opportunities to avoid sensitive sites, critical constraints, and environmental problems.
- Attend *up to 3 PDT meetings*.
- Review of current and projected land use patterns from a ROW cost prospective for 3 alternative studies.
- Provide a comparable analysis of each property, including potential damages to affected property improvements.
- Provide ROW estimates, by parcel.
- Analysis of affected parcels, including a total of *4 land use analysis, with an estimated 20 affected parcels*
- Assist in identifying right of way solutions to environmental problems where appropriate.
- Caltrans ROW data sheets

BRI's Assumptions and Limiting Conditions:

- QEI will provide spreadsheet with all affected parcels, current size, current use and size of acquisition
- A detailed housing study will not be necessary
- *ROW and utility estimates are for budgetary purposes only*
- QEI will provide utility relocation analysis for inclusion in the ROW data sheet
- QEI will provide number and cost of Utility relocations, BRI will fill out ROW Utility Relocation Sheets
- Analysis of up to *3 alternatives, with an estimated 20 affected parcels*
- No additional land uses will be required
- QEI will provide Caltrans right of way maps and APNs.

Deliverables: Right-of-Way Data Sheets (3 Alternatives) (10-Copies)

Subtask A1.13 - Prepare Fact Sheets for Exceptions to Design Standards

Quincy Engineering, Inc. will prepare any Fact Sheets for Exceptions to Design Standards identified during development of the GADs.

Deliverables: Design Exception Fact Sheets (10 Copies)

Subtask A1.14 – Storm Water Data Report

QEI will prepare the required Storm Water Data Report (SWDR) according to the Caltrans Storm Water Quality Handbook – Project Planning and Design Guide, July 2005. This report documents the process of selecting and designing the Water Quality Best Management Practices for the project. The Water Quality Impact Report prepared by the County DOT's environmental consultant for the project will be available for the preparation of the SWDR. The SWDR will follow the December 2005 format. WRECO will review the Project SWDR prepared by Quincy Engineering for consistency with off-site hydrology/hydraulics and BMPs. Quincy Engineering will provide WRECO with drainage design information (plans and report) together with SWDR. It is assumed that WRECO will review the report twice and WRECO will prepare written comments each time. Ten copies of the draft SWDR will be submitted to the County DOT and Caltrans for review and comment. Comments will be incorporated and ten copies of the final SWDR will be submitted to the County DOT and Caltrans.

**Deliverables: Draft Storm Water Data Report (10 Copies)
Final Storm Water Data Report (10 Copies)**

Subtask A1.15 – Traffic Forecasting and Operational Analysis

Dowling & Associates scope of work is to perform traffic forecasting and traffic operations analysis in support of the geometric approval drawings (GAD) for the El Dorado Hills Interchange and HOV lanes improvements, as detailed below.

Geographic Extent of Analysis:

The traffic forecasting and operations analysis will cover the proposed US 50 mainline improvements between the future Empire Ranch Interchange (approximately 1-mile west of El Dorado Hills Interchange), and just east of the future Silva Valley Parkway Interchange (approximately 1.5-miles east of the El Dorado Hills Interchange). The analysis will also consider improvements to El Dorado Hills Blvd./Latrobe Road between Park Drive and Town Center Blvd.

Temporal Extent of Analysis

The analysis will be weekday AM peak hour volumes, and weekday PM peak hour volumes and operations for the years 2010 (within first 2 years after project opens) and 2030 (over 20 years after project opens).

Lane Configurations

Mainline US 50 ultimate lane configurations will consist of the following:

- From Future Empire Ranch to El Dorado Hills Interchange –
 - Westbound 4-lanes (HOV, 2-mixed, auxiliary lane)
 - Eastbound 5-lanes (HOV, 2-mixed, truck climbing, auxiliary lane)
- From El Dorado Hills Interchange to just east of future Silva Valley Parkway –
 - Westbound 5-lanes (HOV, 2-mixed, truck climbing, auxiliary lane)
 - Eastbound 5-lanes (HOV, 2-mixed, truck climbing, auxiliary lane)
 - 4-lanes in each direction across the El Dorado Hills/Latrobe Road UC

El Dorado Hills Boulevard will consist of three through lanes in each direction, dual left turn lanes at each ramp intersection, and additional lanes as approved by the County DOT.

Phasing Scenarios

Traffic operations forecasts would be produced for the following phasing scenarios:

Scenario #1 – Scenario #1 is assumed to include eastbound Mainline improvements (HOV and Auxiliary Lanes), and the ultimate eastbound loop off ramp, eastbound diagonal on ramp, and the pedestrian overcrossing.

Scenario #2 – Scenario #2 is assumed to include westbound Mainline improvements (HOV and Auxiliary Lanes), and the ultimate westbound loop off ramp, removal of the westbound diagonal off ramp, and construction of the westbound diagonal on ramp.

Scenario #3 – This scenario is assumed to be a combination of the two previous scenarios and will be determined by the County DOT prior to development.

Traffic Forecasts

For the US 50 mainline and ramp year 2030 forecasts, Dowling & Associates will use the higher of the SACMET 2027 model and the El Dorado County DOT Model 2025 forecasts extrapolated to 2030.

For 2010 volumes for the US 50 mainline and ramps Dowling & Associates will extrapolate the 2003 count information contained in the Dowling report, US 50 Strategic Corridor Operations Study, March 2006 and more recent ramp/mainline counts to be obtained from Caltrans.

For the year 2030 forecasts for El Dorado Hills Blvd. and Latrobe Road Dowling & Associates will first examine the latest County DOT approved forecasts for the Saratoga Way Extension, modified as needed to reflect full build out of the business park, on Latrobe Road, south of US 50. Given that this analysis did not use a 2030 analysis horizon year and was based on adjusted model output, Dowling Associates will review all post processing adjustments and model modifications performed by Wilber Smith Associates (WSA). These adjustments will be replicated for a new 2030 analysis year model run. If the WSA adjustments cannot be satisfactorily replicated, Dowling Associates will perform a new 2030 analysis year model run and evaluate the need to perform like-adjustments similar to the WSA analysis. This “revised” 2030 model run will serve as the basis for local network forecasts.

For the year 2010 forecasts for El Dorado Hills Blvd. and Latrobe Road Dowling will linearly interpolate between the WSA base year 2006 Wilber Smith Report existing volumes and the 2030 volumes from the “revised” 2030 model.

Traffic Operations Analysis

Dowling & Associates will compute freeway mainline (basic, weaving, ramp merge and diverge) and intersection peak hour level of service according to the Highway Capacity Manual method using the HCS software. Dowling & Associates will identify recommended design modifications to achieve the project level of service standards. We may perform additional simulation tests to verify the results where we feel appropriate.

Dowling & Associates will compute required storage lengths for turn bays and check for queue overflows between signalized intersections using the Highway Capacity Manual and the HCS software.

Dowling & Associates will recommend signalized intersection turn bay storage lengths and deceleration lengths according to the Caltrans Highway Design Manual.

Deliverables: **Draft Forecasting, and Analysis Methodology Technical Memo (10 Copies)**
 Final Forecasting, and Analysis Methodology Technical Memo (10 Copies)
 Draft Traffic Operations Report (10 Copies)
 Final Traffic Operations Report (10 Copies)

Coordination with Others

This task will include coordination with individuals who are not part of the consultant team performing work under this Task Order.

Subtask A1.16 - Utility Coordination

Quincy Engineering, Inc. will identify and coordinate with all utility companies or agencies operating utility facilities that may be impacted by the project. This task provides for up to 80 hours of Quincy Engineering, Inc. staff time for coordination with utility facility owners.

Quincy Engineering, Inc. will contact each utility to obtain their maps and data showing existing facility information. Quincy Engineering, Inc. will then identify utilities in conflict and will provide this information to the utility companies and agencies. Quincy Engineering, Inc. will be proactive in planning and coordinating with all utility companies and agencies to ensure that no unnecessary delays occur due to utility company and agency reviews. Quincy Engineering, Inc. will arrange coordination meetings as needed with all utility companies and agencies impacted by the project. Information obtained during development of the GADs will be used to establish project construction schedules in subsequent task orders.

Subtask A1.17 - Coordination with Adjacent Development and Projects

This task provides for up to 40 hours of Quincy Engineering, Inc. staff time for coordination with adjacent property owners that are concurrently preparing or planning for development that may be impacted by this project.

Subtask A1.18 - Prepare Preliminary Cost Estimates

Quincy Engineering, Inc. will prepare an itemized preliminary cost estimate for construction. Construction items (including supplemental work), quantities, unit prices, subtotals, and contingencies will be included in the estimate.

Deliverable: **Project Report Cost Estimate following Caltrans format (10 Copies)**

Quincy Engineering, Inc.

Year 2007 Hourly Rates

Rates are effective January 1, 2007 through December 31, 2007

Labor by Classification	Hourly Rate
Principal Engineer/ Project Manager	\$42-68
Senior Engineer / Project Engineer Resident Engineer	\$40-64
Senior Engineer / Design Engineer	\$40-64
Associate Engineer / Bridge Representative	\$30-52
Assistant Engineer	\$22-37
Engineering Assistant	\$14-27
Engineering Detailer/ Draftsman	\$17-40
Drafting Technician	\$14-27
Administrative Assistant	\$16-30
Office Support Staff	\$10-20
<u>Overhead</u>	<u>168%</u>

<u>Other Direct Costs</u>	<u>Rate</u>
Office Computer & Software	Included in Overhead
Phone/Fax	Included in Overhead
Reproduction (in office)	Included in Overhead
Reproduction (vendor)	Cost
Delivery	Cost
Car Mileage*	
Other Travel	Cost
Subconsultants	Cost

Fee

Labor + Overhead	12%
Other Direct Costs	5%

* Reimbursement for mileage expenses, if applicable, shall not exceed the rates to be paid to County employees under the current Board of Supervisors Travel Policy at the time the mileage expenses are incurred.

Note: Labor Costs to be invoiced based on actual hourly rate plus overhead plus fee. Other Direct Costs to be invoiced at actual cost plus fee.

Project Name: El Dorado Hills Boulevard/ US Highway 50 Interchange

Date: 2/1/2007

Quincy Engineering, Inc.

Direct Labor:	\$204,131.52
Escalation for Multi-Year Project (0.0%):	\$0.00
Overhead (1.68):	\$342,940.95

A. Labor Subtotal	<u>\$547,072.47</u>
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Subconsultant Costs:

REY Engineers Inc.	\$30,000.00
Bender Rosenthal, Inc.	\$23,010.00
Y&C Transportation Consultants, Inc.	\$32,000.00
WRECO, Inc.	\$18,717.94
Blackburn Consulting Inc.	\$24,938.00
Dowling & Associates Inc.	\$84,900.00
	0 \$0.00
	0 \$0.00
	0 \$0.00

B. Subconsultant Subtotal	<u>\$213,565.94</u>
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Other Direct Costs:

Travel	500 miles @	\$0.485	\$242.50
Pier Diem/ Hotel	days @	\$150.00	\$0.00
Phone/Fax			\$100.00
Delivery	@		\$200.00
Printing: Blue Line			
Vellum			
Large Plots			\$5,000.00
8 1/2 X 11 Reproduction			
11 X 17 Reproduction			\$2,000.00
Mounting Boards for Presentations			\$2,500.00
Miscellaneous/Copies			\$5,000.00

C. Direct Cost Subtotal:	<u>\$15,042.50</u>
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Labor Subtotal A. =	\$547,072.47
Fee (12.0%):	\$65,648.70
Subconsultant Subtotal B. =	\$213,565.94
Fee (5.0%):	\$10,678.30
Direct Cost Subtotal: C. =	\$14,800.00
Fee (5.0%):	\$740.00
Mileage Direct Cost	(Excluding Mileage) \$242.50

TOTAL =	\$852,747.91
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Note: Invoices will be based upon actual labor rates, plus overhead at 168%, plus fee at 12%.
 Direct Costs will be invoiced at actual cost plus 5% fee.
 Subconsultant fees will be invoiced at actual cost plus 5% fee.

ay 50 Interchange

				SUBCONSULTANTS										TOTAL SUBCONSULTANT COST	TOTAL TASK ORDER COST		
Assistant Bridge Engineer	Senior Engineer (QA/QC)	Engineering Detailer	Admin	Total Prime Hours	QEI Total Labor Dollars	REY Engineers Inc.	Bender Rosenthal, Inc.	Y&C Transportation Consultants, Inc.	WRECO, Inc.	Blackburn Consulting Inc.	Dowling & Associates Inc.						
\$34.50	\$56.71	\$35.00	\$24.00														
\$103.56	\$170.22	\$105.06	\$72.04														
			40	234	\$36,091.60											\$0.00	\$36,091.60
				120	\$19,824.97				\$1,241.93							\$1,241.93	\$21,066.90
	40	200	24	1052	\$136,147.29											\$0.00	\$136,147.29
	40	360	24	1536	\$196,688.12											\$0.00	\$196,688.12
				28	\$4,160.94	\$30,000.00										\$30,000.00	\$34,160.94
				248	\$33,703.41				\$12,968.78							\$12,968.78	\$46,672.19
				20	\$3,008.32					\$24,938.00						\$24,938.00	\$27,946.32
48				300	\$41,241.14											\$0.00	\$41,241.14
32				120	\$15,434.71												\$15,434.71
				20	\$3,008.32			\$32,000.00								\$32,000.00	\$35,008.32
				136	\$19,381.21											\$0.00	\$19,381.21
				36	\$5,313.55		\$23,010.00									\$23,010.00	\$28,323.55
				120	\$19,824.97											\$0.00	\$19,824.97
				164	\$23,035.00				\$3,907.23							\$3,907.23	\$26,942.23
				64	\$9,981.64						\$84,900.00					\$84,900.00	\$94,881.64
				80	\$12,794.02											\$0.00	\$12,794.02
				40	\$6,016.65											\$0.00	\$6,016.65
				216	\$27,065.31											\$0.00	\$27,065.31
				0	\$0.00											\$0.00	\$0.00
				0	\$0.00											\$0.00	\$0.00
				0	\$0.00											\$0.00	\$0.00
				0	\$0.00											\$0.00	\$0.00
				0	\$0.00											\$0.00	\$0.00
80	80	560	88	4534													
2,760.00	\$4,536.80	\$19,600.00	\$2,112.00		\$204,131.52												
3,284.42	\$13,617.66	\$58,831.36	\$6,339.38		\$612,721.17												
					\$15,782.50												
					\$628,503.67												
					\$10,678.30	\$30,000.00	\$23,010.00	\$32,000.00	\$18,117.94	\$24,938.00	\$84,900.00	\$0.00	\$0.00	\$0.00			
									600								
					\$639,181.97	\$30,000.00	\$23,010.00	\$32,000.00	\$18,717.94	\$24,938.00	\$84,900.00	\$0.00	\$0.00	\$0.00	\$213,565.94	\$852,747.91	



2007 FEE SCHEDULE

CLASSIFICATION	HOURLY RATES
Principal Manager - Engineering	\$ 176.00
Project Manager - Engineering	\$ 145.00
Senior Engineer	\$ 125.00
Associate Engineer - I	\$ 95.00
Associate Engineer - II	\$ 105.00
Associate Engineer - III	\$ 115.00
Assistant Engineer - I	\$ 65.00
Assistant Engineer - II	\$ 75.00
Assistant Engineer - III	\$ 85.00
Principal Manager - Surveying	\$ 176.00
Senior Project Manager - Surveying	\$ 190.00
Project Manager - Surveying	\$ 145.00
Senior Surveyor	\$ 125.00
Associate Surveyor - I	\$ 95.00
Associate Surveyor - II	\$ 105.00
Associate Surveyor - III	\$ 115.00
Assistant Surveyor - I	\$ 65.00
Assistant Surveyor - II	\$ 75.00
Assistant Surveyor - III	\$ 85.00
Field Supervisor	\$ 135.00
3-Man Survey Crew	\$ 305.00
2-Man Survey Crew	\$ 215.00
1-Man Survey Crew	\$ 160.00
Party Chief	\$ 121.22
Chainman	\$ 92.51
CADD Technician - I	\$ 50.00
CADD Technician - II	\$ 75.00
CADD Technician - III	\$ 100.00
Clerical	\$ 40.00

These rates represent maximum rates to be charged for classifications.


Reimbursement for mileage expenses, if applicable, shall not exceed the rates to be paid to County employees under the current Board of Supervisors Travel Policy at the time the mileage expenses are incurred.

Cost of normal survey stakes and other field supplies are included in the above rates. Special monuments, iron stakes, etc., will be charged at cost.

Outside reproductions, services, and consultants will be charged at cost plus 5%.

In-house large format reproduction will be charged at \$0.30 SF.

Filing fees, checking fees, and other outside charges will be billed at cost.



 Robert J. Huyn, P.E., President

BENDER  **ROSENTHAL, INC.**

COMMERCIAL VALUATION AND RIGHT OF WAY SERVICES

2007 FEE SCHEDULE

Below are our standard 2007 rates for services required:

Stephen A. Rosenthal, MAI, Principal In Charge	\$170/hr.*
Cydney G. Bender, MAI, Principal In Charge	\$170/hr.*
David Wraa, MAI, Principal In Charge	\$170/hr.*
Bob Morrison, Sr. Project Manager	\$170/hr
Senior Appraiser	\$125/hr.
Project Manager/ROW Planner	\$130/hr.
Senior Acquisition Agent	\$115/hr.
Relocation Specialist	\$115/hr.
Acquisition Agent	\$ 95/hr.
Other Associated Professional Staff	\$ 85/hr.
Researchers	\$ 70/hr.
Administrative/Production	\$ 60/hr.

- \$270 per hour for court or briefing preparation, depositions, any pre-trial conferences, court appearances, etc., should these ever become necessary.
- Direct cost mark up – 5%
- Reimbursement for mileage expenses, if applicable, shall not exceed the rates to be paid to County employees under the current Board of Supervisors Travel Policy at the time the mileage expenses are incurred.

We would be pleased to be selected for this assignment, and we would enthusiastically look forward to working with the County of El Dorado once again.

**Y&C Transportation Consultants, Inc.
2007 Billing Rates**

Engineer XII	\$202-\$218/hr
Engineer XI	\$187-\$202/hr
Engineer X	\$169-\$187/hr
Engineer IX	\$150-\$169/hr
Engineer VIII	\$137-\$150/hr
Engineer VII	\$125-\$137/hr
Engineer VI	\$112-\$125/hr
Engineer V	\$96-\$112/hr
Engineer IV	\$83-\$96/hr
Engineer III	\$75-\$83/hr
Engineer II	\$65-\$75/hr
Engineer I	\$54-\$65/hr
Technician IV	\$52-\$65/hr
Technician III	\$39-\$52/hr
Technician II	\$32-\$39/hr
Technician I	\$25-\$32/hr
Clerk II	\$39-\$52/hr
Clerk I	\$25-\$39/hr

Overhead multiplier = 2.35

MISCELLANEOUS COSTS

Reimbursables (Printing and Materials, Express Mail and Delivery Expenses, Film Expenses, Filing Fees, Parking and Field Expenses) will be billed at cost.

Reimbursement for mileage expenses, if applicable, shall not exceed the rates to be paid to County employees under the current Board of Supervisors Travel Policy at the time the mileage expenses are incurred.



1243 Alpine Road, Suite 108
Walnut Creek, CA 94596
Phone: 925.941.0017
Fax: 925.941.0018
www.wreco.com

RATE SCHEDULE

Effective January 1, 2007

Principal Engineer	\$150 - \$170 per Hour
Supervising Engineer	\$130 - \$150 per Hour
Senior Engineer	\$100 - \$130 per Hour
Associate Engineer	\$75 - \$100 per Hour
Staff Engineer	\$50 - \$75 per Hour
Senior Technician/CADD	\$65 - \$90 per Hour
Technician/CADD	\$40 - \$65 per Hour
Administrator / Clerical	\$40 - \$70 per Hour

- Expenses are invoiced at 105% of cost.
- Rates for deposition and trial time are 1.5 times those shown above.
- Reimbursement for mileage expenses, if applicable, shall not exceed the rates to be paid to County employees under the current Board of Supervisors Travel Policy at the time the mileage expenses are incurred

Cost Proposal

ITEMS OF WORK		Project Name: El Dorado Hills Boulevard/ US Highway 50 Interchange										Total Sub-Consultant Hours	Total Labor Dollars
ITEM OF WORK DESCRIPTION		Principal Hydraulic Engineer	Senior Hydraulic Engineer	Staff Hydraulic Engineer	Senior Technician	Critical							
No.		\$61.36	\$43.81	\$37.00	\$32.00	\$17.00							
		\$155.24	\$107.50	\$55.31	\$35.35	\$43.01							
* A1.1	Project Management											0	\$0.00
* A1.2	Meetings	8										8	\$1,241.83
* A1.3	GAD's Ultimate Mainline and Interchange Improvements											0	\$0.00
* A1.4	GAD's Phasing Scenarios (3)											0	\$0.00
* A1.5	Supplemental Surveys											0	\$0.00
* A1.6	Drainage Report	10	40	92	8	4						154	\$12,868.78
* A1.7	Preliminary Geotechnical Studies											0	\$0.00
* A1.8	Structure Advance Planning Studies											0	\$0.00
* A1.9	Structure Advance Planning Studies Pedestrian											0	\$0.00
* A1.10	Preliminary Signal and Lighting Plans & Estimate											0	\$0.00
* A1.11	Utility Relocation Study											0	\$0.00
* A1.12	Right of Way Data Sheet											0	\$0.00
* A1.13	Prepare Fee Sheets for Exceptions to Design Standards											0	\$0.00
* A1.14	Storm Water Data Report	6	20	12								38	\$3,807.23
* A1.15	Traffic Forecasting and Operational Analysis											0	\$0.00
* A1.16	Utility Coordination											0	\$0.00
* A1.17	Coordination with Adjacent Development and Projects											0	\$0.00
* A1.18	Prepare Preliminary Cost Estimates											0	\$0.00
Subtotal- Hours		24	80	104	8	4						200	\$18,117.84
Sub-Consultant Labor Cost Plus Fee		\$3,725.78	\$6,488.20	\$7,104.24	\$647.68	\$172.04						\$0.00	\$18,117.84
Sub-Consultant Other Direct Cost												\$0.00	\$0.00
TOTAL NOT TO EXCEED													\$18,117.84

THE NOT-TO-EXCEED AMOUNT FOR THIS TASK ORDER \$18,117.84

The distribution of hours and expenses between staff and tasks are estimates only. This spreadsheet represents the composition of the total not-to-exceed budget for the project. In the performance of the scope of services to be provided per this budget, WRECO, Incorporated may request to reallocate the hours and expenses listed herein among personnel and among the various tasks. WRECO, Incorporated will, so long as the total not-to-exceed amount is not exceeded and subject to Contract Administrator approval, in no event shall the "not-to-exceed" amount of this Task Order be exceeded.

**Blackburn Consulting
2007 Fee Schedule
El Dorado County**

OUR SERVICES:

- Geotechnical & Materials Engineering
- Construction Monitoring
- Civil Engineering
- Construction Litigation Support
- Laboratory Testing
- Environmental Engineering

HOURLY RATES: *

Project Assistant	\$ 80	Project Engineer/Geologist I	\$115
CAD/GIS.	\$105	Project Engineer/Geologist II	\$125
Tester / Inspector I	\$ 80	Senior Engineer/Geologist	\$135
Prevailing Wage	\$ 95	Project Manager	\$.155
Tester / Inspector II	\$ 85	Senior Project Manager	\$175
Prevailing Wage	\$100	Principal	\$.195
Tester / Inspector III	\$100	Senior Principal	\$.220
Prevailing Wage	\$115	Expert Testimony & Deposition	\$.360
Technician Manager	\$115		

MINIMUM / BASIC CHARGES:

Outside Equipment & Services (except drill rig)	Cost plus 5%
Mileage	Travel and mileage expenses, if applicable, shall be paid in accordance with County's Travel Policy (No. d-1), Sections 4 and 5, marked "Board of Supervisors Policy," incorporated herein and made by reference a part hereof. Travel and mileage reimbursement rates apply to Consultant and to Any subconsultants authorized under this Agreement.
Technician Services	Charge includes time from office to job & return to office Minimum charge: 2 hours
Overtime	Over 8 hours: 1.5 x Hourly Rate Before 7:00 a.m. or after 4:00 p.m.: 1.5 x Hourly Rate Rush Charge (less than 24 hour notice): 1.5 x Hourly Rate Saturday: 1.5 x Hourly Rate (minimum: 4 hour increments) Sunday & Holiday: 2.0 x Hourly Rate (minimum: 4 hour increments)
Report Copies	4 report copies provided
Additional Report Copies	\$100 for binding up to 50 pages, plus postage

EQUIPMENT: (personnel not included)

Hand Sampling Equipment	\$ 160 / day	Level Equipment	\$160 / day
6 " Sand Cone Testing	\$ 30 / test	Coring	\$ 28 / core
12" Sand Cone Testing.	\$ 150 / test	Coring Machine	\$170 / day
Seismic Refraction	\$ 260 / day	Anchor Bolt Equipment	\$130 / day
Schmidt Hammer	\$ 55 / day	Dynamic Cone Penetrometer	\$170 / day
Pachometer.	\$ 75 /day	Drill Rig(prevailing wage)	\$230/hour
		Electrical Resistivity Equipment	\$160 / day

Blackburn Consulting 2007 FEE SCHEDULE - Laboratory

SOIL CLASSIFICATION:

#200 Sieve Wash	ASTM D-1140	\$ 85
Sieve Analysis to #200	ASTM D-422, CAL 202	\$ 100
Standard Hydrometer.	ASTM D-422	\$ 140
Plasticity Index	ASTM D-4318	\$ 140

AGGREGATES:

Bulk Specific Gravity	ASTM D-136	\$ 90
Coarse Durability	CAL 229	\$ 150
Fine Durability	CAL 229	\$ 150
Sand Equivalent	CAL 217, ASTM D-2419	\$ 120

STRENGTH:

Direct Shear (per point):		
Undisturbed	ASTM D-3080	\$ 120
Remolded	ASTM D-3080	\$ 135
Unconfined Compression	ASTM D-2166	\$ 95
Triaxial Compression (per point)		upon request
Pavement Subgrade:		
CBR	ASTM D-1883	\$ 800
Resistance Value (R-value)	CAL 301	\$ 250
Compression Test, Rock (w/o prep).	ASTM D-2938	\$ 200

CONSOLIDATION / EXPANSION:

One-Dimensional Consolidation (per load).	ASTM D-2435	\$ 100
Swell-Settlement Potential (per load)		\$ 120
Expansion Index	ASTM D-4829, UBC 29-2	\$ 200

MOISTURE / DENSITY:

Moisture Content (oven or microwave)	ASTM D-2216	\$ 30
Moisture/Density (tube samples).	ASTM D-2216, ASTM D-2937.	\$ 50
Standard Proctor (4" or 6" mold)	ASTM D-698	\$ 200
Modified Proctor (4" mold)	ASTM D-1557	\$ 250
Modified Proctor (6" mold)	ASTM D-1557	\$ 250
California Impact	CAL 216	\$ 225
Check Point (standard or modified)	ASTM D-698, ASTM D-1557	\$ 100

PERMEABILITY:

Triaxial Cell Method (one effective stress)	ASTM D-5084	\$ 400
Each Additional Effective Stress	ASTM D-5084	\$ 100

CORROSIVITY ANALYSIS:

Soil Resistivity	CAL 643	\$ 150
Soil pH	CAL 643	\$ 50
Sulfates / Chlorides	CAL 417, CAL 422	\$ 80

TREATED SOIL TESTS:

% Lime for Stabilization	ASTM C-977	\$ 100
Modified Proctor (4" mold)	ASTM D-1557	\$ 300
Soil Compression Test (per point)	ASTM D-5102	\$ 180
One-Dimensional Swell		\$ 180

CONCRETE:

Compression Tests, 6"x12" molds	ASTM C-39	\$ 25
Spare Cylinders, handled and cured but not tested		\$ 25
Splitting Tensile Test, 6"x12" cylinders	ASTM C-496	\$ 60
Flexural Strength, 6"x6" concrete beam	ASTM C-78	\$ 85
Compression Test of cored concrete specimen	ASTM C-42	\$ 65
Cleaness Test	Caltrans 227	\$ 120

MASONRY:

Compression Test, mortar or grout specimens	UBC Stds. 24-28, 24-22	\$ 35
Concrete Block, moisture, unit weight & absorption	ASTM C-140	\$ 65
Compression Test, masonry unit	ASTM C-140	\$ 60
Compression Test, cutting coupons	ASTM C-140	\$ 85/hr.
Compression Test on grouted prisms (each)	UBC Std. 24-26.	\$ 125

ASPHALT CONCRETE:

Maximum Density (LTMD, min. 5 briquettes).	CAL 304, CAL 308	\$ 300
Stabilometer (min. 3 briquettes)	CAL 304, CAL 366	\$ 200
Extraction & Gradation	CAL 362, CAL 202.	\$ 290
Core Density	CAL 308	\$ 50

Cost Proposal

ITEMS OF WORK		El Dorado Hills Boulevard/ US Highway 50 Interchange Blackburn Consulting Staffing										Total Sub-Consultant Hours	Total Labor Dollars		
No.	ITEM OF WORK DESCRIPTION	Principal in Charge	Senior Project Manager	Project Manager	Senior Project Engineer/Geologist	Project Engineer/Geologist	Drafting	Project Admin/Assistant							
		Initial Hourly Rates \$56.70 \$165.00	\$41.43 \$175.00	\$33.58 \$155.00	\$22.27 \$135.00	\$25.50 \$125.00	\$28.35 \$105.00	\$36.30 \$90.00							
		Initial Loaded Rates													
* A1.1	Project Management													0	\$0
* A1.2	Meetings													0	\$0
* A1.3	GAD's Ultimate Mainline and Interchange Improvements													0	\$0
* A1.4	GAD's Phasing Scenarios (3)													0	\$0
* A1.5	Supplemental Surveys													0	\$0
* A1.6	Drainage Report													0	\$0
* A1.7	Preliminary Geotechnical Studies	1	25	46	70		14	14					170	\$23,740	
* A1.8	Structure Advance Planning Studies													0	\$0
* A1.9	OC													0	\$0
* A1.10	Preliminary Signal and Lighting Plans & Estimate													0	\$0
* A1.11	Utility Relocation Study													0	\$0
* A1.12	Right of Way Data Sheet													0	\$0
* A1.13	Prepare Fact Sheets for Exceptions to Design Standards													0	\$0
* A1.14	Storm Water Data Report													0	\$0
* A1.15	Traffic Forecasting and Operational Analysis													0	\$0
* A1.16	Utility Coordination													0	\$0
* A1.17	Coordination with Adjacent Development and Projects													0	\$0
* A1.18	Prepare Preliminary Cost Estimates													0	\$0
	Subtotal - Hours		25	46	70		14	14					170		
	Sub-Consultant Labor Cost Plus Fee	\$195.00	\$4,375.00	\$7,150.00	\$9,450.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,470.00	\$1,120.00		\$23,740.00
	BCI Other Direct Cost (ODCs)														\$1,198.00
	Subtotal Labor Cost														\$24,938.00
	TOTAL NOT TO EXCEED														\$24,938.00

THE NOT-TO-EXCEED AMOUNT FOR THIS TASK ORDER IS \$24,938.00

The distribution of hours and expenses between staff and tasks are estimates only. This spreadsheet represents the composition of the total not-to-exceed budget for the project. In the performance of the scope of services to be provided per this budget, Blackburn Consulting may request to reallocate the hours and expenses listed herein among personnel and among the various tasks identified herein, so long as the total not-to-exceed amount is not exceeded and subject to Contract Administrator approval. In no event shall the "not-to-exceed" amount of this Task Order be exceeded.

Dowling Associates, Inc.

Transportation Engineering • Planning • Research • Education



Billing Schedule 2007

Dowling Associates has established the following billing rates for our professional consulting services, **Effective December 16, 2006.**

Classification	Hourly Rate
President	\$350
Principal	\$190-\$220
Principal Associate	\$165-\$170
Research Engineer	\$218
Senior Engineer/Planner	\$117-\$160
Associate Engineer/Planner	\$104-\$115
Accounting	\$137-\$171
Graphic Artist	\$65-\$88
Executive Assistant	\$79-\$82

Expert witness charges available upon request.

Direct Expenses

The above rates include standard overhead items. The rates in the table below apply to non-standard items. All outside services and expenses are billed at cost, plus administrative cost of five percent.

Item	Rate
Personal Auto Use*	
Commercial Air and other Travel Expenses	Actual Cost
Delivery	Actual Cost
Teleconferences, Long Distance Phone	Actual Cost
Outside Printing and Binding	Actual Cost
PDA's (Personal Digital Assistants)	\$2 per day
Plotter maps and charts	\$6 per square foot

*Reimbursement for mileage expenses, if applicable, shall not exceed the rates to be paid to County employees under the current Board of Supervisors Travel Policy at the time the mileage expenses are incurred.

Invoices are due and payable within thirty days.

Last revised: 12/19/06

Cost Proposal

Contract Number: #04-935		Project Name: El Dorado Hills Boulevard/ US Highway 50 Interchange									
Task Order #2: Geometric Approval Drawings		Dowling Associates, Inc.									
ITEMS OF WORK	ITEM OF WORK DESCRIPTION	Principal Associate				Senior Engineer		Associate Engineer		Total Labor Hours	Total Labor Dollars
		Charge	Principal Associate	Senior Engineer	Associate Engineer	Principal Associate	Senior Engineer	Associate Engineer			
No.	Initial Hourly Rates										
	Initial Loaded Rates	\$350.00	\$170.00	\$130.00	\$115.00						
* A1.1	Project Management								0	\$0	
* A1.2	Meetings								0	\$0	
	GAD's Ultimate Mainline and Interchange								0	\$0	
* A1.3	Improvements								0	\$0	
* A1.4	GAD's Phasing Scenarios (3)								0	\$0	
* A1.5	Traffic Forecasting and Operations Analysis	40	100	230	200				570	\$63,900	
* A1.6	Supplemental Surveys								0	\$0	
* A1.7	Drainage Report								0	\$0	
* A1.8	Preliminary Geotechnical Studies								0	\$0	
* A1.9	Structure Advance Planning Studies								0	\$0	
* A1.10	Preliminary Signal and Lighting Plans & Estimate								0	\$0	
* A1.11	Utility Relocation Study								0	\$0	
* A1.12	Right of Way Data Sheet								0	\$0	
* A1.13	Prepare F&I Sheets for Exceptions to Design Standards								0	\$0	
* A1.14	Storm Water Data Report								0	\$0	
* A1.15	Utility Coordination								0	\$0	
* A1.16	Coordination with Adjacent Development and Projects								0	\$0	
* A1.17	Coordination with Traffic Consultants								0	\$0	
Subtotal - Hours		40	100	230	200				0	\$0	
Senior Cost Plus Fee		\$14,000.00	\$17,000.00	\$29,900.00	\$23,000.00				\$0.00	\$0.00	
Associate Cost									\$0.00	\$0.00	
Total Cost									\$0.00	\$0.00	
TOTAL NOT TO EXCEED									\$53,900.00	\$53,900.00	
										\$1,000.00	
										\$54,900.00	

THE NOT-TO-EXCEED AMOUNT FOR THIS TASK ORDER IS **\$54,900.00.**

"The distribution of hours and expenses between staff and tasks are estimates only. This spreadsheet represents the composition of the total not-to-exceed budget for the project. In the performance of the scope of services to be provided per this budget, Dowling Associates, Incorporated may request to reallocate the hours and expenses listed herein among personnel and among the various tasks identified herein, so long as the total not-to-exceed amount is not exceeded and subject to Contract Administrator approval. In no event shall the "not-to-exceed" amount of this Task Order be exceeded."